



THE DATASHEET OF PMP5501QASZ

Selection guide 2019.

Discretes, Logic and MOSFETs



nexperia

EFFICIENCY WINS.

Introduction

Welcome to the 2019 edition of the Nexperia Selection Guide. Here we present all our Discrete, Logic and MOSFET devices in one single document to give you a complete overview of our portfolio. We hope that makes it even easier for you to find the right product for your design.

Our extensive portfolio offers a wide range of general purpose devices and those that meet the stringent standards set by the automotive industry. They are housed in some of the most advanced, industry-leading small packages that combine power and thermal efficiency with best-in-class quality levels.

Alongside quality and efficiency, Nexperia customers value reliability and a consistent supply they can trust. We produce consistently reliable semiconductor components at high volume (Over 90 billion annually) and we work at every step to safeguard the long-term availability of our manufacturing processes and products, to ensure secure supply for all our customers.

We have a long history and broad experience. That ensures we can support you with the dedicated in-house technical support you need – from simplifying selection via quick-reference material to simple-to-use design tools and application insights. All to help drive up efficiency in your designs.

All the functionality you need in one spot

Just like on our website, you will find the selection guide is split into our five key product areas. There is also a dedicated section on packages, highlighting the latest package innovations and packing options.

Bipolar transistors

- › Resistor-equipped, low V_{CEsat} and small-signal transistors
- › Standard SMD, leadless and clip-bond packages

Diodes

- › Broad choice of Zener, Schottky and switching diodes
- › Ultra-small, low-profile surface-mount package options

ESD protection, filtering and signal conditioning

- › Extensive range of protection in ultra-small form factors
- › Optimized for signal integrity, robustness and system protection

MOSFETs

- › Low R_{DSon} devices from < 20 V to > 200 V
- › True power packages with solid wireless-clip for smart efficiency

Logic

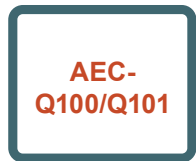
- › Comprehensive portfolio operating from 0.7 V to 15.0 V
- › Unrivalled package innovation and lowest power logic solutions

Packages

- › The next generation of packaging for volume production
- › Package cross-reference and packing options

As an innovative company we are continually adding to our product portfolio, so to discover all our latest product information you should visit our website – www.nexperia.com

Our commitment: quality and reliability



AEC-Q100/Q101 qualified

We qualify our products according to the automotive AEC-Q100/Q101 standard and even exceed it's requirements, for instance when doing extended lifetime testing.



Go for quality

All our processes and manufacturing plants are subject to regular international and internal audits, including the following:

- › ISO9001
- › ISO/TS 16949 for automotive sites
- › ISO14001
- › OHSAS18001



Design for excellence

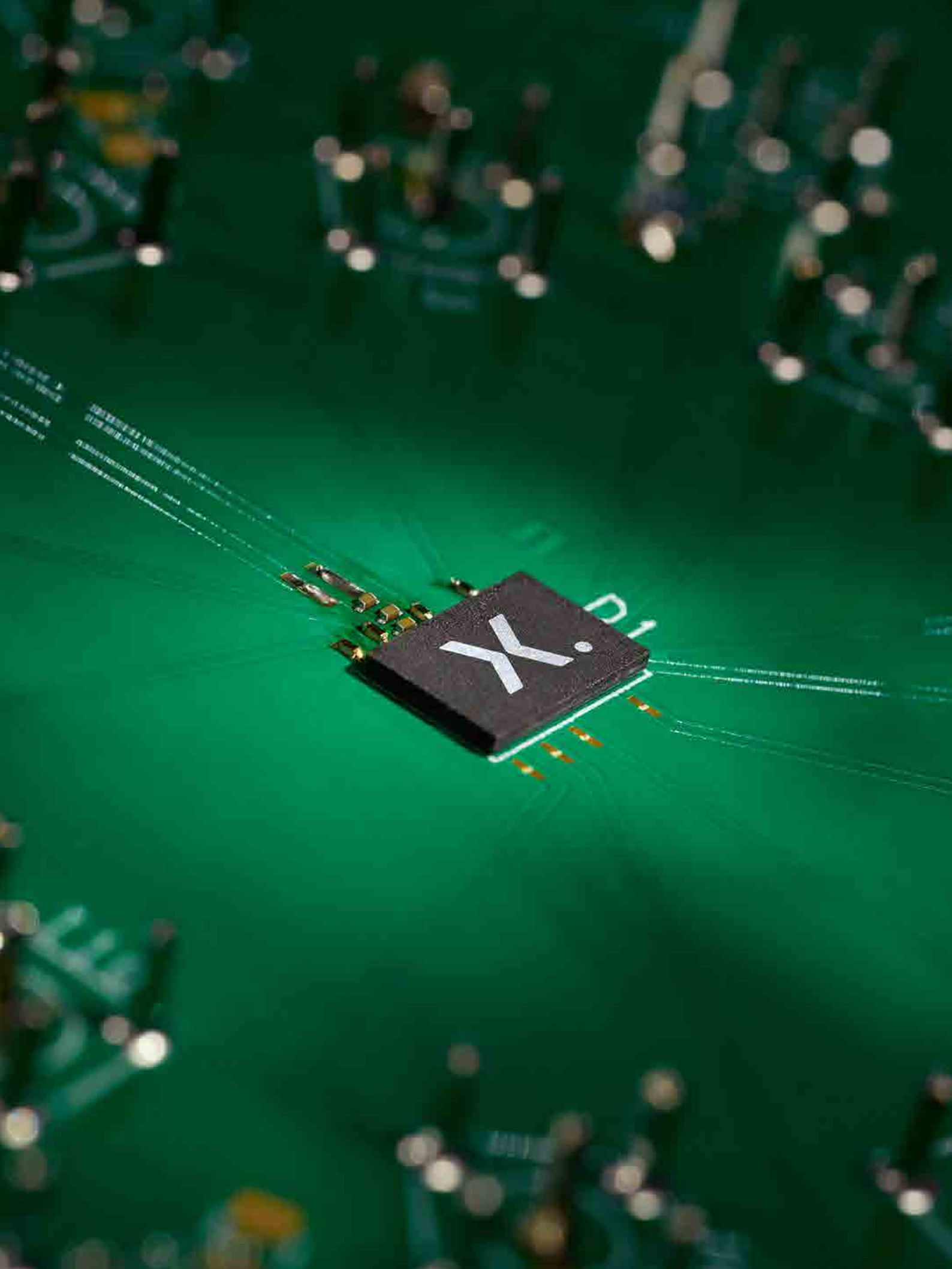
Nexperia's Design for Excellence (DfX) program ensures that each new development builds on past learning and that best practices are always employed. The result is continual product improvement.



Zero defect

Zero defect is our goal. To ensure continuous improvement failure analysis and the determination to find root causes is performed at all stages of development and production by adoption of quality-analysis tools and methods (e.g. Six-Sigma, Safe-Launch).

Rigorous attention to detail and commitment to quality have yielded a very low product failure rate of a single-digit part per billion (ppb).



Selection guide 2019

Discretes, Logic and MOSFETs

Bipolar
transistors

1

Diodes

2

ESD protection,
TVS, filtering
and signal
conditioning

3

MOSFETs

4

Logic

5

Packages

6

New products	8
Bipolar transistors	8
Diodes	8
ESD protection, TVS, filtering and signal conditioning.....	9
MOSFETs	10
Logic	11

Bipolar transistors 13

General purpose bipolar transistors.....	14
Transistors single NPN.....	14
Transistors single PNP	14
High performance transistors (superior power dissipation)	15
Transistors double	15
Switching transistors single	16
Switching transistors double	16
Medium power transistors high performance (175 °C capable)...	17
NPN High performance transistors (175°C capable & superior power dissipation)	17
PNP High performance transistors (175°C capable & superior power dissipation)	17
Medium power transistors	18
High voltage transistors	18
LED driver	19
LED driver NPN	19
Constant current source.....	19
Darlington transistors.....	20
Schmitt triggers.....	20
Low noise transistors.....	20
Matched pair transistors	21
MOSFET driver	22
Medium frequency transistors	22
Low V_{CEsat} (BISS) transistors.....	23
Low V_{CEsat} (BISS) transistors single NPN up to 2000 mW	23
Low V_{CEsat} (BISS) transistors single NPN up to 750 mW	24
Low V_{CEsat} (BISS) transistors single PNP up to 2000 mW	25
Low V_{CEsat} (BISS) transistors single PNP up to 750 mW	26
Low V_{CEsat} (BISS) transistors double.....	27
Low V_{CEsat} (BISS) transistors load switches	28
Low V_{CEsat} (BISS) high voltage transistors.....	29
Low V_{CEsat} (BISS) RETs	29
Low V_{CEsat} (BISS) transistors PNP - N-channel MOSFET combination	30
Low V_{CEsat} (BISS) power transistors single	30
Low V_{CEsat} (BISS) power transistors double	30
Resistor equipped transistors (RETs)	31
RETs 100 mA single	31
RETs 100 mA double	32
RETs 500 mA single / double	32
3-terminal adjustable shunt regulators	33

Diodes 35

Zener diodes	36
General purpose Zener diodes	36
Zener diodes specifications	37
Switching diodes	38
General purpose, high speed switching diodes $\leq 90V$	38
General purpose, high speed switching diodes 100V	38
General purpose, switching diodes $\geq 100V$	39
Controlled avalanche switching diodes.....	40
Low leakage current switching diodes	40
Recovery rectifiers	41

Recovery rectifiers - Automotive qualified	41
Nomenclature recovery rectifiers automotive grade types.....	41

Schottky diodes and rectifiers 42

General purpose Schottky diodes ≤ 250 mA	42
Low capacitance Schottky diodes	43
Medium power low VF Schottky rectifiers single ≥ 200 mA - leadless DSN / DFN packages	44
Medium power low VF Schottky rectifiers single ≥ 200 mA ...	46
Medium power low VF Schottky rectifiers single ≥ 200 mA - leaded packages	47
Medium power low VF Schottky rectifiers dual ≥ 200 mA	48

Nomenclatures 49

ESD protection, TVS, filtering and signal conditioning 51

Low capacitance ESD protection for high-speed interfaces 52

USB 3.x and eSATA protection and filtering for high-speed and super-speed lines.....	54
Low capacitance ESD protection for high-speed interfaces - HDMI2.0, DisplayPort.....	55
TrEOS protection devices.....	56
TrEOS2 protection devices.....	56

General ESD protection devices.....57

Application-specific ESD solutions 61

Audio interface protection	61
Automotive high-speed network protection.....	62
Automotive in-vehicle network bus line protection.....	62
Battery and charger port protection.....	63
HDMI and display port protection	63

EMI solutions with integrated protection 64

Antenna protection (NFC, WiFi,...)	64
USB and SATA protection.....	64
Common mode filter for USB 2.0	64
Common mode filter for USB 3.x	65
Common mode filter for HDMI and MIPI	65
HDMI signal conditioning.....	66
LCD and camera RC filter with integrated protection	66
Memory and SIM card filter with integrated protection	66

Transient voltage surge suppressor (TVS) 67

TVS diodes for mobile applications	67
TVS diodes, 24 W/40 W (automotive).....	67
TVS diodes, 400 W	68
TVS diodes, 600 W	69

Nomenclatures 70

MOSFETs 73

Automotive MOSFETs.....74

Automotive grade MOSFETs nomenclature	74
N-channel 30V automotive power MOSFETs.....	74
N-channel 40V automotive power MOSFETs.....	75
N-channel 55V-60V automotive power MOSFETs.....	77
N-channel 75V-80V automotive power MOSFETs.....	79
N-channel 100V automotive power MOSFETs.....	80
P-channel 30V-60V automotive power MOSFETs	81
Small-signal automotive MOSFETs – Low $R_{DS(on)}$	82
Small-signal automotive MOSFETs – High $R_{DS(on)}$	84
Small-signal automotive MOSFETs – Dual.....	84
Small-signal MOSFETs complementary	84

Power MOSFETs 86

Contents

N-channel 25V-30V Power MOSFETs	86
N-channel 40V-60V Power MOSFETs	88
N-channel 75V-200V Power MOSFETs	90
P-channel Power MOSFETs	92
Power MOSFETs nomenclature	93
Small-signal MOSFETs	94
Small-signal MOSFETs in DFN1006 and DFN1006B packages	94
Small-signal MOSFETs in DFN0606	94
Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages	95
Small-signal low-leakage MOSFETs	95
Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages	96
Small-signal MOSFETs in WLCSP4 and WLCSP6 packages	97
Small-signal MOSFETs single (N-channel)	98
Small-signal MOSFETs single (P-channel)	100
Small-signal MOSFET-Schottky combination	100
Small-signal MOSFETs dual	102
Small-signal MOSFETs complementary	102
Small-signal MOSFETs nomenclature	104
Logic	107
Automotive logic	108
Q100 Standard logic functions and packages	108
Analog switches	108
Buffers/Inverters	109
Counters/Frequency dividers	111
Bus switches	112
Digital decoders/Demultiplexers	112
Digital multiplexers	113
Flip-flops	113
Gates	115
Latches/Registered drivers	117
Level shifters/Translators	118
Multivibrators	118
Schmitt-triggers	119
Shift registers	120
Transceivers	122
Q100 mini logic functions and packages	123
Analog switches	123
Bus switches	123
Buffers/Inverters	124
Digital decoders/Demultiplexers	126
Digital multiplexers	126
Flip-flops	126
Gates	127
Latches/Registered drivers	128
Multivibrators	129
Level shifters/Translators	130
Asynchronous interface logic	131
Buffers/Inverters/Drivers	131
Schmitt-triggers	138
Transceivers	141
Voltage translators (level-shifters)	142
I/O expansion	145
Analog Switches	145
Bus Switches	146
Decoders/Demultiplexers	147
Digital Multiplexers	148
Shift Registers	148
Synchronous interface logic	150

Latches/Registered drivers	150
Flip-flops	152
FIFO registers	154
Counters/frequency dividers	154
Multivibrators	155
Phase-locked loops	155
Control logic	156
AND Gates	156
Combination Gates	157
Configurable Gates	157
EXCLUSIVE-NOR Gates	158
EXCLUSIVE-OR Gates	158
NAND Gates	158
NOR Gates	160
OR Gates	161
Digital comparators	162
Parity generators-checkers	162
Nomenclatures	163

Packages 165

Package details and packing methods	166
Package details and packing methods SMD	166
Package details and packing methods WLCSP	170
Packing details glass diodes, single ended and through hole packages	170
Package cross reference	171
Package cross reference list	171
Package cross reference matrix	176
Competitive cross reference - Logic	178
Packing methods	180
Product orientation (tape and reel pack)	180
Minimized outline drawings and reflow soldering foot- print	183
2-pin SMD packages	183
3-pin SMD packages	187
4-pin SMD packages	190
5-pin SMD packages	192
6-pin SMD packages	193
7-pin SMD packages	196
8-pin SMD packages	196
10-pin SMD packages	200
12-pin SMD packages	201
14-pin SMD packages	201
16-pin SMD packages	202
20-pin SMD packages	203
24-pin SMD packages	204
32-pin SMD packages	205
48-pin SMD packages	205
56-pin SMD packages	205
Index	206

New products

As an innovative company we invest significantly in R&D, and continually expand our portfolio with the latest generation of technology and products. Here is a snapshot of our most recent releases, but don't forget to visit the website for the most up-to-date information - www.nexperia.com

Bipolar transistors

Category	Device	Description	Page
General purpose bipolar transistors	PMBTA06	500 mA NPN transistor in a SOT23 plastic package	14
	PMSTA06	500 mA NPN general-purpose transistor in a SOT323 plastic package	14
	PMBT2222AM	40V, 600 mA NPN switching transistor in an ultra small DFN1006-3 (SOT883) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2907AM	60V, 600 mA PNP switching transistor in an ultra small DFN1006-3 (SOT883) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2222AMB	40V, 600 mA NPN switching transistor in an ultra small DFN1006B-3 (SOT883B) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT2907AMB	60V, 600 mA PNP switching transistor in an ultra small DFN1006B-3 (SOT883B) leadless Surface-Mounted Device (SMD) plastic package.	16
	PMBT3904QA	40V, 200 mA NPN switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT2222AQA	40V, 600 mA NPN switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT2907AQA	60V, 600 mA PNP switching transistor in an ultra small DFN1010D-3 (SOT1215) leadless Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	16
	PMBT3904RA	40V, 200 mA Double NPN switching transistor in an ultra small DFN1412-6 (SOT1268) leadless Surface-Mounted Device (SMD) plastic package.	16
	BC807-16H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17
	BC807-25H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17
	BC807-40H	175 deg C capable PNP transistor in SOT23 with 500 mA and 45V	17

Diodes

Category	Device	Description	Page
Switching Diodes	BAS521B	High-voltage switching diode, in an ultra small SOD523 (SC-72) flat lead Surface-Mounted Device (SMD) plastic package.	39
	BAV21QA	200V dual common cathode high-voltage switching diode in a leadless ultra small DFN1010D-3 (SOT1215) package with solderable side pads	39
	BAV23QA	Dual common cathode high-voltage switching diode, encapsulated in a leadless ultra small DFN1010D-3 (SOT1215) Surface-Mounted Device (SMD) plastic package with visible and solderable side pads.	39
Recovery rectifiers	PNE20020EP	200V, 2 A hyperfast Recovery rectifiers in a small and flat lead CFP5 package.	41
	PNE20030EP	200V, 3 A hyperfast Recovery rectifiers in a small and flat lead CFP5 package.	41
	PNE20010ER	200V, 1 A hyperfast Recovery rectifiers in a small and flat lead SOD123W package.	41
	PNE20020ER	200V, 2 A hyperfast Recovery rectifiers in a small and flat lead SOD123W package.	41
Schottky rectifiers	PMEG3001EEF	30V, 0.1 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG3002EEF	30V, 0.2 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG3005EEF	30V, 0.5 A low VF Schottky Rectifier in DFN0603-2	45
	PMEG60T10ELP	60V, 1 A Trench Schottky Rectifier in CFP5	46
	PMEG60T20ELP	60V, 2 A Trench Schottky Rectifier in CFP5	46
	PMEG60T30ELP	60V, 3 A Trench Schottky Rectifier in CFP5	46
	PMEG60T50ELP	60V, 5 A Trench Schottky Rectifier in CFP5	46
	PMEG60T10ELR	60V, 1 A Trench Schottky Rectifier in CFP3	46
	PMEG60T30ELR	60V, 3 A Trench Schottky Rectifier in CFP3	46

ESD protection, TVS, filtering and signal conditioning

Category	Device	Description	Page
Low capacitance ESD protection for high-speed interfaces	PESD2V0Y1BSF	Low peak voltage 2V single-line bidirectional ESD protection	52
	PESD2V5Y1BSF	Low peak voltage 2.5V single-line bidirectional ESD protection	52, 55
	PESD3V3Y1BSF	Low peak voltage 3.3V single-line bidirectional ESD protection	52, 55
	PESD3V3Z1BCSF	High-surge rating 3.3V single-line bidirectional ESD protection	52, 55
	PESD3V3W1BCSF	High-surge rating 3.3V single-line bidirectional ESD protection	52, 55, 56
	PESD4V0Y1BSF	Low peak voltage 4V single-line bidirectional ESD protection	52
	PESD4V0Z1BSF	high surge robustness low capacitance ESD protection for USB3.2	52, 56
	PESD4V0Z1BCSF	High-surge rating 4V single-line bidirectional ESD protection	52, 56
	PESD4V0W1BCSF	High-surge rating 4V single-line bidirectional ESD protection	52, 56
	PESD5V0R1BSF	Ultra low capacitance 5V bidirectional ESD protection	52, 55, 56
	PESD7V0H1BSF	Ultra low capacitance 7V bidirectional ESD protection	52, 56
	PESD7V0C1BSF	Ultra low capacitance 7V bidirectional ESD protection	52, 56
	PESD3V3X4UHM	4-fold unidirectional ESD protection array in DFN1308-6 package for SD card protection	54
	PESD1USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF1USB3B/C	55
	PESD2USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF2USB3B/C	55
	PESD3USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF3USB3B/C	55
	PESD6V5C1USF	Ultra low capacitance 6V unidirectional ESD protection	56
General ESD protection devices	PESD8V0S1ULD	Unidirectional 8V ESD protection	57
	PESD16VV1BSF	Extremely symmetrical 16V bidirectional ESD protection	58
	PESD18VV1BBSF	Very symmetrical 18V bidirectional ESD protection	58
	PESD3V3V1BL	Low capacitance 3.3V bidirectional ESD protection	58
	PESD3V3S1BL	Low capacitance 3.3V bidirectional ESD protection	58
	PTVS3V3D1BAL	Ultra compact 3.3V Transient Voltage Suppressor	58
	PTVS5V5D1BL	High-robustness ultra-compact 5V Transient Voltage Suppressor	58
	PESD3V3T1BLD	Single line bidirectional ESD protection in DFN1006-2 package for low-speed interfaces	58
	PESD3V3L4BHM	4-fold bidirectional ESD protection array in DFN1308-6 package for SIM card protection	60
Application-specific ESD solutions	PESD1USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF1USB3B/C	61
	PESD2USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF2USB3B/C	61
	PESD3USB3B/C	high surge robustness bi-directional ESD protection for USB3.2, footprint compatible to PCMF3USB3B/C	61
	PESD4V0Z1BSF	high surge robustness low capacitance ESD protection for USB3.2	61
	PESD4V0Z1BCSF	High-surge rating 4V single-line bidirectional ESD protection	61
	PESD4V0W1BCSF	High-surge rating 4V single-line bidirectional ESD protection	61
	PTVS3V3D1BAL	Ultra compact 3.3V Transient Voltage Suppressor	61, 63
	PTVS5V5D1BL	High-robustness ultra-compact 5.5V Transient Voltage Suppressor	61, 63
EMI solutions with integrated protection	PESD1USB3B	ESD protection for differential data lines (1 line pair)	65
	PESD2USB3B	ESD protection for differential data lines for (2 line pairs)	65
	PESD3USB3B	ESD protection for differential data lines for (3 line pairs)	65
	PESD3V3X4UHM	4-fold unidirectional ESD protection array in DFN1308-6 package for SD card protection	66
Transient voltage surge suppressor (TVS)	PTVS3V3D1BAL	Ultra compact 3.3V Transient Voltage Suppressor	67
	PTVS5V5D1BL	High-robustness ultra-compact 5.5V Transient Voltage Suppressor	67

MOSFETs

Category	Device	Description	Page
Automotive MOSFETs	BUK9J0R9-40H	N-channel 40V, 0.9mΩ logic level Q101 qualified MOSFET in LFPAK56E	75
	BUK7J1R0-40H	N-channel 40V, 1mΩ standard level Q101 qualified MOSFET in LFPAK56E	75
	BUK9Y1R3-40H	N-channel 40V, 1.3mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK7Y1R4-40H	N-channel 40V, 1.4mΩ standard level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y1R6-40H	N-channel 40V, 1.6mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y1R9-40H	N-channel 40V, 1.9mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y2R4-40H	N-channel 40V, 2.4mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK9Y2R8-40H	N-channel 40V, 2.8mΩ logic level Q101 qualified MOSFET in LFPAK56	75
	BUK7Y3R5-40H	N-channel 40V, 3.5mΩ standard level Q101 qualified MOSFET in LFPAK56	75
	BUK6Y12-30P	30V, 12mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y20-30P	30V, 20mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y15-40P	40V, 15mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y25-40P	40V, 25mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y32-60P	60V, 32mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	BUK6Y57-60P	60V, 57mΩ P-channel MOSFET in an LFPAK56 (Power SO8) package using Trench MOSFET technology.	81
	PMN25ENEA	Single N-channel MOSFET transistor; 30V; 25 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN20ENA	Single N-channel MOSFET transistor; 40V; 20 mΩ in SOT457 package; auto qualified; 175°C	83
	PMN40ENA	Single N-channel MOSFET transistor; 60V; 40 mΩ in SOT457 package; auto qualified; 175°C	83
	PMN55ENEA	Single N-channel MOSFET transistor; 60V; 55 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN120ENEA	Single N-channel MOSFET transistor; 60V; 120 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN230ENEA	Single N-channel MOSFET transistor; 20V; 230 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMN280ENEA	Single N-channel MOSFET transistor; 100V; 280 mΩ in SOT457 package; ESD protected; auto qualified; 175°C	83
	PMV30ENEA	Single N-channel MOSFET; 40V; 30 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D120-40E	Single N-channel MOSFET; 40V; 120 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D56-60E	Single N-channel MOSFET; 60V; 56 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D88-60E	Single N-channel MOSFET; 60V; 88 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D125-60E	Single N-channel MOSFET; 60V; 125 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D210-60E	Single N-channel MOSFET; 60V; 210 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D98-80E	Single N-channel MOSFET; 80V; 98 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D230-80E	Single N-channel MOSFET; 80V; 230 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D335-100E	Single N-channel MOSFET; 100V; 335 mΩ in SOT1220; auto qualified; 175°C	83
	BUK6D120-60P	60V, P-channel Trench MOSFET in DFN2020MD-6 (SOT1220) with side-wettable flanks	83
Power MOSFETs	PSMN0R9-30ULD	N-channel 30V, 0.87 mΩ, 300 A logic level MOSFET in SOT1023A enhanced package for UL2595, using NextPowerS3 Schottky-Plus Technology	87
	PSMN1R6-30MLH	N-channel 30V, 1.9 mΩ, 160 A logic level MOSFET in LFPAK33 using NextPowerS3 technology	88
	PSMN1R0-40ULD	N-channel 40V, 1.1 mΩ, 280 A logic level MOSFET in SOT1023A enhanced package for UL2595, using NextPower-S3 Schottky-Plus technology	89
	PSMN3R7-100BSE	N-channel 100V, 3.95 mΩ, standard level MOSFET in D2PAK	91
	PSMP012-30YE	Single P-channel MOSFET; 30V; 12 mΩ in LFPAK56	92
	PSMP020-30YE	Single P-channel MOSFET; 30V; 20 mΩ in LFPAK56	92
	PSMP015-40YE	Single P-channel MOSFET; 40V; 15 mΩ in LFPAK56	92
	PSMP025-40YE	Single P-channel MOSFET; 40V; 25 mΩ in LFPAK56	92
	PSMP032-60YE	Single P-channel MOSFET; 60V; 32 mΩ in LFPAK56	92
	PSMP057-60YE	Single P-channel MOSFET; 60V; 57 mΩ in LFPAK56	92

MOSFETs

Category	Device	Description	Page
Small-signal MOSFETs	PMH600UNE	Single N-channel MOSFET transistor; 20V; 600 mΩ; 1 kV ESD protected in DFN0606	94
	PMH550UNE	Single N-channel MOSFET transistor; 30V; 550 mΩ; 2 kV ESD protected in DFN0606	94
	NX7002BKH	Single N-channel ESD protected MOSFET; 60V; 3 Ohm; 2 kV ESD protected in DFN0606	94
	PMH950UPE	Single P-channel MOSFET transistor; 20V; 950 mΩ; 1 kV ESD protected in DFN0606	94
	PMH1200UPE	Single P-channel MOSFET transistor; 30V; 1200 mΩ; 2 kV ESD protected in DFN0606	94
	PMPB25ENE	Single N-channel MOSFET; 30V; 24 mΩ in SOT1220; ESD protected; 175°C	96
	PMPB50ENE	Single N-channel MOSFET; 30V; 46 mΩ in SOT1220; ESD protected	96
	PMPB100ENE	Single N-channel MOSFET; 30V; 79 mΩ in SOT1220; ESD protected	96
	PMPB14XP	Single P-channel MOSFET; 12V; 14 mΩ in SOT1220;	96
	PMPB30XPE	Single P-channel MOSFET; 20V; 28 mΩ in SOT1220; ESD protected	96
	PMPB24EP	Single P-channel MOSFET; 30V; 24 mΩ in SOT1220;	96
	PMN28UNE	Single N-channel MOSFET transistor; 20V; 28 mΩ in SOT457 package; ESD protected	99
	PMN25ENE	Single N-channel MOSFET transistor; 30V; 25 mΩ in SOT457 package; ESD protected	99
	PMN55ENE	Single N-channel MOSFET transistor; 60V; 55 mΩ in SOT457 package; ESD protected	99
	PMN120ENE	Single N-channel MOSFET transistor; 60V; 120 mΩ in SOT457 package; ESD protected	99
	PMN230ENE	Single N-channel MOSFET transistor; 20V; 230 mΩ in SOT457 package; ESD protected	99
	PMN30XPE	Single P-channel MOSFET transistor; 60V; 30 mΩ in SOT457 package; ESD protected	101
	PMN50EPE	Single P-channel MOSFET transistor; 30V; 50 mΩ in SOT457 package; ESD protected	101

Logic

Category	Device	Description	Page
Logic voltage translators (including translating Gates, Buffers, Inverters)	74AUP1T04	Single supply translating inverter	132, 142
	74AUP1T14	Single supply translating inverter; Schmitt-Trigger	132, 142
	74AUP1T17	Single supply translating buffer; Schmitt-Trigger	132, 142
	74AUP1T50	Single supply translating buffer; Schmitt-Trigger	132, 142
	74AVC1T1004	1-to-4 fan out translating buffer	133, 143
	74AVC4T3144	4-bit dual-supply buffer/level translator (3-state)	133, 143
	74LV1T04	Single supply translating inverter	135, 143
	74LV1T34	Single supply translating buffer	135, 144
	74LV1T125	Single supply translating buffer (3-state)	135, 144
	74LV1T126	Single supply translating buffer (3-state)	135, 144
	74AVC4T774	4-bit dual supply translating transceiver (3-state)	141, 143
	74AUP1T00	2-input single supply translating NAND gate	142, 159
	74AUP1T02	2-input single supply translating NOR gate	142, 160
	74AUP1T08	2-input single supply translating AND gate	142, 156
	74AUP1T32	2-input single supply translating OR gate	142, 161
	74AUP1T86	2-input single supply translating X-OR gate	142, 158
	74AUP1T87	2-input single supply translating X-NOR gate	142, 158
	74AVC1T8128	Single dual-supply translating 2-input NOR with enable	143
	74AVC1T8832	Single dual-supply translating 2-input OR with strobe	143
	74LV1T00	2-input single supply translating NAND gate	143, 159
	74LV1T02	2-input single supply translating NOR gate	143, 160
	74LV1T08	2-input single supply translating AND gate	144, 156
	74LV1T32	2-input single supply translating OR gate	144, 161
	74LV1T86	2-input single supply translating X-OR gate	144, 158
	74LV1T87	2-input single supply translating X-NOR gate	144, 158



Bipolar transistors

1

General purpose bipolar transistors..... 14

Transistors single NPN.....	14
Transistors single PNP.....	14
High performance transistors (superior power dissipation)	15
Transistors double.....	15
Switching transistors single.....	16
Switching transistors double.....	16
Medium power transistors high performance (175 °C capable).....	17
NPN High performance transistors (175°C capable & superior power dissipation)	17
PNP High performance transistors (175°C capable & superior power dissipation)	17
Medium power transistors	18
High voltage transistors.....	18
LED driver	19
LED driver NPN	19
Constant current source	19
Darlington transistors.....	20
Schmitt triggers.....	20
Low noise transistors.....	20
Matched pair transistors.....	21
MOSFET driver	22
Medium frequency transistors.....	22

Low V_{CEsat} (BISS) transistors..... 23

Low V_{CEsat} (BISS) transistors single NPN up to 2000 mW.....	23
Low V_{CEsat} (BISS) transistors single NPN up to 750 mW.....	24
Low V_{CEsat} (BISS) transistors single PNP up to 2000 mW.....	25
Low V_{CEsat} (BISS) transistors single PNP up to 750 mW.....	26
Low V_{CEsat} (BISS) transistors double.....	27
Low V_{CEsat} (BISS) transistors load switches	28
Low V_{CEsat} (BISS) high voltage transistors	29
Low V_{CEsat} (BISS) RETs	29
Low V_{CEsat} (BISS) transistors PNP - N-channel MOSFET combination.....	30
Low V_{CEsat} (BISS) power transistors single	30
Low V_{CEsat} (BISS) power transistors double	30

Resistor equipped transistors (RETs) 31

RETs 100 mA single	31
RETs 100 mA double.....	32
RETs 500 mA single / double.....	32

3-terminal adjustable shunt regulators 33

Transistors single NPN

Types in **bold** represent new products

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
25	100	450	1200	100					
30	100	110 - 200	450 - 800	100	BC848B	PMST5089			
		350	900	100		BC848W			
32	100	110 - 420	220 - 800	100	BCW31 / 32 / 33	PMST5088			
		180 - 380	310 - 630	250	BCW60B / C / D				
45	100	110 - 420	220 - 800	100	BC847 / A / B / C	BC847W / AW / BW / CW	BC847AQA / BQA / CQA	BC847AM / BM / CM	BC847AMB / BMB / CMB
		120 - 380	220 - 630	100	BCX70G / H / J / K				
		110 - 200	220 - 450	100	BCW71 / 72				
		500	1250	100	PMBT6429	PMST6429			
50	100	210 - 290	340 - 460	100 - 150	2PD601ART 2PD601ARL 2PD601ASL	2PD601ARW / SW			
		250	650	100	PMBT6428	PMST6428			
60	100	110 - 200	220 - 450	100	BCV71 / 72				
65	100	110 - 200	220 - 450	100	BC846 / A / B	BC846W / AW / BW		BC846BM	BC846BMB
50	150	120 - 200	240 - 400	80	NXP3875Y / G				
		150	120 - 270	270 - 560	100	2PC4081Q / R / S		2PC4617QM / RM	2PC4617QMB / RMB
	200	210	340	100	2PD601BRL				
		290	460	100	2PD601BSL				
45	500	100 - 250	250 - 600	100	BC817 / -16 / -25 / -40	BC817W / -16W / -25W /-40W	BC817-25QA/-40QA		
		100	600	100	BCX19				
50	500	85 - 170	170 - 340	140 - 180	2PD602AQL 2PD602ARL 2PD602ASL	2PD1820AR / S			
60	500	50	-	100		PMSTA05			
80	500	100	-	50	PMBTA06	PMSTA06			
45	800	100-250	250-600	100	BCW66F/G/H				

Transistors single PNP

Package					SOT23	SOT323 (SC-70)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
									
Size (mm)					2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
P _{tot} (mW)					250	200	750	250	250
V _{CE0} (V)	I _C (mA)	h _{FE} min/typ	h _{FE} max	f _T min (MHz)					
30	100	125 - 220	500 - 800	100	BC858B	BC858W			
32	100	120 - 215	260 - 500	100	BCW29 / 30				
		180 - 380	310 - 630	100	BCW61B / C / D				
45	100	210 - 290	340 - 460	70 - 80	2PB709ART 2PB709ARL 2PB709ASL	2PB709ARW / SW			
		180 - 380	310 - 630	100	BCX71H / J / K				
		120 - 215	260 - 500	100	BCW69 / 70				
		125 - 420	250 - 800	100	BC857 / A / B / C	BC857W / AW / BW / CW	BC857AQA / BQA / CQA	BC857AM / BM / CM	BC857AMB / BMB / CMB
60	100	120	260	150	BCW89				
65	100	125 - 200	250 - 475	100	BC856 / A / B	BC856W / AW / BW		BC856BM	BC856BMB
100	100	30	-	50	BSS63				
50	150	120 - 270	270 - 560	100		2PA1576Q / R / S		2PA1774QM / RM / SM	2PA1774QMB / RMB / SMB
	200	210	340	100	2PB709BRL				
		290	460	100	2PB709BSL				
25	500	100	600	80	BCX18				
45	500	100 - 250	250 - 600	80	BC807 / -16 / -25 / -40	BC807W / -16W / -25W /-40W	BC807-25QA/-40QA		
		100	600	80	BCX17				
50	500	85 - 170	170 - 340	100 - 140	2PB710ARL 2PB710ASL	2PB1219AQ / R / S			
60	500	100	-	50		PMSTA55			
80	500	100	-	50	PMBTA56	PMSTA56			
45	800	100-250	250-600	80	BCW68F/G/H				

High performance transistors (superior power dissipation)

Package							SOT23
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							775
Polarity	V _{CEO} (V)	V _{ebo} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	
NPN	45	5	0.5	100	250	100	BC817K-16
				160	400	100	BC817K-25
				250	600	100	BC817K-40
PNP	45	5	0.5	100	250	80	BC807K-16
				160	400	80	BC807K-25
				250	600	80	BC807K-40

Transistors double

Package						SOT457 (SC-74)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010B-6 (SOT1216)
Size (mm)						2.9 x 1.5 x 1.0	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.5	1.0 x 1.0 x 0.37
P _{tot} (mW)						750	300	480	350
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)				
NPN	40	100	120	450	100		PUMX1		
	45	100	200	450	100	BC847DS	BC847BS	BC847RA	BC847QAS
	65	100	110	-	100		BC846S		
			200	450	100	BC846DS	BC846BS		
	50	150	120	560	100		PUMX2		
PNP	45	500	160	400	80	BC817DS		BC817RA	
	40	100	120	450	100	PIMT1	PUMT1		
	45	100	200	450	100		BC857BS	BC857RA	BC857QAS
	65	100	110	-	100		BC856S		
			200	450	100		BC856BS		
NPN / PNP	45	500	160	400	80	BC807DS		BC807RA	
	40	100	120	450	100		PUMZ1		
	45	100	200	450	100		BC847BPN	BC847RAPN	BC847QAPN
	50	100	120	560	100	PIMZ2	PUMZ2		
	65	100	200	450	100		BC846BPN		
	45	500	160	160	100 / 800	BC817DPN		BC817RAPN	

General purpose bipolar transistors

Switching transistors single

Types in **bold** represent new products

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT23	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)							1700	1300	250	200	250	250	750
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	t _{off} (ns)							
NPN	40	200	100	300	180	1200			PMBS3904	PMSS3904			
	15	600	40	120	500	20			PMBT2369	PMST2369			
	40	200	100	300	300	250			MMBT3904				
	30	600	100	300	250	250			PMBT3904	PMST3904	PMBT3904M	PMBT3904MB	PMBT3904QA
	40	600	100	300	250	250	PZT4401	PXT4401	PMBT4401	PMST4401			
	40	600	100	300	300	250			MMBT2222A				
	40	600	100	300	300	250	PZT2222A	PXT2222A	PMBT2222A	PMST2222A	PMBT2222AM	PMBT2222AMB	PMBT2222AQA
PNP	40	800	100	300	300	250			BSR14				
	40	100	100	300	150	700			PMBS3906	PMSS3906			
	40	200	100	300	250	300			MMBT3906				
	40	600	100	300	200	350	PZT4403	PXT4403	PMBT4403	PMST4403	PMBT3906M	PMBT3906MB	
	40	600	100	300	200	365			PMBT2907				
	40	600	100	300	200	300				PMST2907A			
	60	600	100	300	200	365	PZT2907A	PXT2907A	PMBT2907A		PMBT2907AM	PMBT2907AMB	PMBT2907AQA

Switching transistors double

Types in **bold** represent new products

Package							SOT363 (SC-88)	SOT457 (SC-74)	DFN1412-6 (SOT1268)
Size (mm)							2.0 x 1.25 x 0.95	2.9 x 1.5 x 1.0	1.4 x 1.2 x 0.5
P _{tot} (mW)							300	750	480
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)	t _{off} (ns)			
NPN	40	200	100	300	300	250	PMBT3904YS		PMBT3904RA
	40	600	100	300	250	250	PMBT4401YS		
	40	600	100	300	300	250	PMBT2222AYS		
PNP	40	200	100	300	250	300	PMBT3906YS		
	40	600	100	300	200	350	PMBT4403YS		
	60	600	100	300	200	365	PMBT2907AYS		
NPN / PNP	40	200	100	300	300 / 250	250 / 300	PMBT3946YPN		
	40	200	100	300	300 / 200	250 / 365		NMB2227A	

Medium power transistors high performance (175 °C capable)

Package							SOT223 (SC-73)
Size (mm)							6.5 x 3.5 x 1.65
P _{tot} (mW)							1700
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	80	7	1	63	250	100	BCP56H
					160	100	BCP56-10H
				100	250	100	BCP56-16H
PNP	80	7	1	63	250	100	BCP53H
					100	100	BCP53-10H
				100	250	100	BCP53-16H

NPN High performance transistors (175°C capable & superior power dissipation)

Package							SOT23
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							950
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	45	7	0.5	100	250	100	BC817K-16H
				160	400	100	BC817K-25H
				250	600	100	BC817K-40H

PNP High performance transistors (175°C capable & superior power dissipation)

Types in **bold** represent new products

Package							SOT23
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							675
Polarity	V _{CEO} (V)	V _{EBO} (V)	I _C (A)	h _{FE} min	h _{FE} max	f _T min(MHz)	
NPN	45	7	0.5	100	250	80	BC807-16H
				160	400	80	BC807-25H
				250	600	80	BC807-40H

Medium power transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)						1700	1300	1300	1300
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)				
NPN	20	2	85 - 160	375	40	BCP68 / -25	BC868 / -25	BC68PA / BC68-25PA	BC68PAS / BC68-25PAS
	45	1	63 - 100	160 - 250	100	BCP54 / -10 / -16	BCX54 / -10 / -16	BC54PA / BC54-10PA / BC54-16PA	BC54PAS / BC54-10PAS / BC54-16PAS
	60	1	63 - 100	160 - 250	100	BCP55 / -10 / -16	BCX55 / -10 / -16	BC55PA / BC55-10PA / BC55-16PA	BC55PAS / BC55-10PAS / BC55-16PAS
			100	300	100	BSP41	BSR41		
	80	1	63 - 100	160 - 250	100	BCP56 / -10 / -16	BCX56 / -10 / -16	BC56PA / BC56-10PA / BC56-16PA	BC56PAS / BC56-10PAS / BC56-16PAS
			40 - 100	120 - 300	100	BSP43	BSR43		
PNP	20	2	85 - 160	250 - 375	40	BCP69 / -16 / -25	BC869 / -16 / -25	BC69PA / BC69-16PA / BC69-25PA	BC69PAS / BC569-16PAS / BC69-25PAS
	45	1	63 - 100	160 - 250	115 ¹⁾ - 145 ¹⁾	BCP51 / -10 / -16	BCX51 / -10 / -16	BC51PA / BC51-10PA / BC51-16PA	BC51PAS / BC51-10PAS / BC51-16PAS
	60	1	63 - 100	160 - 250	100	BCP52 / -10 / -16	BCX52 / -10 / -16	BC52PA / BC52-10PA / BC52-16PA	BC52PAS / BC52-10PAS / BC52-16PAS
			40 - 100	120 - 300	100	BSP31	BSR30 / 31		
	80	1	63 - 100	160 - 250	115 ¹⁾ - 145 ¹⁾	BCP53 / -10 / -16	BCX53 / -10 / -16	BC53PA / BC53-10PA / BC53-16PA	BC53PAS / BC53-10PAS / BC53-16PAS
			40 - 100	120 - 300	100	BSP32 / 33	BSR33		

¹⁾ Typical value

High voltage transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	SOT23	SOT323 (SC-70)
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P _{tot} (mW)						1700	1300	750	250	200
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	f _T min (MHz)					
NPN	140	300	60	250	100				PMBT5550	PMST5550
	160	300	80	250	100				PMBT5551 / BSR19A	PMST5551
	250	100	50		60	BF722	BF622		BF822	
	300	100	50		60	BF720	BF620		BF820	BF820W
			40		50	PZTA42	PXTA42		PMBTA42	PMSTA42
	350	100	40		70	BSP19	BST39			
PNP	400	300	50	200	20	PZTA44			PMBTA44	
	100	100	30		50				BSS63	
	250	100	50		60	BF723				
			50		60		BF623		BF823	
	300	100	50		60		BF621		BF821	
			40		50	PZTA92	PXTA92		PMBTA92	PMSTA92
2 x NPN	300	100	40		50			PMBTA42DS		

For high-voltage transistors with increased performance please refer to our high-voltage low V_{CEsat} (BISS) transistor portfolio on page 23.

LED driver

Package		SOT457	SOT23
			
Size (mm)		2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0
P _{tot} (mW)		750	480
V _s supply voltage [V]	LED drive current [mA] @ V _s =10V		
18	10		NCR401T
	20		NCR402T
40	10	NCR401U	
	20	NCR402U	
	50	NCR405U	

LED driver NPN

Package		SOT457	SOT223
			
Size (mm)		2.9 x 1.5 x 1.0	6.5 x 3.5 x 1.65
P _{tot} (mW)		750	1250
V _s supply voltage [V]	Max Output Current I _{Out} [mA]		
16	250	NCR320U	
		NCR321U	
40	150	NCR420U	
		NCR421U	
16	250		NCR320Z
			NCR321Z
40	150		NCR420Z
			NCR421Z

Constant current source

SOT353 (SC-88A)					
Package					
Size (mm)	2.0 x 1.25 x 0.95				
P _{tot} (mW)	335				
Type	PSSI2021SAY				
Description	Maximum supply voltage	Maximum supply current	Typical stabilized output current	Minimum stabilized output current	Maximum stabilized output current
Parameter	V _s max (V)	I _s max (mA)	I _{out} typ (μA)	I _{out} min (mA)	I _{out} max (mA)
Value	75	2.2	15	0.015	50

Darlington transistors

Package					SOT223 (SC-73)	SOT89 (SC-62)	SOT23
							
Size (mm)					6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.3 x 1.0
P _{tot} (mW)					1700	1300	250
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	f _T min (MHz)			
NPN	30	500	10000	125			PMBTA13
			20000		PZTA14	PXTA14	PMBTA14
						BCV29	BCV27
	45	1000	2000	200	BSP50	BST50	
	60	500	10000	220		BCV49	BCV47
		1000	2000	200	BSP51	BST51	
	80					BSP52	BST52
	PNP	30	500	20000	125		
				220		BCV28	BCV26
45		1000	2000	200	BSP60	BST60	
60		500	10000	220		BCV48	BCV46
		1000	2000	200	BSP61	BST61	
80						BSP62	BST62

Schmitt triggers

Package							SOT143B
Size (mm)							2.9 x 1.3 x 1.0
P _{tot} (mW)							250
Polarity	V _{CEO} (V) TR1	V _{CEO} (V) TR2	I _C (mA)	h _{FE} min	h _{FE} max	V _{CEsat} typ (mV)	
NPN	30	6	100	110	800	250	BCV63 / B
PNP	30	6	100	220	475	250	BCV64B

Low noise transistors

Package							SOT23	SOT323 (SC-70)
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
P _{tot} (mW)							250	200
Polarity	V _{CEO} (V)	I _C (mA)	Noise figure max (dB)	h _{FE} min	h _{FE} max	f _T min (MHz)		
NPN	30	100	4	200	450	100	BC849B	BC849BW
				420	800	100	BC849C	BC849CW
	45	100	4	200	450	100	BC850B	BC850BW
				420	800	100	BC850C	BC850CW
PNP	30	100	4	220	475	100	BC859B	BC859BW
				420	800	100	BC859C	BC859CW
	45	100	4	220	475	100	BC860B	BC860BW
				420	800	100	BC860C	BC860CW

Matched pair transistors - part 1

Package							SOT143B	SOT457 (SC-74)	LFP4K56D (SOT1205)
Size (mm)							2.9 x 1.3 x 1.0	2.9 x 1.5 x 1.0	5 x 6 x 1.1
P _{tot} (mW)							250	750	1250
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	h _{FE1} /h _{FE2}	V _{BE1} - V _{BE2} (mV)			
NPN	30	100	110	800	0.7 ¹⁾	n.a.	BCV61/A/B/C		
	45	100	200	450	0.9 ¹⁾	n.a.	BCM61B		
						2		BCM847DS	
	80	100	63	250	0.95	n.a.		BCM56DS	
	100	3000	150	-	0.95	n.a.			PHPT610035NK
Configuration									
PNP	30	100	100	800	0.7 ¹⁾	n.a.	BCV62/A/B/C		
	45	100	200	450	0.9 ¹⁾	n.a.	BCM62B		
						2		BCM857DS	
	65	100	200	450	0.9	2		BCM856DS	
	80	100	63	250	0.95	n.a.		BCM53DS	
Configuration									

¹⁾ I_{C1} / I_{E2}

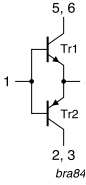
Matched pair transistors - part 2

Package							SOT353 (SC-88A)	SOT363 (SC-88)	SOT1216 (DFN1010B-6)
Size (mm)							2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.1 x 1.0 x 0.37
P _{tot} (mW)							300	300	350
Polarity	V _{CEO} (V)	I _C (mA)	h _{FE} min	h _{FE} max	h _{FE1} /h _{FE2}	V _{BE1} - V _{BE2} (mV)			
NPN	45	100	200	450	0.9 ¹⁾	2		BCM847BS	
					0.95	2	PMP4501G	PMP4501Y	BCM847QAS
					0.98	2	PMP4201G	PMP4201Y	
	65	100	200	450	0.9	2		BCM846BS	
	Configuration								
PNP	45	100	200	450	0.9 ¹⁾	2		BCM857BS	
					0.95	2	PMP5501G	PMP5501Y	BCM857QAS
					0.98	2	PMP5201G	PMP5201Y	
	65	100	200	450	0.9	2		BCM856BS	
	Configuration								

¹⁾ I_{C1} / I_{E2}

General purpose bipolar transistors

MOSFET driver

V_{CE0} (V)	I_C (A)	I_{cm} [A]	Type	Package	Remark	Configuration
30	0.1	0.2	BCV65	SOT143B 	General-purpose transistors	
40	0.6	1	PMD2001D	SOT457 	Switching transistors with reduced storage time	
	1	2	PMD3001D		Low V_{CEsat}	

Medium frequency transistors

						SOT23 	SOT323 (SC-70) 
Package						2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95
Size (mm)						250	200
P_{tot} (mW)							
Polarity	V_{CE0} (V)	I_C (mA)	h_{FE} min	h_{FE} max	f_T typ (MHz)		
NPN	15	100	40	-	500	BF570	
	20	25		85	>275	BF520	BF520W
		30	65	225	260	BF519	
	40	25	67	220	380	BF840	
PNP	30	25	25	50	250	BF824	BF824W
	40		50	-	>325	BF550	

Low V_{CEsat} (BISS) transistors single NPN up to 2000 mW

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)							1700	1650	750	1300	1300
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A					
12	5.3	10.6	300 / 530	0.5	2	18		PBSS301NX			
	5.8	11.6	300 / 530	0.5	2	18	PBSS301NZ				
	6	7	280 / 440	0.5	2	20				PBSS4612PA	
20	3	5	220 / 390	0.5	2	40		PBSS4320X			
	4	15	300 / 450	0.5	2	30			PBSS301ND		
	5	10	300 / 450	0.5	2	35		PBSS4520X			
	5.3	10.6	300 / 570	0.5	2	20		PBSS302NX			
	5.8	10.2	300 / 570	0.5	2	20	PBSS302NZ				
	6	7	280 / 440	0.5	2	20				PBSS4620PA	
	7	15	300 / 550	0.5	2	12		PBSS4021NX			
	8	20	300 / 550	0.5	2	9	PBSS4021NZ				
30	3	5	300 / 490	0.5	2	45		PBSS4330X			
	3	5	300 / 465	0.5	2	40				PBSS4330PA	PBSS4330PAS
	3.5	6	300 / 500	0.5	2	70			PBSS4032ND ³⁾		
	4.7	10	300 / 500	0.5	2	57		PBSS4032NX ³⁾			
	5.1	10.2	300 / 480	0.5	2	20		PBSS303NX			
	5.4	10	300 / 500	0.5	2	57	PBSS4032NZ ³⁾				
	5.5	11	300 / 480	0.5	2	20	PBSS303NZ				
	6	7	280 / 450	0.5	2	21				PBSS4630PA	
40	2	3	300 / –	0.5	5	140		PBSS4240X			
	4	15	300 / 520	0.5	2	35			PBSS302ND		
		10	300 / 500	0.5	2	21		PBSS4540X			
	5	10	300 / 500	0.5	2	25	PBSS4540Z				
50	2	5	300 / –	0.5	2	90 ²⁾		PBSS4250X			
	3	5	200 / 280	0.5	2	65			PBSS4350D		
			300 / 460	0.5	2	50		PBSS4350X			
			200 / 280	0.5	2	60 ¹⁾	PBSS4350Z				
60	1	2	170 / –	0.5	10	200 ²⁾		PBSS4160X			
	3	6	200 / 360	0.5	5	45					PBSS4360PAS
			200 / –	0.5	5	45	PBSS4360Z	PBSS4360X			
			345 / 570	0.5	2	40			PBSS303ND		
	4.7	9.4	300 / 520	0.5	2	25		PBSS304NX			
	5.2	10.4	300 / 520	0.5	2	25	PBSS304NZ				
	6	7	280 / 440	0.5	2	22				PBSS4560PA	
	6.2	15	300 / 500	0.5	2	17		PBSS4041NX			
80	7	15	300 / 500	0.5	2	13	PBSS4041NZ				
	3	6	240 / 360	0.5	2	40			PBSS304ND		
	4	10	250 / 400	0.5	2	25		PBSS4480X			
	4.6	9.2	300 / 470	0.5	2	25		PBSS305NX			
	5.1	10.2	300 / 470	0.5	2	25	PBSS305NZ				
100	5.6	7	270 / 425	0.5	2	25				PBSS4580PA	
	1	3	150 / 290	0.25	10	75			PBSS8110D		
			150 / 290	0.25	10	73		PBSS8110X			
			150 / 290	0.25	10	73	PBSS8110Z				
	3	4	170 / 275	0.5	2	45			PBSS305ND		
	4.5	9	200 / 330	0.5	2	27		PBSS306NX			
100	5.1	10.2	200 / 330	0.5	2	27	PBSS306NZ				
	5.2	6	180 / 285	0.5	2	30				PBSS8510PA	

¹⁾ $I_C / I_B = 20$ ²⁾ V_{CEsat} (max) ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors single NPN up to 750 mW

Types in **bold** represent new products

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	250	750
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A						
15	0.5	1	200 / 325	0.01	2	-				PBSS2515M	PBSS2515MB	
20	1	3	350 / 470	0.1	2	110 ²⁾	PBSS4120T					
	2	5	220 / 330	0.1	2	45	PBSS4320T					
	4.3	8	300 / 550	0.5	2	21	PBSS4021NT					
30	1	1.5	230 / 380	0.5	2	90						PBSS4130QA
		3	300 / 450	0.5	2	120 ²⁾	PBSS4130T					
	2	3	300 / 450	0.5	2	70	PBSS4230T					
			230 / 380	0.5	2	75						PBSS4230QA
	2.6	5	300 / 500	0.5	2	80	PBSS4032NT ³⁾					
40	0.5	1	200 / 550	0.01	2	200 ²⁾				PBSS2540M	PBSS2540MB	
	1	2	300 / 440	0.5	5	130		PBSS4140U				
			300 / 510	0.5	5	120	PBMT491A					
			300 / 420	0.5	5	130	PBSS4140T					
	2	3	350 / 470	0.1	2	70			PBSS4240Y			
			300 / 450	0.5	2	70	PBSS4240T					
50	2	5	300 / 495	0.5	2	60	PBSS4350T					
60	1	1.5	150 / 240	0.5	2	90						PBSS4160QA
		2	200 / 420	0.5	5	120		PBSS4160U				
			200 / 350	0.5	5	110	PBSS4160T					
	2	3	150 / 240	0.5	2	75						PBSS4260QA
	3.8	8	300 / 500	0.5	2	29	PBSS4041NT					
100	1	3	150 / 400	0.25	10	80			PBSS8110Y			
			150 / 300	0.25	10	70	PBSS8110T					

¹⁾ $I_C / I_B = 20$ ²⁾ V_{CEsat} (max) ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors single PNP up to 2000 mW

Package							SOT223 (SC-73)	SOT89 (SC-62)	SOT457 (SC-74)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
											
Size (mm)							6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P _{tot} (mW)							1700	1650	750	1300	1300
V _{CE0} (V)	I _C (A)	I _{CM} (A)	h _{FE} min/typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A					
12	5.3	10.6	250 / 400	0.5	2	20		PBSS301PX			
	5.7	11.4	250 / 400	0.5	2	20	PBSS301PZ				
	6	7	220 / 335	0.5	2	20				PBSS5612PA	
20	3	5	200 / –	0.5	2	80 ²⁾			PBSS5320D		
			220 / 450	0.5	2	50		PBSS5320X			
	4	15	250 / 400	0.5	2	35			PBSS301PD		
	5	10	300 / 430	0.5	2	45		PBSS5520X			
	5.1	10.2	250 / 370	0.5	2	25		PBSS302PX			
	5.5	11	250 / 370	0.5	2	25	PBSS302PZ				
	6	7	230 / 345	0.5	2	25				PBSS5620PA	
	6.2	15	250 / 400	0.5	2	18		PBSS4021PX			
	6.6	20	250 / 400	0.5	2	16	PBSS4021PZ				
30	2.7	5	200 / 350	0.5	2	87			PBSS4032PD ³⁾		
	3	5	200 / 380	0.5	2	50		PBSS5330X			
			200 / 320	0.5	2	45				PBSS5330PA	PBSS5330PAS
	4.2	10	200 / 350	0.5	2	70		PBSS4032PX ³⁾			
	4.4	10	200 / 350	0.5	2	70	PBSS4032PZ ³⁾				
	5.1	10.2	250 / 400	0.5	2	25		PBSS303PX			
	5.3	10.6	250 / 400	0.5	2	25	PBSS303PZ				
6	7	200 / 335	0.5	2	25				PBSS5630PA		
40	2	3	215 / –	0.5	5	170		PBSS5240X			
	4	15	200 / 310	0.5	2	46			PBSS302PD		
		10	250 / 370	0.5	2	33		PBSS5540X			
5	250 / 350		0.5	2	40 ¹⁾	PBSS5540Z					
50	2	5	200 / –	0.5	2	90 ²⁾		PBSS5250X			
	3	5	200 / 300	0.5	2	70			PBSS5350D		
			200 / 375	0.5	2	70		PBSS5350X			
			200 / 300	0.5	2	70	PBSS5350Z				
60	3	6	130 / 220	0.5	5	55					PBSS5360PAS
			130 / –	0.5	5	55	PBSS5360Z	PBSS5360X			
			180 / 265	0.5	2	55			PBSS303PD		
	4.2	8.4	200 / 295	0.5	2	35		PBSS304PX			
	4.5	9	200 / 295	0.5	2	35	PBSS304PZ				
	5	6	170 / 260	0.5	2	35				PBSS560PA	
	5	15	200 / 300	0.5	2	30		PBSS4041PX			
5.7	200 / 300		0.5	2	22	PBSS4041PZ					
80	3	5	155 / 225	0.5	2	55			PBSS304PD		
	180 / 265		0.5	2	40				PBSS5580PA		
	4	10	200 / 300	0.5	2	35		PBSS5480X			
		8	200 / 280	0.5	2	36		PBSS305PX			
	4.5	9	200 / 280	0.5	2	36	PBSS305PZ				
100	1	3	150 / 350	0.5	5	100			PBSS9110D		
			150 / 350	0.5	5	90		PBSS9110X			
			150 / –	0.5	5	90	PBSS9110Z				
	2	3	175 / 275	0.5	2	65			PBSS305PD		
	2.7	4	180 / 295	0.5	2	45				PBSS9410PA	
	3.7	7.4	200 / 300	0.5	2	45		PBSS306PX			
	4.1	8.2	200 / 300	0.5	5	45	PBSS306PZ				

¹⁾ $I_C / I_B = 20$ ²⁾ V_{CEsat} (max) ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors single PNP up to 750 mW

Package							SOT23	SOT323 (SC-70)	SOT363 (SC-88)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010D-3 (SOT1215)
												
Size (mm)							2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P_{tot} (mW)							480	350	430	250	250	750
V_{CE0} (V)	I_C (A)	I_{CM} (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A						
15	0.5	1	200 / 260	0.01	2	150				PBSS3515M	PBSS3515MB	
20	1	2	300 / 450	0.1	2	125 ²⁾	PBSS5120T					
	2	3	225 / –	0.5	2	80 ²⁾	PBSS5220T					
		5	220 / 420	0.5	2	50	PBSS5320T					
	3.5	8	250 / 400	0.5	2	35	PBSS4021PT					
30	1	1.5	180 / 295	0.5	2	85						PBSS5130QA
			260 / 350	0.5	2	110	PBSS5130T					
	2	3	300 / 450	0.1	2	70	PBSS5230T					
			180 / 295	0.5	2	70						PBSS5230QA
	2.4	5	200 / 320	0.5	2	95	PBSS4032PT ³⁾					
40	0.5	1	200 / 380	0.01	2	220				PBSS3540M	PBSS3540MB	
	1	2	300 / 520	0.1	5	130		PBSS5140U				
			300 / 800	0.1	5	130	PMMT591A					
			300 / 510	0.1	5	130	PBSS5140T					
	2	3	300 / –	0.1	2	110 ²⁾			PBSS5240Y			
			300 / 450	0.1	2	70	PBSS5240T					
50	2	3	200 / –	0.5	2	90 ²⁾	PBSS5250T					
							PBSS5250TH					
	2	3	200 / –	0.5	2	90 ²⁾	PBSS5350TH					
		5	200 / 360	0.5	2	55	PBSS5350T					
60	1	2	120 / 185	0.5	2	125						PBSS5160QA
			150 / 250	0.5	5	135		PBSS5160U				
			150 / 250	0.5	5	120	PBSS5160T					
	1.7	2.5	120 / 185	0.5	2	105						PBSS5260QA
	2.7	8	200 / 300	0.5	2	49	PBSS4041PT					
100	1	3	150 / –	0.25	5	93			PBSS9110Y			
			150 / 350	0.5	5	95	PBSS9110T					

¹⁾ $I_C / I_B = 20$ ²⁾ V_{CEsat} (max) ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors double

Package										SOT96 (SO8)	SOT457 (SC-74)	DFN2020-6 (SOT1118)	DFN2020D-6 (SOT1118D)
Size (mm)										4.9 x 3.9 x 1.75	2.9 x 1.5 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62
P_{tot} (mW)										2000 ²⁾	750	1300	1300
V_{CE0} (V)	I_C (A)	Polarity	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	V_{CEsat} typ (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	V_{CEsat} max (mV)	@ I_C (A)	@ I_B (A)				
15	0.5	2 x NPN	200	0.01	2	170 ¹⁾	250	0.5	0.05				
		2 x PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05				
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05				
		NPN / PNP	200	0.01	2	170 ¹⁾	250	0.5	0.05				
20	2	NPN / NPN	230	0.5	2	60	90	0.5	0.05				PBSS4220PANS
	2	PNP / PNP	210	0.5	2	70	110	0.5	0.05				PBSS5220PAPS
	7.5	NPN / NPN	300	0.5	2	15	150	4	0.2	PBSS4021SN			
	6.3	PNP / PNP	250	0.5	2	24	225	4	0.2	PBSS4021SP			
	7.5 / 6.3	NPN / PNP	300 / 250	0.5	2	15 / 24	150 / 225	4	0.2	PBSS4021SPN			
30	1	NPN / NPN	210	0.5	2	75	100	0.5	0.05			PBSS4130PAN	
		PNP / PNP	170	0.5	2	85	140	0.5	0.05			PBSS5130PAP	
		NPN / PNP	210 / 170	0.5	2	75 / 85	100 / 140	0.5	0.05			PBSS4130PANP	
	2	NPN / NPN	230	0.5	2	60	80	0.5	0.05			PBSS4230PAN	
		PNP / PNP	210	0.5	2	75	110	0.5	0.05			PBSS5230PAP	
		NPN / PNP	230 / 210	0.5	2	60 / 75	80 / 100	0.5	0.05			PBSS4230PANP	
	5.7	NPN / NPN	300	0.5	2	57	250	4	0.4	PBSS4032SN ³⁾			
	4.8	PNP / PNP	200	0.5	2	70	390	4	0.4	PBSS4032SP ³⁾			
	5.7 / 4.8	NPN / PNP	300 / 200	0.5	2	57 / 70	250 / 390	4	0.4	PBSS4032SPN ³⁾			
	40	1	NPN / PNP	300 / 250	0.5	5	130 / 150	500	1	0.1		PBSS4140DPN	
		2	NPN / PNP	300 / 250	0.5	5	80 / 100	400 / 530	2	0.2		PBSS4240DPN	
50	2.7	2 x NPN	300	0.5	2	50	340	2.7	0.27	PBSS4350SS			
		2 x PNP	200	0.5	2	60	370	2.7	0.27	PBSS5350SS			
		NPN / PNP	300 / 200	0.5	2	50 / 60	340 / 370	2.7	0.27	PBSS4350SPN			
60	1	2 x NPN	200	0.5	5	115	250	1	0.1		PBSS4160DS		
		2 x PNP	150	0.5	5	120	330	1	0.1		PBSS5160DS		
		NPN / PNP	200 / 150	0.5	5	115 / 120	250 / 330	1	0.1		PBSS4160DPN		
	1	NPN / NPN	150	0.5	2	90	120	0.5	0.05			PBSS4160PAN	PBSS4160PANS
		PNP / PNP	120	0.5	2	125	180	0.5	0.05			PBSS5160PAP	PBSS5160PAPS
		NPN / PNP	150 / 120	0.5	2	90 / 125	120 / 180	0.5	0.05			PBSS4160PANP	PBSS4160PANPS
	2	NPN / NPN	210	0.5	2	70	90	0.5	0.05			PBSS4260PAN	PBSS4260PANS
		PNP / PNP	140	0.5	2	100	140	0.5	0.05			PBSS5260PAP	PBSS5260PAPS
		NPN / PNP	210 / 140	0.5	2	70 / 100	90 / 140	0.5	0.05			PBSS4260PANP	PBSS4260PANPS
	6.7	NPN / NPN	300	0.5	2	20	190	4	0.2	PBSS4041SN			
	5.9	PNP / PNP	200	0.5	2	35	330	4	0.2	PBSS4041SP			
	6.7 / 5.9	NPN / PNP	300 / 200	0.5	2	20 / 35	190 / 330	4	0.2	PBSS4041SPN			
120	1	NPN / NPN	240	0.1	2	90	120	0.5	0.05			PBSS4112PAN	
		PNP / PNP	190	0.1	2	150	220	0.5	0.05			PBSS5112PAP	
		NPN / PNP	240 / 190	0.1	2	90 / 150	120 / 220	0.5	0.05			PBSS4112PANP	

¹⁾ $I_C / I_B = 20$ ²⁾ Device mounted on a ceramic PCB, Al₂O₃, standard footprint ³⁾ Optimized for high-speed switching

Low V_{CEsat} (BISS) transistors load switches

Package				SOT457 (SC-74)	SOT363 (SC-88)
					
Size (mm)				2.9 x 1.5 x 1.0	
P_{tot} (mW)				750 ¹⁾	600 ¹⁾
V_{CE0} (V)	I_C (A)	V_{CEsat} max (mV); $I_C = 0.5$ A; $I_B = 0.05$ A	R1, R2 (k Ω)		
15	0.5	250	2.2		PBLS1501Y
			4.7		PBLS1502Y
			10		PBLS1503Y
			22		PBLS1504Y
20	1	150	2.2		PBLS2001D
			4.7		PBLS2002D
			10		PBLS2003D
			22		PBLS2004D
	1.8	70	2.2	PBLS2021D	
			4.7	PBLS2022D	
			10	PBLS2023D	
			22	PBLS2024D	
40	0.5	350	2.2		PBLS4001Y
			4.7		PBLS4002Y
			10		PBLS4003Y
			22		PBLS4004Y
			47		PBLS4005Y
	1	170	2.2		PBLS4001D
			4.7		PBLS4002D
			10		PBLS4003D
			22		PBLS4004D
			47		PBLS4005D
60	1	180	2.2		PBLS6001D
			4.7		PBLS6002D
			10		PBLS6003D
			22		PBLS6004D
			47		PBLS6005D
	1.5	100	2.2	PBLS6021D	
			4.7	PBLS6022D	
			10	PBLS6023D	
			22	PBLS6024D	

¹⁾ Device mounted on a ceramic PCB, Al₂O₃, standard footprint

²⁾ Device mounted on an FR4 PCB, single-sided copper, tin-plated, and standard footprint

Low V_{CEsat} (BISS) high voltage transistors

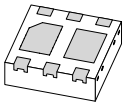
Types in **bold** represent new products

Package				SOT223 (SC-73)	SOT89 (SC-62)	SOT1215	SOT23
							
Size (mm)				6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	1.1 x 1.0 x 0.37	2.9 x 1.3 x 1.0
P _{tot} (mW)				1700	1300	750	250
Polarity	V _{CEO} [max] (V)	I _C (A)	hFE [min]				
NPN	150	0.5	100			PBHV8515QA	
		1	70				PBHV8115TLH
			100				PBHV8115T
					PBHV8115X		
			PBHV8115Z				
		PBHV8215Z					
	180	1	100				PBHV8118T
	400	0.5	100	PBHV8540Z	PBHV8540X		PBHV8540T
		1	100	PBHV8140Z			
	500	0.15	50				PMBTA45
	600	0.1	70	PBHV2160Z			
		0.5	70	PBHV8560Z			
PNP	140	4	100	PBHV9414Z			
	150	0.5	100			PBHV9515QA	
		1	70				PBHV9115TLH
			100				PBHV9115T
					PBHV9115X		
			PBHV9115Z				
		PBHV9215Z					
	400	0.25	100				PBHV9040T
					PBHV9040X		
		PBHV9040Z					
		PBHV9540Z	PBHV9540X				
	500	0.15	100				PBHV9050T
		0.25	100	PBHV9050Z			
	600	0.1	70	PBHV3160Z			
		0.5	70	PBHV9560Z			

Low V_{CEsat} (BISS) RETs

Package					SOT23	
						
Size (mm)					2.9 x 1.3 x 1.0	
P_{tot} (mW)					250	
V_{CEO} (V)	I_C (mA)		R1 (k Ω)	R2 (k Ω)	NPN	PNP
40	600	R1 = R2	1	1	PBRN113ET	PBRP113ET
			2.2	2.2	PBRN123ET	PBRP123ET
		R1 $\neq$ R2	1	10	PBRN113ZT	PBRP113ZT
			2.2	10	PBRN123YT	PBRP123YT

Low V_{CEsat} (BISS) transistors PNP - N-channel MOSFET combination

Package											DFN2020-6 (SOT1118)
											
Size (mm)											2.0 x 2.0 x 0.62
P_{tot} (mW)											1300
V_{CEO} (V)	I_C (A)	h_{FE} min	h_{FE} max	@ I_C (mA)	@ V_{CE} (V)	R_{CEsat} typ (mΩ)	V_{DS} (V)	V_{GS} (V)	I_D (A)	R_{Dson} typ (mΩ)	
40	2	300	800	100	5	240	30	0.7	0.66	390	PBSM5240PF
		100	-	100	5	240	30	0.7	0.66	390	PBSM5240PFH

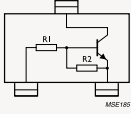
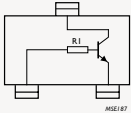
Low V_{CEsat} (BISS) power transistors single

Package						LFPAK56 (SOT669)
						
Size (mm)						5 x 6 x 1.1
P_{tot} (mW)						1250
V_{CEO} (V)	I_C (A)	h_{FE} min/typ	@ I_C (A)	@ V_{CE} (V)	Polarity	
40	6	200 / 400	0.5	2	NPN	PHPT60406NY
			0.5	2	PNP	PHPT60406PY
	10	200 / 400	0.5	2	NPN	PHPT60410NY
			0.5	2	PNP	PHPT60410PY
	15	200 / 400	0.5	2	NPN	PHPT60415NY
60	3	200 / 400	0.5	2	NPN	PHPT60603NY
			0.5	2	PNP	PHPT60603PY
	6	200 / 400	0.5	2	NPN	PHPT60606NY
		150 / 250	0.5	2	PNP	PHPT60606PY
	10	200 / 400	0.5	2	NPN	PHPT60610NY
		150 / 250	0.5	2	PNP	PHPT60610PY
		150 / 250	0.5	2	PNP	PHPT60610PY
100	2	150 / 250	0.5	10	NPN	PHPT61002NYC
		150 / 220	0.5	10	PNP	PHPT61002PYC
		120/220	0.5	10	NPN	PHPT61002NYCLH
		100/180	0.5	10	PNP	PHPT61002PYCLH
	3	150 / 250	0.5	10	NPN	PHPT61003NY
		150 / 220	0.5	10	PNP	PHPT61003PY
	6	150 / 250	0.5	10	NPN	PHPT61006NY
		150 / 220	0.5	10	PNP	PHPT61006PY
	10	150 / 250	0.5	10	NPN	PHPT61010NY
		150 / 220	0.5	10	PNP	PHPT61010PY
		150 / 220	0.5	10	PNP	PHPT61010PY

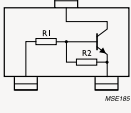
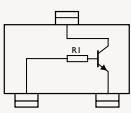
Low V_{CEsat} (BISS) power transistors double

Package												LFPAK56D (SOT1205)
												
Size (mm)												5 x 6 x 1.1
P _{tot} (mW)												1250
V _{CEO} (V)	I _C (A)	I _{CM} (A)	h _{FE} typ	@ I _C (A)	@ V _{CE} (V)	V _{CEsat} typ (mV); I _C = 0.5 A; I _B = 0.05 A	V _{CEsat} max (mV)	@ I _C (A)	@ I _B (A)	Polarity	h _{FE1} /h _{FE2}	
100	3	6	150	0.5	10	50	300	3	0.2	2XNPN	-	PHPT610030NK
						70	400	3	0.2	2XPNP	-	PHPT610030PK
						50 / 70	300 / 400	3	0.2	NPN/PNP	-	PHPT610030NPK
						50	300	3	0.2	2XNPN	0.95	PHPT610035NK
						70	400	3	0.2	2XPNP	0.9	PHPT610035PK

RETs 100 mA single - part 1

Package					SOT23		SOT323 (SC-70)	
								
Size (mm)					2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95	
P _{tot} (mW)					250		200	
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN		PNP	
50	100		1	1			PDTA113ET	PDTA113EU
			2.2	2.2	PDTC123ET		PDTA123ET	PDTC123EU
			4.7	4.7	PDTC143ET		PDTA143ET	PDTC143EU
			10	10	PDTC114ET		PDTA114ET	PDTC114EU
			22	22	PDTC124ET		PDTA124ET	PDTC124EU
			47	47	PDTC144ET		PDTA144ET	PDTC144EU
			100	100	PDTC115ET		PDTA115ET	PDTC115EU
			1	10			PDTA113ZT	PDTA113ZU
			2.2	10	PDTC123YT		PDTA123YT	PDTC123YU
			2.2	47	PDTC123JT		PDTA123JT	PDTC123JU
			4.7	10	PDTC143XT		PDTA143XT	PDTC143XU
			4.7	47	PDTC143ZT		PDTA143ZT	PDTC143ZU
			10	47	PDTC114YT		PDTA114YT	PDTC114YU
			22	47	PDTC124XT		PDTA124XT	PDTC124XU
			47	10	PDTC144VT		PDTA144VT	PDTC144VU
			47	22	PDTC144WT		PDTA144WT	PDTC144WU
			2.2	-	PDTC123TT		PDTA123TT	PDTC123TU
			4.7	-	PDTC143TT		PDTA143TT	PDTC143TU
			10	-	PDTC114TT		PDTA114TT	PDTC114TU
			22	-	PDTC124TT		PDTA124TT	PDTC124TU
			47	-	PDTC144TT		PDTA144TT	PDTC144TU
			100	-	PDTC115TT		PDTA115TT	PDTC115TU

RETs 100 mA single - part 2

Package					DFN1006-3 (SOT883)		DFN1006B-3 (SOT883B)		SOT1215	
										
Size (mm)					1.0 x 0.6 x 0.48		1.0 x 0.6 x 0.37		1.1 x 1.0 x 0.37	
P _{tot} (mW)					250		250		750	
V _{CE0} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN		PNP		NPN	
50	100		1	1			PDTA113EM		PDTA113EMB	
			2.2	2.2	PDTC123EM		PDTA123EM	PDTC123EMB	PDTA123EMB	
			4.7	4.7	PDTC143EM		PDTA143EM	PDTC143EMB	PDTA143EMB	PDTC143EQA
			10	10	PDTC114EM		PDTA114EM	PDTC114EMB	PDTA114EMB	PDTC114EQA
			22	22	PDTC124EM		PDTA124EM	PDTC124EMB	PDTA124EMB	PDTC124EQA
			47	47	PDTC144EM		PDTA144EM	PDTC144EMB	PDTA144EMB	PDTC144EQA
			100	100	PDTC115EM		PDTA115EM	PDTC115EMB	PDTA115EMB	
			1	10			PDTA113ZM		PDTA113ZMB	
			2.2	10	PDTC123YM		PDTA123YM	PDTC123YMB	PDTA123YMB	
			2.2	47	PDTC123JM		PDTA123JM	PDTC123JMB	PDTA123JMB	PDTC123JQA
			4.7	10	PDTC143XM		PDTA143XM	PDTC143XMB	PDTA143XMB	PDTC143XQA
			4.7	47	PDTC143ZM		PDTA143ZM	PDTC143ZMB	PDTA143ZMB	PDTC143ZQA
			10	47	PDTC114YM		PDTA114YM	PDTC114YMB	PDTA114YMB	PDTC114YQA
			22	47	PDTC124XM		PDTA124XM	PDTC124XMB	PDTA124XMB	
			47	10	PDTC144VM		PDTA144VM	PDTC144VMB	PDTA144VMB	
			47	22	PDTC144WM		PDTA144WM	PDTC144WMB	PDTA144WMB	
			2.2	-	PDTC123TM		PDTA123TM	PDTC123TMB	PDTA123TMB	
			4.7	-	PDTC143TM		PDTA143TM	PDTC143TMB	PDTA143TMB	
			10	-	PDTC114TM		PDTA114TM	PDTC114TMB	PDTA114TMB	
			22	-	PDTC124TM		PDTA124TM	PDTC124TMB	PDTA124TMB	
			47	-	PDTC144TM		PDTA144TM	PDTC144TMB	PDTA144TMB	
			100	-	PDTC115TM		PDTA115TM	PDTC115TMB	PDTA115TMB	

Resistor equipped transistors (RETs)

RETs 100 mA double

Package					DFN1010B-6 (SOT1216)			DFN1412-6 (SOT1268)			SOT363 (SC-88)		
													
Size (mm)					1.1 x 1.0 x 0.37			1.4 X 1.2 X 0.5			2.0 x 1.25 x 0.95		
P _{tot} (mW)					350			480			300		
V _{CEO} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP	NPN / NPN	NPN / PNP	PNP / PNP
50	100	R1 = R2	2.2	2.2							PUMH20	PUMD20	PUMB20
			4.7	4.7							PUMH15	PUMD15	PUMB15
			10	10	PQMH11	PQMD3	PQMB11	PRMH11	PRMD3	PRMB11	PUMH11	PUMD3	PUMB11
			22	22		PQMD2			PRMD2		PUMH1	PUMD2	PUMB1
			47	47	PQMH2	PQMD12		PRMH2	PRMD12		PUMH2	PUMD12	PUMB2
			100	100							PUMH24	PUMD24	PUMB24
		R1 ≠ R2	2.2	47	PQMH10	PQMD10		PRMH10	PRMD10		PUMH10	PUMD10	PUMB10
			4.7	10							PUMH18	PUMD18	PUMB18
			4.7	47	PQMH13	PQMD13		PRMH13	PRMD13		PUMH13	PUMD13	PUMB13
			10	47	PQMH9			PRMH9			PUMH9	PUMD9	PUMB9
			22	47		PQMD16			PRMD16		PUMH16	PUMD16	PUMB16
			47	22							PUMH17	PUMD17	PUMB17
			47 / 2.2	47 / 47								PUMD48	
		Only R1	2.2	-							PUMH30	PUMD30	PUMB30
			4.7	-							PUMH7	PUMD6	PUMB3
			10	-							PUMH4	PUMD4	PUMB4
			22	-							PUMH19	PUMD19	PUMB19
			47	-							PUMH14	PUMD14	PUMB14

RETs 500 mA single / double

Package					SOT457 (SC-74)		SOT23		SOT323 (SC-70)		SOT1215	
												
Size (mm)					2.9 x 1.5 x 1.0		2.9 x 1.3 x 1.0		2.0 x 1.25 x 0.95		1.1 x 1.0 x 0.37	
P _{tot} (mW)					750		250		200		750	
V _{CEO} (V)	I _C (mA)	Configuration	R1 (kΩ)	R2 (kΩ)	NPN / NPN	NPN / PNP	NPN	PNP	NPN	PNP	NPN	PNP
50	500	R1 = R2	1	1			PDTD113ET	PDTB113ET	PDTD113EU	PDTB113EU	PDTD113EQA	PDTB113EQA
			2.2	2.2			PDTD123ET	PDTB123ET	PDTD123EU	PDTB123EU	PDTD123EQA	PDTB123EQA
			4.7	4.7			PDTD143ET	PDTB143ET	PDTD143EU	PDTB143EU	PDTD143EQA	PDTB143EQA
			10	10			PDTD114ET	PDTB114ET	PDTD114EU	PDTB114EU	PDTD114EQA	PDTB114EQA
		R1 ≠ R2	1	10	PIMN31	PIMC31	PDTD113ZT	PDTB113ZT	PDTD113ZU	PDTB113ZU	PDTD113ZQA	PDTB113ZQA
			2.2	10			PDTD123YT	PDTB123YT	PDTD123YU	PDTB123YU	PDTD123YQA	PDTB123YQA
			4.7	10			PDTD143XT	PDTB143XT	PDTD143XU	PDTB143XU	PDTD143XQA	PDTB143XQA
		Only R1	2.2	-			PDTD123TT	PDTB123TT				

3-terminal adjustable shunt regulators

Types in **bold red** are in development

Type name	Pinning configuration	Tamb(C°)	Vref		Package	Size(mm)	Ptot(mW)	VKA(V)	IK(mA)	
TLVH431NCDBZR	Normal pinning	0 to 70	1.5%	1.24		2.9 x 1.3 x 1.0	480	20	80	
TLVH431NIDBZR	Normal pinning	-40 to 85								
TLVH431NQDBZR	Normal pinning	-40 to 125								
TLVH431NMQDBZR	Mirrored pinning									
TLVH431NACDBZR	Normal pinning	0 to 70	1%							
TLVH431NAIDBZR	Normal pinning	-40 to 85								
TLVH431NAQDBZR	Normal pinning	-40 to 125								
TLVH431NAMQDBZR	Mirrored pinning									
TL431CDBZR	Normal pinning	0 to 70	2%	2.495			2.9 x 1.3 x 1.0	580	36	100
TL431IDBZR	Normal pinning	-40 to 85								
TL431QDBZR	Normal pinning	-40 to 125								
TL431FDT	Normal pinning									
TL431MFDT	Mirrored pinning									
TL431ACDBZR	Normal pinning	0 to 70	1%							
TL431AIDBZR	Normal pinning	-40 to 85								
TL431AQDBZR	Normal pinning	-40 to 125								
TL431AFDT	Normal pinning									
TL431AMFDT	Mirrored pinning									
TL431BCDBZR	Normal pinning	0 to 70	0.5%							
TL431BIDBZR	Normal pinning	-40 to 85								
TL431BQDBZR	Normal pinning	-40 to 125								
TL431BFDT	Normal pinning									
TL431BMFDT	Mirrored pinning									



Zener diodes	36
General purpose Zener diodes	36
Zener diodes specifications	37
Switching diodes	38
General purpose, high speed switching diodes $\leq 90V$	38
General purpose, high speed switching diodes 100V	38
General purpose, switching diodes $\geq 100V$	39
Controlled avalanche switching diodes	40
Low leakage current switching diodes	40
Recovery rectifiers	41
Recovery rectifiers - Automotive qualified	41
Nomenclature recovery rectifiers automotive grade types	41
Schottky diodes and rectifiers	42
General purpose Schottky diodes $\leq 250\text{ mA}$	42
Low capacitance Schottky diodes	43
Medium power low VF Schottky rectifiers single $\geq 200\text{ mA}$ - leadless DSN / DFN packages	44
Medium power low VF Schottky rectifiers single $\geq 200\text{ mA}$	46
Medium power low VF Schottky rectifiers single $\geq 200\text{ mA}$ - leaded packages	47
Medium power low VF Schottky rectifiers dual $\geq 200\text{ mA}$	48
Nomenclatures	49

General purpose Zener diodes

I_F max (mA)	P_{ZSM} (W)	V_Z nom (V)	V_Z tolerance	Note	Configuration		Series	Package		Size (mm)	P_{tot} (mW)
500	-	3.3~24	C	Europe	Single		1N47xxA series	SOD66 (DO-41)		4.8 x 2.6 x 0.81	1000
	60	3.6~75					BZV85 series				
250	-	2.1~36	About 2%	Special	Single		NZX series	SOD27 (DO-35)		4.25 x 1.85 x 0.56	400
	40	2.4~75	B, C	Europe			BZX79 series				
400	40	2.4~75	C	Europe	Single		BZV90 series	SOT223 (SC-73)		6.5 x 3.5 x 1.65	1500
250	40	2.4~75	C	Europe	Single		BZV49 series	SOT89 (SC-62)		4.5 x 2.5 x 1.5	1000
250	40	2.4~75	B, C	Europe	Single		BZV55 series	SOD80C (MiniMelf)		3.5 x 1.5 x 1.5	400
200	40	2.4~75	B, C	Europe	Dual c.a.		BZB84 series	SOT23		2.9 x 1.3 x 1.0	250
			A, B, C		Single		BZX84 series				
250	30	5~6.8	0.2 V	Ave	Single		PLVA600A series				
250	40	2.4~75	B, C	Europe	Single		BZT52 series	SOD123		2.7 x 1.6 x 1.2	550
200		2.4~36	B	Japan			PDZ-GW series				
250	-	3.0~30	About 2.5%	Special	Single		NZH series	SOD123F		2.6 x 1.6 x 1.1	830
	40	2.4~75	B, C	Europe			BZT52H series				
200	40	10	B2	Japan	Dual isolated		PZU10DB2 series	SOT353 (SC-88A)		2.0 x 1.25 x 0.95	300
200	40	2.4~15	C	Europe	Dual c.a.		BZB784 series	SOT323 (SC-70)		2.0 x 1.25 x 0.95	350
200	40	2.4~75	B, C	Europe	Single		BZX84W series				
200	30	100	C	Europe	Back-to-back		BZB100A	SOD323 (SC-76)		1.7 x 1.25 x 0.95	300
	40	2.4~36	B2	Japan	Single		PDZ-B series				
250	40	2.4~75	B, C	Europe			BZX384 series				
200	40	2.4~36	B, B1, B2, B3	Japan	Single		PZUxBA series				
200	60	100	C	Europe	Single		BZX100A	SOD323F (SC-90)		1.7 x 1.25 x 0.7	550
200	40	2.4~36	B, B1, B2, B3	Japan			PZUxB series				
250	40	2.4~75	B, C	Europe			BZX84J series				
200	40	2.4~75	B, C	Europe	Single		BZX585 series	SOD523 (SC-79)		1.2 x 0.8 x 0.6	300
200	40	2.4~75	B, C	Europe	Single		BZX884 series	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250
		2.4~36	B, B2	Japan			PZUxBL series				
250	40	2.4~30	B	Europe	Single		TDZxJ series	SOD323J		1.7 x 1.25 x 0.7	500

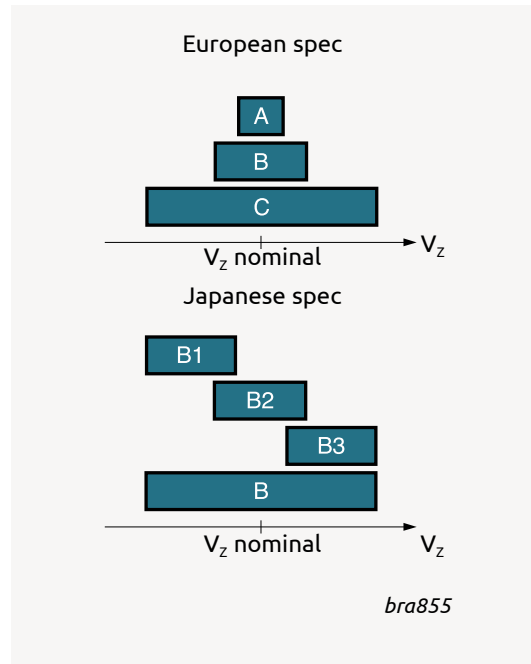
Notes:

Japan: B selection: app. 5% V_Z tolerance, B1, B2, B3 selections: app. 2% V_Z tolerance in sequential intervals
 Europe: A selection: app. 1% V_Z tolerance, B selection: app. 2% V_Z tolerance, C selection: app. 5% V_Z tolerance;
 the selections are in overlapping intervals

Ave: low-voltage avalanche regulator diodes
 Dual c.a.: dual common anode

Zener diodes specifications

Differences in Zener specifications



European spec (BZV, BZX, BZB, 1N47)

y =	C-series	B-series	A-series
	±5%	±2%	±1%
	V_z (V)	V_z (V)	V_z (V)
BZX84-y2V4	2.2 - 2.6	2.35 - 2.45	2.37 - 2.43
BZX84-y2V7	2.5 - 2.9	2.65 - 2.75	2.67 - 2.73
BZX84-y3V0	2.8 - 3.2	2.94 - 3.06	2.97 - 3.03
BZX84-y3V3	3.1 - 3.5	3.23 - 3.37	3.26 - 3.34
BZX84-y3V6	3.4 - 3.8	3.53 - 3.67	3.56 - 3.64
BZX84-y3V9	3.7 - 4.1	3.82 - 3.98	3.86 - 3.94
BZX84-y4V3	4 - 4.6	4.21 - 4.39	4.25 - 4.35
BZX84-y4V7	4.4 - 5	4.61 - 4.79	4.65 - 4.75
BZX84-y5V1	4.8 - 5.4	5 - 5.2	5.04 - 5.16
BZX84-y5V6	5.2 - 6	5.49 - 5.71	5.54 - 5.66
BZX84-y6V2	5.8 - 6.6	6.08 - 6.32	6.13 - 6.27
BZX84-y6V8	6.4 - 7.2	6.66 - 6.94	6.73 - 6.87
BZX84-y7V5	7 - 7.9	7.35 - 7.65	7.42 - 7.58
BZX84-y8V2	7.7 - 8.7	8.04 - 8.36	8.11 - 8.29
BZX84-y9V1	8.5 - 9.6	8.92 - 9.28	9 - 9.2
BZX84-y10	9.4 - 10.6	9.8 - 10.2	9.9 - 10.1
BZX84-y11	10.4 - 11.6	10.8 - 11.2	10.8 - 11.11
BZX84-y12	11.4 - 12.7	11.8 - 12.2	11.88 - 12.12
BZX84-y13	12.4 - 14.1	12.7 - 13.3	12.87 - 13.13
BZX84-y15	13.8 - 15.6	14.7 - 15.3	14.85 - 15.15
BZX84-y16	15.3 - 17.1	15.7 - 16.3	15.84 - 16.16
BZX84-y18	16.8 - 19.1	17.6 - 18.4	17.82 - 18.18
BZX84-y20	18.8 - 21.2	19.6 - 20.4	19.8 - 20.2
BZX84-y22	20.8 - 23.3	21.6 - 22.4	21.78 - 22.22
BZX84-y24	22.8 - 25.6	23.5 - 24.5	23.76 - 24.24
BZX84-y27	25.1 - 28.9	26.5 - 27.5	26.73 - 27.27
BZX84-y30	28 - 32	29.4 - 30.6	29.70 - 30.30
BZX84-y33	31 - 35	32.3 - 33.7	32.67 - 33.33
BZX84-y36	34 - 38	35.3 - 36.7	35.64 - 36.36
BZX84-y39	37 - 41	38.2 - 39.8	38.61 - 39.39
BZX84-y43	40 - 46	42.1 - 43.9	42.57 - 43.43
BZX84-y47	44 - 50	46.1 - 47.9	-
BZX84-y51	48 - 54	50 - 52	50.49 - 51.51
BZX84-y56	52 - 60	54.9 - 57.1	-
BZX84-y62	58 - 66	60.8 - 63.2	-
BZX84-y68	64 - 72	66.6 - 69.4	-
BZX84-y75	70 - 79	73.5 - 76.5	74.25 - 75.75

Japanese spec (PZU, PDZ)

y =	B-series	B1-series	B2-series	B3-series
	± 5%	± 2%	± 2%	± 2%
	V_z (V)	V_z (V)	V_z (V)	V_z (V)
PZU2.4y	2.3 - 2.6	-	-	-
PZU2.7y	2.5 - 2.9	2.5 - 2.75	2.65 - 2.9	-
PZU3.0y	2.8 - 3.2	2.8 - 3.05	2.95 - 3.2	-
PZU3.3y	3.1 - 3.5	3.1 - 3.35	3.25 - 3.5	-
PZU3.6y	3.4 - 3.8	3.4 - 3.65	3.55 - 3.8	-
PZU3.9y	3.7 - 4.1	3.7 - 3.97	3.87 - 4.1	-
PZU4.3y	4.01 - 4.48	4.01 - 4.21	4.15 - 4.34	4.28 - 4.48
PZU4.7y	4.42 - 4.9	4.42 - 4.61	4.55 - 4.75	4.69 - 4.9
PZU5.1y	4.84 - 5.37	4.84 - 5.04	4.98 - 5.2	5.14 - 5.37
PZU5.6y	5.31 - 5.92	5.31 - 5.55	5.49 - 5.73	5.67 - 5.92
PZU6.2y	5.86 - 6.53	5.86 - 6.12	6.06 - 6.33	6.26 - 6.53
PZU6.8y	6.47 - 7.14	6.47 - 6.73	6.65 - 6.93	6.86 - 7.14
PZU7.5y	7.06 - 7.84	7.06 - 7.36	7.28 - 7.6	7.52 - 7.84
PZU8.2y	7.76 - 8.64	7.76 - 8.1	8.02 - 8.36	8.28 - 8.64
PZU9.1y	8.56 - 9.55	8.56 - 8.93	8.85 - 9.23	9.15 - 9.55
PZU10y	9.45 - 10.55	9.45 - 9.87	9.77 - 10.21	10.11 - 10.55
PZU11y	10.44 - 11.56	10.44 - 10.88	10.76 - 11.22	11.1 - 11.56
PZU12y	11.42 - 12.6	11.42 - 11.9	11.74 - 12.24	12.08 - 12.6
PZU13y	12.47 - 13.96	12.47 - 13.03	12.91 - 13.49	13.37 - 13.96
PZU14y	-	-	13.7 - 14.3	-
PZU15y	13.84 - 15.52	13.84 - 14.46	14.34 - 14.98	14.85 - 15.52
PZU16y	15.37 - 17.09	15.37 - 16.01	15.85 - 16.51	16.35 - 17.09
PZU18y	16.94 - 19.03	16.94 - 17.7	17.56 - 18.35	18.21 - 19.03
PZU20y	18.86 - 21.08	18.86 - 19.7	19.52 - 20.39	20.21 - 21.08
PZU22y	20.88 - 23.17	20.88 - 21.77	21.54 - 22.47	22.23 - 23.17
PZU24y	22.93 - 25.57	22.93 - 23.96	23.72 - 24.78	24.54 - 25.57
PZU27y	25.1 - 28.9	-	-	-
PZU30y	28 - 32	-	-	-
PZU33y	31 - 35	-	-	-
PZU36y	34 - 38	-	-	-

NZX-series in SOD27

	V_z (V)		V_z (V)		V_z (V)
NZX2V1A	2.0 - 2.2	NZX6V2D	6.1 - 6.4	NZX14C	13.8 - 14.3
NZX2V4A	2.3 - 2.5	NZX6V2E	6.3 - 6.6	NZX15A	14.1 - 14.7
NZX2V4B	2.4 - 2.6	NZX6V8A	6.4 - 6.7	NZX15B	14.5 - 15.1
NZX2V7A	2.5 - 2.7	NZX6V8B	6.6 - 6.9	NZX15C	14.9 - 15.5
NZX2V7B	2.6 - 2.8	NZX6V8C	6.7 - 7	NZX15X	14.35 - 15.09
NZX2V7C	2.7 - 2.9	NZX6V8D	6.9 - 7.2	NZX16A	15.3 - 15.9
NZX3V0A	2.8 - 3	NZX7V5A	7 - 7.3	NZX16B	15.7 - 16.5
NZX3V0B	2.9 - 3.1	NZX7V5B	7.2 - 7.6	NZX16C	16.3 - 17.1
NZX3V0C	3 - 3.2	NZX7V5C	7.3 - 7.7	NZX18A	16.9 - 17.7
NZX3V3A	3.1 - 3.3	NZX7V5D	7.5 - 7.9	NZX18B	17.5 - 18.3
NZX3V3B	3.2 - 3.4	NZX7V5X	7.07 - 7.45	NZX18C	18.1 - 19
NZX3V3C	3.3 - 3.5	NZX8V2A	7.7 - 8.1	NZX20A	18.8 - 19.7
NZX3V6A	3.4 - 3.6	NZX8V2B	7.9 - 8.3	NZX20B	19.5 - 20.4
NZX3V6B	3.5 - 3.7	NZX8V2C	8.1 - 8.5	NZX20C	20.2 - 21.2
NZX3V6C	3.6 - 3.8	NZX8V2D	8.3 - 8.7	NZX22A	20.9 - 21.9
NZX3V9A	3.7 - 3.9	NZX9V1A	8.5 - 8.9	NZX22B	21.6 - 22.6
NZX3V9B	3.8 - 4	NZX9V1B	8.7 - 9.1	NZX22C	22.3 - 23.3
NZX3V9C	3.9 - 4.1	NZX9V1C	8.9 - 9.3	NZX24A	22.9 - 24
NZX4V3A	4 - 4.2	NZX9V1D	9.1 - 9.5	NZX24B	23.6 - 24.7
NZX4V3B	4.1 - 4.3	NZX9V1E	9.3 - 9.7	NZX24C	24.3 - 25.5
NZX4V3C	4.2 - 4.4	NZX10A	9.5 - 9.9	NZX24X	22.61 - 23.77
NZX4V3D	4.3 - 4.5	NZX10B	9.7 - 10.1	NZX27A	25.2 - 26.6
NZX4V7A	4.4 - 4.6	NZX10C	9.9 - 10.3	NZX27B	26.2 - 27.6
NZX4V7B	4.5 - 4.7	NZX10D	10.2 - 10.6	NZX27C	27.2 - 28.6
NZX4V7C	4.6 - 4.8	NZX11A	10.4 - 10.8	NZX27X	26.99 - 28.39
NZX4V7D	4.7 - 4.9	NZX11B	10.7 - 11.1	NZX30A	28.2 - 29.6
NZX5V1A	4.8 - 5	NZX11C	10.9 - 11.3	NZX30B	29.2 - 30.6
NZX5V1B	4.9 - 5.1	NZX11D	11.1 - 11.6	NZX30C	30.2 - 31.6
NZX5V1C	5 - 5.2	NZX12A	11.4 - 11.9	NZX30X	29.02 - 30.51
NZX5V1D	5.1 - 5.3	NZX12B	11.6 - 12.1	NZX33A	31.2 - 32.6
NZX5V6A	5.2 - 5.5	NZX12C	11.9 - 12.4	NZX33B	32.2 - 33.6
NZX5V6B	5.3 - 5.6	NZX12D	12.2 - 12.7	NZX33C	33.2 - 34.5
NZX5V6C	5.4 - 5.7	NZX12X	11.44 - 12.03	NZX36A	34.2 - 35.7
NZX5V6D	5.5 - 5.8	NZX13A	12.4 - 12.9	NZX36B	35.3 - 36.8
NZX5V6E	5.6 - 5.9	NZX13B	12.6 - 13.1	NZX36C	36.4 - 38
NZX6V2A	5.7 - 6	NZX13C	12.9 - 13.4	NZX36X	35.36 - 37.19
NZX6V2B	5.8 - 6.1	NZX14A	13.2 - 13.7		
NZX6V2C	6 - 6.3	NZX14B	13.5 - 14		

Switching diodes

General purpose, high speed switching diodes <= 90V

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA)	@ V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	SOT23	SOT143B	SOT323 (SC-70)	SOT363 (SC-88)	DFN1412-6 (SOT1268)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)
														
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.4 x 1.2 x 0.5	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48
						P_{tot} (mW)	400	250	250	200	350	480	325	250
50	1	50	100	50	4			BAL74						
								BAV74						
70	1	50	1000	70	4			BAL99						
75	1	50	1000	75	4				BAS28					
		100	5000	75	4		BAS32L							
80	1	50	500	80	4					1PS300				
										1PS301				
										1PS302				
90	1	50	500	80	4			BAW56		BAW56W		BAW56QA	BAW56M	
										BAW56S	BAW56SRA			
										BAW756S				

General purpose, high speed switching diodes 100V

V_R max (V)	V_F max (V) @ I_F (mA)	I_R max (nA) @ V_R (V)	t_{rr} max (ns)	Package	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	DFN1412-6 (SOT1268)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-2 (SOD882)	DFN1006-3 (SOT883)	DFN1006D-2 (SOD882D)	
				Size (mm)	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.4 x 1.2 x 0.5	1.2 x 0.8 x 0.6	1.1 x 1.0 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	
				P_{tot} (mW)	250	380	375	200	300	300	300	480	250	325	250	250	250	
100	1	50	500	80	4			BAS16GW	BAS16H			BAS316	BAS16J		BAS516		BAS16L	BAS16LD
							BAS16			BAS16W					BAS16QA			
											BAS16VY							
							BAV70			BAV70W					BAV70QA		BAV70M	
										BAV70S		BAV70SRA						
							BAV99			BAV99W					BAV99QA			
										BAV99S								

General purpose, switching diodes $\geq 100\text{V}$ Types in **bold** represent new products

V_R max (V)	V_F max (V)	I_F (mA)	I_F max (mA)	V_R (V)	t_{rr} max (ns)	Package	SOD80C (MiniMelf)	SOT457 (SC-74)	SOT23	SOT143B	SOD123	SOD123F	SOT323 (SC-70)	SOT353 (SC-88A)	SOT363 (SC-88)	SOD323 (SC-76)	SOD323F (SC-90)	SOD523 (SC-79)	DFN1006D-2 (SOD882(D))	DFN1010D-3 (SOT1215)
																				
						Size (mm)	3.5 x 1.5 x 1.5	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48 (1.0 x 0.6 x 0.37)	1.1 x 1.0 x 0.37
						P_{tot} (mW)	400	250	250	250	380	375	200	255	300	300	300	250	250	325
100	1	100	100	100	50				BAS19											
150	1	100	100	150	50		BAV102													
									BAS20											
≈ 200	1	100	100	200	50		BAV103				BAS21GW	BAS21H				BAS321	BAS321J	BAS521B	BAS21LL (LD)	BAV21QA
									BAS21				BAS21W							
										BAV23										
														BAS21PG						
									BAV23A				BAS21AW							
									BAV23C											BAV23QA
									BAV23S				BAS21SW							
								BA-S21AVD												
								BAS21VD												
300	1.1	100	150	250	50												BAS21J	BAS521		
									BAS101											
									BAS101S											
										BAW101										
															BAW101S					

Controlled avalanche switching diodes

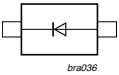
V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	I_{FSM} max (A)	I_{FRM} max (mA)	C_d max (pF)	t_{rr} max (ns)	Package	SOT23	SOT143B
								Size (mm)		
								P_{tot} (mW)	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0
60	1	200	100	9	600	2.5	6			BAS56
90	1	200	100	10	600	35	50		BAS29	
									BAS31	
									BAS35	

Low leakage current switching diodes

V_R max (V)	V_F max (V)	@ I_F (mA)	I_R max (nA) @ V_R max	t_{rr} max (μs)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1010D-3 (SOT1215)	DFN1006-3 (SOT883)	DFN1006-2 (SOD882)
					Size (mm)											
					P_{tot} (mW)	400	300	250	380	375	250	250	250	305	250	250
75	1	10	5	3					BAS116GW	BAS116H		BAS416	BAS716			BAS116L
								BAS116						BAS116QA		
								BAV199			BAV199W					
								BAW156								
								BAV170						BAV170QA	BAV170M	
125	1	100	1	1.5 typ		BAS45AL	BAS45A									

Recovery rectifiers - Automotive qualified

Types in **bold** represent new products

$V_R \text{ max (V)}$	$V_F \text{ max (V)}$	$(@) I_F \text{ (A)}$	$I_R \text{ max (}\mu\text{A)}$	$(@) V_R \text{ (V)}$	$t_{rr} \text{ max (ns)}$	Package	CFP5 (SOD128)	CFP3 (SOD123W)
						Size (mm)		
						$P_{tot} \text{ (mW) @ } 1\text{cm}^2$	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
200	0.93	1	0.2	200	25		1050	950
	0.98	2	0.2	200	25			PNE20010ER
	0.95	2	0.2	200	25		PNE20020EP	PNE20020ER
	0.98	3	0.2	200	30		PNE20030EP	
400	1.1	1	1	400	1800			PNS40010ER

Diodes

Nomenclature recovery rectifiers automotive grade types

PNE 200 10 E R

Recovery time indicator:

- PNE** - hyperfast recovery time
- PNU - ultrafast recovery time
- PNS - standard recovery time

Max. reverse voltage:

- 200** = 200 V
- 400 = 400 V
- 600 = 600 V

Cont. Forward current:

- 10** = 1.0 A
- 20 = 2.0 A
- 30 = 3.0 A

Package indicator:

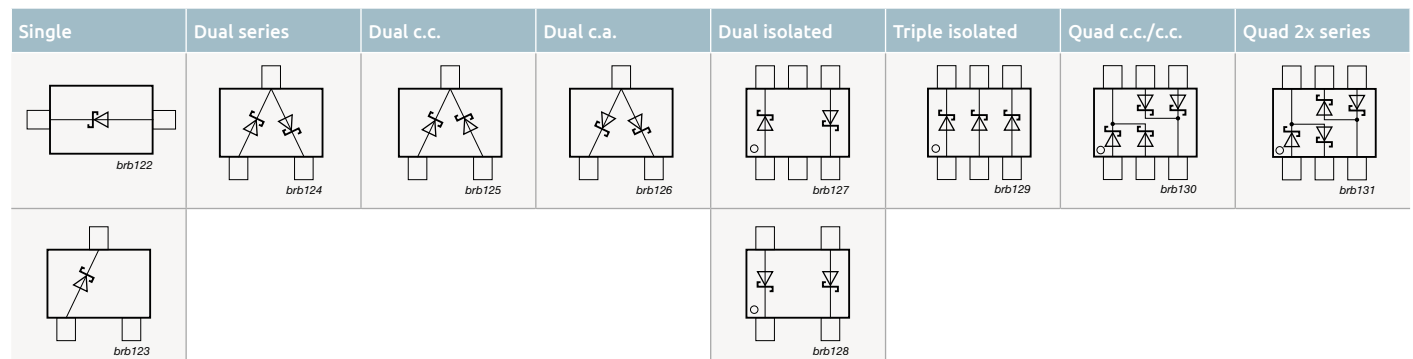
- R** = CFP3 (SOD123W)
- P = CFP5 (SOD128)

configuration:

- E** = single die

General purpose Schottky diodes <= 250 mA

IF max (mA)	VR max (V)	VF max (mV)	@ IF (mA)	IR max (μA)	@ VR (V)	Package	SOD80C (MiniMelf)	SOD68 (DO-34)	SOT23	SOT143B	SOD123	
												
						Size (mm)	3.5 x 1.5 x 1.5	3.04 x 1.6 x 0.55	2.9 x 1.3 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	
P _{tot} (mW)							300	500	250	250	357	
70	70	750	10	0.1	50	Single			BAS70			
						Dual series			BAS70-04			
						Dual c.c.			BAS70-05			
						Dual c.a.			BAS70-06			
						Dual isolated				BAS70-07		
						Triple isolated						
120	40	370	1	0.5	30	Quad 2x series						
						Single						
						Single			BAS40			
						Dual series			BAS40-04			
						Dual c.c.			BAS40-05			
						Dual c.a.			BAS40-06			
200	30	340	10	2	25	Dual isolated				BAS40-07		
						Quad c.c./c.c.						
						Quad 2x series						
						Single						
						Single			BAT754			
						Dual series			BAT754S			
200	40	300	10	15	30	Dual c.c.			BAT754C			
						Dual c.a.			BAT754A			
						Triple isolated						
						Single	BAS85	BAT85	BAT54		BAT54GW	
						Dual series			BAT54S			
						Dual c.c.			BAT54C			
						Dual c.a.			BAT54A			
						Dual isolated				BAT74		
						Triple isolated						
						Quad c.c./c.c.						
						Quad 2x series						
						500	200	30	10	Single		
600	200	1	10	Single								
250	100	850	250	4	75	Single						
						Single						
						Single			BAT721			
						Dual series			BAT721S			
						Dual c.c.			BAT721C			
						Dual c.a .			BAT721A			
						Single						
						Single						
420	30	0.5	25	Dual series								
Dual c.c.												
Dual c.a.												
50	450	10	5	40	Single	BAS86	BAT86					
850	250	4	75	Single						BAT46GW		



	SOD123F	SOT323 (SC-70)	SOT363 (SC-88)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)/ DFN1006-3 (SOT883)
							
	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
	375	250	300	385	400	275	250
	BAS70H	BAS70W			1PS76SB70	1PS79SB70	BAS70L
		BAS70-04W					
		BAS70-05W					
		BAS70-06W					
			BAS70-07S				
			BAS70XY				
	BAS40H	BAS40W			RB751V40	RB751S40	RB751CS40
		BAS40-04W			1PS76SB40	1PS79SB40	BAS40L
		BAS40-05W					
		BAS40-06W					
			1PS88SB48				
			BAS40XY			1PS79SB31	
			BAT754L				
	BAT54H	BAT54W		BAT54J	1PS76SB10	1PS79SB10	BAT54L
		BAT54SW					
		BAT54CW					BAT54CM
		BAT54AW					
			BAT74S				
			BAT54XY				
						RB521S30	RB521CS30L
						RB520S30	RB520CS30L
					1PS76SB21		
						1PS79SB30	
		BAT854W					
		BAT854SW					
		BAT854CW					
		BAT854AW					
	BAT46WH			BAT46WJ			

Low capacitance Schottky diodes

I_F max (mA)	V_R max (V)	V_F max (mV) @ I_F (mA)	C_j max (pF) @ $V_R = 0$ V	Package	SOT23	SOT323 (SC-70)	SOT363 (SC-88)	SOD323 (SC-76)	SOD523 (SC-79)	DFN1006-2 (SOD882)
				Size (mm)						
				P_{tot} (mW)	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6	1.0 x 0.6 x 0.48
30	4	450	1	Single	BAT17	250	300	400	500	250
				Triple isolated				1PS76SB17	1PS79SB17	
				Dual series	PMBD353 PMBD354 ¹⁾					
	15	340	1	Single		1PS70SB82				1PS10SB82
				Triple isolated			1PS88SB82			
				Dual series		1PS70SB84				
				Dual c.c.		1PS70SB85				
				Dual c.a.		1PS70SB86				

¹⁾ Diodes have matched capacitance

Medium power low VF Schottky rectifiers single ≥ 200 mA - leadless DSN / DFN packages

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	DSN0603-2 (SOD962)	DSN0603B-2 (SOD962B)	DSN1006-2 (SOD993)	
								
					Size (mm)	0.6 x 0.3 x 0.3	0.6 x 0.3 x 0.2	1.0 x 0.6 x 0.28
					P_{tot} (mW) @ 1 cm ²	525	525	1.000
0.1	30	840	0.0008	Low I_R				
0.2	20	420	0.045	Low V_F	PMEG2002AESF	PMEG2002AESFB		
		490	0.0035	Low I_R	PMEG2002ESF			
	30	470	0.08	Low V_F	PMEG3002AESF			
		480	0.05	low V_F				
		520	0.015	Low I_R				
		535	0.009	Low I_R	PMEG3002ESF			
	40	525	0.08	Low V_F	PMEG4002AESF			
		600	0.0065	Low I_R	PMEG4002ESF			
		600	0.01	low I_R				
	60	600	0.1	low V_F				
0.5	20	390	0.2	low V_F				
		410	0.3	low V_F				
		440	1.5	low V_F				
		500	0.03	low I_R				
		550	0.045	Low V_F	PMEG2005AESF			
		620	0.0035	Low I_R	PMEG2005ESF			
	30	500	0.5	low V_F				
		630	0.08	Low V_F	PMEG3005AESF			
		670	0.015	Low I_R				
		720	0.009	Low I_R	PMEG3005ESF			
	40	590	0.01	low I_R				
		820	0.08	Low V_F	PMEG4005AESF			
		880	0.0065	Low I_R	PMEG4005ESF			
1	20	375	1.9	low V_F				
		415	0.6	low V_F				
		490	0.2	low V_F				
	30	480	1.25	Low V_F			PMEG3010AESB	
		565	0.045	Low I_R			PMEG3010ESB	
	40	505	0.115	Low V_F			PMEG4010AESB	
		600	0.02	low I_R				
		610	0.04	Low I_R			PMEG4010ESB	
	60	625	0.65	Low V_F			PMEG6010AESB	
		730	0.03	Low I_R			PMEG6010ESB	
1.5	20	420	0.9	low V_F				
	40	610	0.03	low I_R				
2	20	420	1.9	low V_F				
		450	0.9	low V_F				
	30	470	2.5	low V_F				
	40	535	0.1	low V_F				
		530	0.2	low V_F				
		575	0.25	low V_F				

Types in **bold** represent new products

	DSN1006U-2 (SOD995)	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)	DFN1608D-2 (SOD1608)	DFN1006-2 (SOD882)	DFN1006D-2 (SOD882D)	DFN0603-2 (SOD972E)
							
	1.0 x 0.6 x 0.28	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.62	1.6 x 0.8 x 0.37	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	0.63 x 0.33 x 0.25
	1.190	960	960	780	565	660	570
							PMEG3001EEF
					PMEG3002AEL	PMEG3002AELD	PMEG3002EEF
					PMEG4002EL	PMEG4002ELD	
					PMEG6002EL	PMEG6002ELD	
						PMEG2005BELD	
				PMEG2005EPK			
					PMEG2005AEL	PMEG2005AELD	
					PMEG2005EL	PMEG2005ELD	
					PMEG3005EL	PMEG3005ELD	
							PMEG3005EEF
				PMEG4005EPK			
		PMEG2010EPA	PMEG2010EPAS				
				PMEG2010EPK			
	PMEG3010AESA					PMEG2010BELD	
				PMEG4010EPK			
				PMEG2015EPK			
				PMEG4015EPK			
		PMEG2020EPA	PMEG2020EPAS				
				PMEG2020EPK			
		PMEG3020EPA	PMEG3020EPAS				
		PMEG4020EPA	PMEG4020EPAS				
				PMEG4020EPK			
		PMEG6020EPA	PMEG6020EPAS				

Medium power low VF Schottky rectifiers single ≥ 200 mATypes in **bold** represent new products

I_F max (A)	V_F max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)
				Size (mm)			
				P_{tot} (mW) @ 1 cm ²	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
				Optimization	2150	1050	950
1	20	340	1	Low V_F			PMEG2010ER
		450	0.05	Low I_R			PMEG2010BER
	30	360	1.5	Low V_F		PMEG3010EP	PMEG3010ER
		450	0.05	Low I_R		PMEG3010BEP	PMEG3010BER
	40	490	0.05	Low V_F		PMEG4010EP	PMEG4010ER
				Low V_F		PMEG4010ETP	PMEG4010ETR
		460	0.022	Low V_F /Low I_R			PMEG40T10ER ¹⁾
	60	530	0.06	Low V_F		PMEG6010EP	PMEG6010ER
				Low V_F			PMEG6010ETR
		590	0.0008	Low V_F /Low I_R		PMEG60T10ELP¹⁾	
		600	0.00065	Low V_F /Low I_R			PMEG60T10ELR¹⁾
		660	0.0003	Low I_R			PMEG6010ELR
2	30	360	3	Low V_F		PMEG3020EP	
		420	1.5	Low V_F		PMEG3020CEP	PMEG3020ER
		450	0.1	Low I_R		PMEG3020BEP	
		520	0.05	Low I_R		PMEG3020DEP	PMEG3020BER
	40	490	0.1	Low V_F		PMEG4020EP	PMEG4020ER
				Low V_F		PMEG4020ETP	PMEG4020ETR
		515	0.022	Low V_F /Low I_R		PMEG40T20EP ¹⁾	PMEG40T20ER ¹⁾
	60	530	0.2	Low V_F		PMEG6020EP	PMEG6020ER
				Low V_F		PMEG6020ETP	PMEG6020ETR
		620	0.0012	Low V_F /Low I_R		PMEG60T20ELP¹⁾	PMEG60T20ELR ¹⁾
		680	0.0007	Low I_R		PMEG6020AELP	PMEG6020AELR
		760	0.0003	Low I_R			PMEG6020ELR
3	30	360	5	Low V_F		PMEG3030EP	
		450	0.15	Low I_R	PMEG030V030EPD	PMEG3030BEP	
	40		0.12	Low V_F	PMEG040V030EPD		
		490	0.2	Low V_F		PMEG4030EP	
				Low V_F		PMEG4030ETP	
		525	0.028	Low V_F /Low I_R		PMEG40T30EP ¹⁾	PMEG40T30ER ¹⁾
	45	480	0.044	Low V_F /Low I_R	PMEG045T030EPD ¹⁾		PMEG4030ER
		530	0.1	Low V_F	PMEG050V030EPD		
	60	475	0.4	Low V_F		PMEG6030EVP	
		530	0.2	Low V_F	PMEG060V030EPD	PMEG6030EP	
				Low V_F		PMEG6030ETP	
		620	0.0018	Low V_F /Low I_R		PMEG60T30ELP¹⁾	PMEG60T30ELR¹⁾
4.5	30	690	0.001	Low I_R		PMEG6030ELP	
		770	0.00045	Low I_R		PMEG10030ELP	
	40	490	0.3	Low V_F		PMEG4050EP	
		520	0.12	Low V_F	PMEG040V050EPD	PMEG4050ETP	
		525	0.041	Low V_F /Low I_R		PMEG40T50EP ¹⁾	
		490	0.3	Low V_F	PMEG045V050EPD		
	45	525	0.044	Low V_F /Low I_R	PMEG045T050EPD ¹⁾		
		560	0.4	Low V_F	PMEG060V050EPD		
	60	690	0.0018	Low V_F /Low I_R		PMEG60T50ELP¹⁾	
		840	0.00045	Low I_R	PMEG100V060ELPD		
	8	850	0.0005	Low I_R	PMEG100V080ELPD		

¹⁾ Trench process

Medium power low VF Schottky rectifiers single ≥ 200 mA

I_F max (A)	V_F max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	CFP15 (SOT1289)	CFP5 (SOD128)	CFP3 (SOD123W)
				Size (mm)			
				P_{tot} (mW) @ 1 cm ²	5.8 x 4.3 x 0.78	3.8 x 2.5 x 1.0	2.6 x 1.7 x 1.0
				Optimization	2150	1050	950
10	45	490	0.6	Low V_F	PMEG045V100EPD		
		540	0.5	Low V_F	PMEG45A10EPD		
		545	0.08	Low V_F /Low I_R	PMEG045T100EPD ¹⁾		
	60	560	0.7	Low V_F	PMEG060V100EPD		
	100	850	0.0008	Low I_R	PMEG100V100ELPD		
15	45	490	1	Low V_F	PMEG045V150EPD		
		550	0.1	Low V_F /Low I_R	PMEG045T150EPD ¹⁾		
		580		Low V_F /Low I_R	PMEG45T15EPD ¹⁾		
		570	0.098	Low V_F /Low I_R	PMEG045T150EIPD ¹⁾		
	50	500	1	Low V_F	PMEG050V150EPD		
		550	0.1	Low I_R	PMEG050T150EPD ¹⁾		

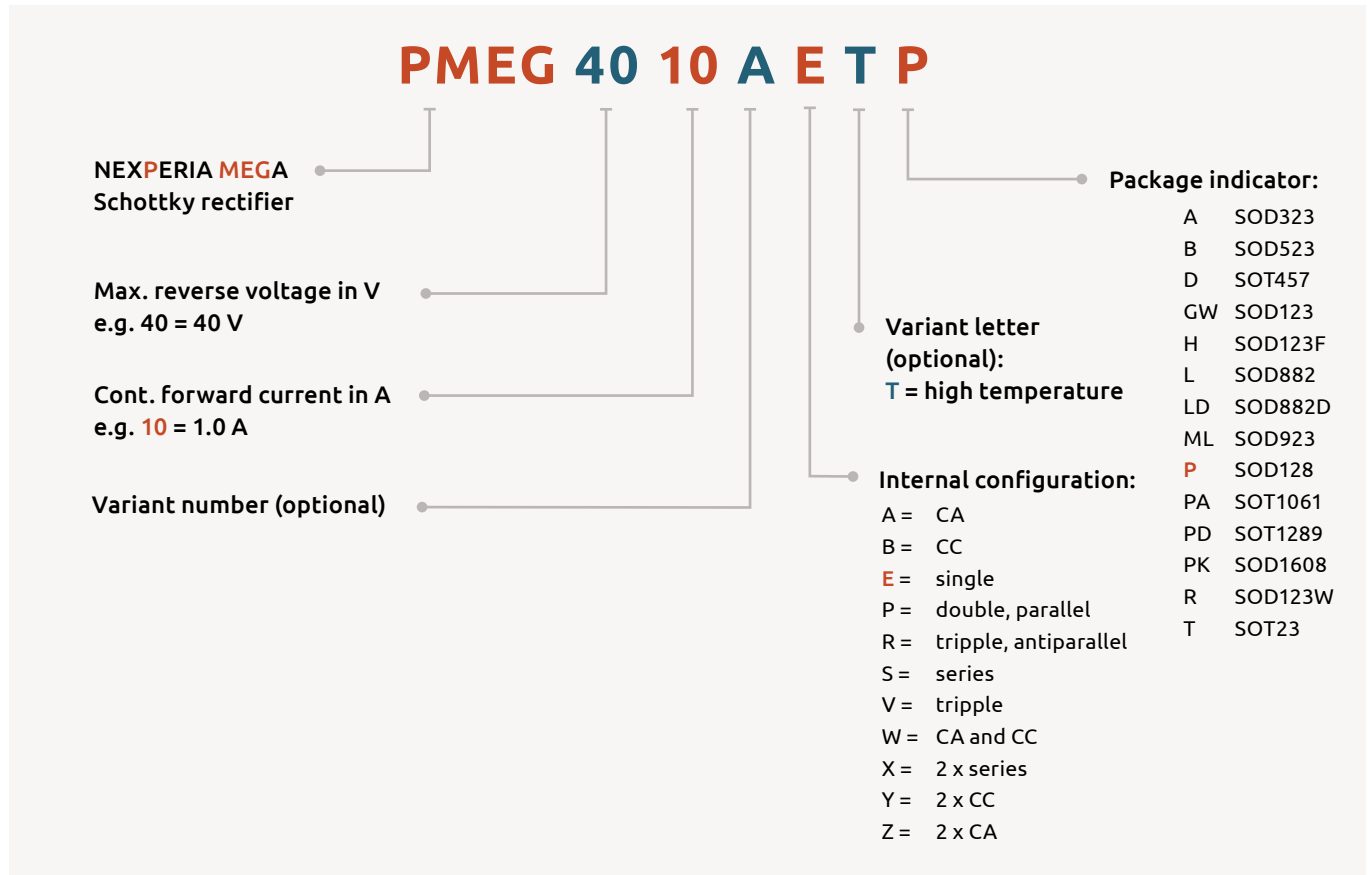
¹⁾ Trench processMedium power low VF Schottky rectifiers single ≥ 200 mA - leaded packages

I_F max (A)	V_F max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Package	SOT457 (SC-74)	SOT23	SOD123	SOD123F	SOT323 (SC-70)	SOD323F (SC-90)	SOD323 (SC-76)	SOD523 (SC-79)
				Size (mm)								
				P_{tot} (mW) @ 1 cm ²	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.7 x 1.6 x 1.2	2.6 x 1.6 x 1.1	2.0 x 1.25 x 0.95	1.7 x 1.25 x 0.7	1.7 x 1.25 x 0.95	1.2 x 0.8 x 0.6
				Optimization	540	420	660	830	400	830	570	500
0.2	30	480	0.05	Low V_F						PMEG3002EJ		PMEG3002AEB
	40	600	0.01	Low I_r						PMEG4002EJ		PMEG4002EB
	60	600	0.1	Low V_F						PMEG6002EJ		PMEG6002EB
0.5	20	390	0.2	Low V_F		PMEG2005ET	PMEG2005EGW	PMEG2005EH		PMEG2005EJ	PMEG2005AEA	
		480	0.03	Low I_r								PMEG2005EB
	30	430	0.15	Low V_F		PMEG3005ET	PMEG3005EGW	PMEG3005EH		PMEG3005EJ	PMEG3005AEA	
		500	0.5	Low V_F								PMEG3005EB
	40	470	0.1	Low V_F		PMEG4005ET	PMEG4005EGW	PMEG4005EH		PMEG4005EJ	PMEG4005AEA	
		550	1.1	Low V_F		BAT720			1PS70SB20			
		640	0.008	Low I_r						PMEG4005CEJ	PMEG4005CEA	
0.75	40	740	0.008	Low I_r							BAT165A	
1	20	430	0.2	Low V_F		PMEG2010AET		PMEG2010AEH				
		500	0.2	Low V_F		PMEG2010ET		PMEG2010EH		PMEG2010EJ	PMEG2010BEA	
		550	0.07	Low I_r						PMEG2010AEJ	PMEG2010EA BAT760	
		620	1.5	Low V_F								PMEG2010AEB
	30	450	1	Low V_F	1PS74SB23							
		520	0.1	Low I_r				PMEG3010CEH		PMEG3010CEJ		
		560	0.15	Low V_F		PMEG3010ET	PMEG3010EGW	PMEG3010EH		PMEG3010EJ	PMEG3010BEA	
		680	0.5	Low V_F								PMEG3010EB
	40	570	0.05	Low I_r			PMEG4010CEGW	PMEG4010CEH		PMEG4010CEJ		
		640	0.05	Low V_F		PMEG4010ET	PMEG4010EGW	PMEG4010EH		PMEG4010EJ	PMEG4010BEA	
		840	0.008	Low I_r							PMEG4010CEA	
		60	660	0.05	Low I_r		PMEG6010CEGW	PMEG6010CEH		PMEG6010CEJ		
1.5	20	660	0.2	Low I_r				PMEG2015EH		PMEG2015EJ	PMEG2015EA	
	30	500	1	Low V_F				PMEG3015EH		PMEG3015EJ		
2	10	460	3	Low V_F				PMEG1020EH		PMEG1020EJ	PMEG1020EA	
	20	525	0.2	Low V_F				PMEG2020EH		PMEG2020EJ	PMEG2020AEA	
	30	620	1	Low V_F			PMEG3020EGW	PMEG3020EH		PMEG3020EJ		
3	10	530	3	Low V_F				PMEG1030EH		PMEG1030EJ		

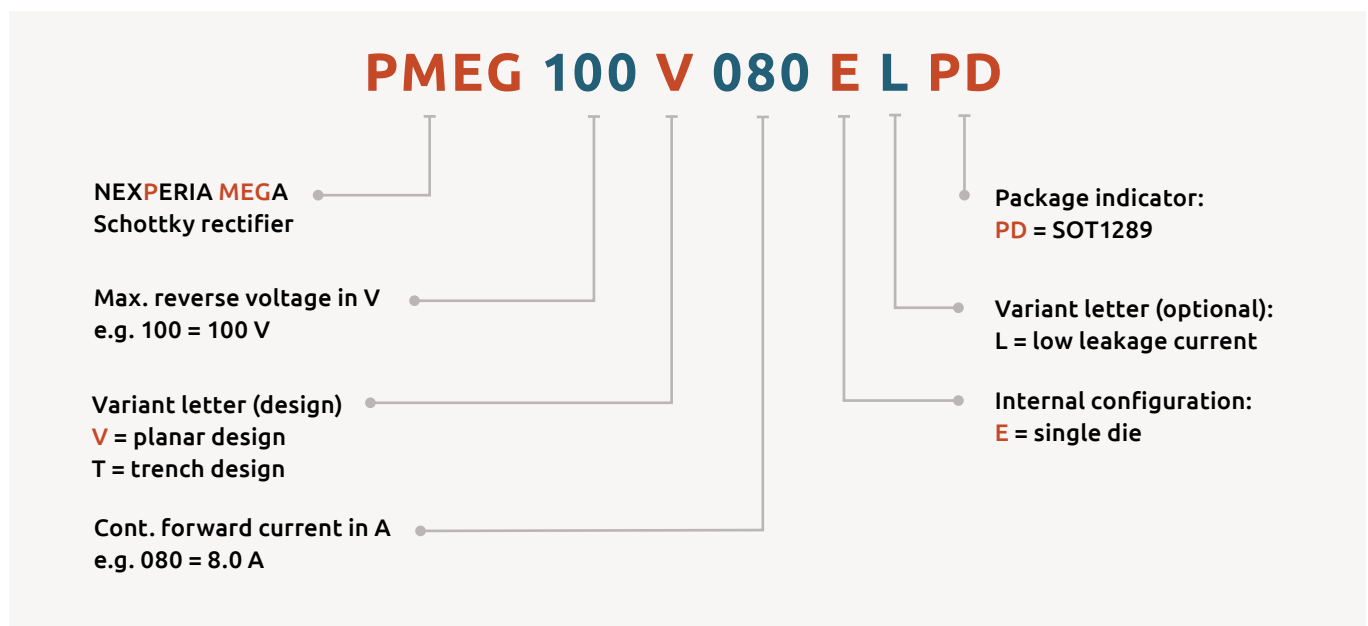
Medium power low VF Schottky rectifiers dual ≥ 200 mA

I_F max (A)	V_R max (V)	V_F max (mV) @ I_F max	I_R max (mA) @ V_R max	Optimization	Package	SOT223 (SC-73)	SOT23	DFN2020-3 (SOT1061)	DFN2020D-3 (SOT1061D)
					Size (mm)				
					P_{tot} (mW) @ 1 cm ²	6.5 x 3.5 x 1.65	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.62	2.0 x 2.0 x 0.63
0.5	20	390	0.2	Low V_F			PMEG2005CT		
	30	430	0.15	Low V_F			PMEG3005CT		
	40	470	0.1	Low V_F			PMEG4005CT		
1.0	25	450	1.0	Low V_F		BAT120S			
				Low V_F		BAT120C			
				Low V_F		BAT120A			
	40	500	0.05	Low V_F				PMEG4010CPA	PMEG4010CPAS
	60	540	0.06	Low V_F				PMEG6010CPA	PMEG6010CPAS
		650	0.35	Low V_F		BAT160S			
				Low V_F		BAT160C			
				Low V_F		BAT160A			
		20	420	1.0				PMEG2020CPA	PMEG2020CPAS
								PMEG3020CPA	PMEG3020CPAS

Nomenclature of automotive grade Schottky rectifier in medium-power packages



Nomenclature of automotive grade Schottky rectifier in CFP15 (SOT1289) power package





ESD protection, TVS, filtering and signal conditioning

Low capacitance ESD protection for high-speed interfaces.....	52
USB 3.x and eSATA protection and filtering for high-speed and super-speed lines	54
Low capacitance ESD protection for high-speed interfaces - HDMI2.0, DisplayPort.....	55
TrEOS protection devices	56
TrEOS2 protection devices	56
General ESD protection devices.....	57
Application-specific ESD solutions	61
Audio interface protection	61
Automotive high-speed network protection	62
Automotive in-vehicle network bus line protection	62
Battery and charger port protection.....	63
HDMI and display port protection.....	63
EMI solutions with integrated protection	64
Antenna protection (NFC, WiFi,...).....	64
USB and SATA protection.....	64
Common mode filter for USB 2.0.....	64
Common mode filter for USB 3.x.....	65
Common mode filter for HDMI and MIPI.....	65
HDMI signal conditioning.....	66
LCD and camera RC filter with integrated protection.....	66
Memory and SIM card filter with integrated protection	66
Transient voltage surge suppressor (TVS).....	67
TVS diodes for mobile applications	67
TVS diodes, 24 W/40 W (automotive).....	67
TVS diodes, 400 W	68
TVS diodes, 600 W	69
Nomenclatures	70

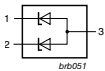
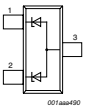
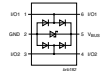
Low capacitance ESD protection for high-speed interfaces

Products in **bold red** are under development, types in **bold** represent new products

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional								
1	0	5	0.45	0.5	20		PESD5V0C1USF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		6.5	0.45	0.5	20		PESD6V5C1USF		
		5	0.6	0.75	10		PESD5V0F1USF		
		5	0.95	1.15	8		PESD5V0X1ULD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
			1.55	1.75	15		PESD5V0X1UALD		
		16	0.83	0.98	8		PESD16VX1UL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
		5	0.95	1.15	8		PESD5V0X1UB	SOD523 (SC-79) 	1.2 x 0.8 x 0.6
			1.55	1.75	15		PESD5V0X1UAB		
		3.3	0.6	1.5	30		PESD3V3U1UT	SOT23 	2.9 x 1.3 x 1.0
		5	0.6	1.5	30		PESD5V0U1UT		
		12	0.6	1.5	30		PESD12VU1UT		
		15	0.6	1.5	30		PESD15VU1UT		
		24	0.6	1.5	23		PESD24VU1UT		
0	1	5	0.2	0.3	8		PESD5V0F1BSH	DSN0402-2 (SOD992) 	0.4 x 0.2 x 0.12
		2.0	0.69	0.82	20		PESD2V0Y1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		2.5	0.25	0.30	15		PESD2V5Y1BSF		
		3.3	0.24	0.29	15		PESD3V3Y1BSF		
			0.2	0.25	20		PESD3V3C1BSF		
			0.28	0.35	20		PESD3V3Z1BSF		
			0.45	0.6	30		PESD3V3Z1BCSF		
			0.55	0.65	30		PESD3V3W1BCSF		
		4.0	0.24	0.29	15		PESD4V0Y1BSF		
			0.28	0.35	20		PESD4V0Z1BSF		
			0.45	0.6	30		PESD4V0Z1BCSF		
			0.55	0.65	30		PESD4V0W1BCSF		
			0.1	0.15	10		PESD5V0R1BSF		
		5	0.15	0.19	15		PESD5V0H1BSF		
			0.2	0.25	20		PESD5V0C1BSF		
			0.2	0.25	20		PESD7V0R1BSF		
		7	0.1	0.15	10		PESD7V0H1BSF		
			0.15	0.19	15		PESD7V0C1BSF		
			0.2	0.25	20		PESD9V0C1BSF		
			0.2	0.25	20		PESD5V0F1BSF		
		5.5	0.25	0.3	10		PESD5V0F1BRSF		
		3.3	–	1.1	20		PESD3V3X1BCSF		
		5.0	–	1.1			PESD5V0X1BCSF		
		18	0.28	0.45			PESD18VF1BSF		
		24	0.25	0.4	10		PESD24VF1BSF		
		5	0.4	0.55	10		PESD5V0F1BLD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
		3.3	1.3	1.6	9		PESD5V0F1BRLD	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
		5.5	0.4	0.55	10		PESD3V3X1BL		
		5	0.49	0.6	8		PESD5V0F1BL		
			0.85	0.95	15		PESD5V0X1BCL		
			0.9	1.3	9		PESD5V0X1BCAL		
			0.35	0.5	10		PESD5V0X1BL		
		18	0.35	0.5	10		PESD18VF1BL		
		24	0.3	0.45	10		PESD24VF1BL		

[1] according to IEC 61000-4-2 (contact discharge)

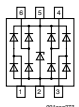
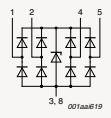
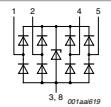
Low capacitance ESD protection for high-speed interfaces

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional								
2	1	5	0.5	0.65	10		PESD5V0X2UMB	DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37
							PESD5V0X2UM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48
			0.8	0.95	15		PESD5V0X2UAMB	DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37
							PESD5V0X2UAM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48
	0	80	0.9	1.3	9		PESD5V0X1BT	SOT23	2.9 x 1.3 x 1.0
							NUP1301U	SOT323	2.0 x 1.25 x 0.95
			0.6	0.75	30		NUP1301	SOT23	2.9 x 1.3 x 1.0
							NUP1301QA	SOT1215	1.0 x 1.0 x 0.4
3	0	5.5	1	1.5	8		PRTR5V0U2X	SOT143B	2.9 x 1.3 x 1.0
			1.8	-	12		PRTR5V0U2AX		
			1	1.5	8		PRTR5V0U2F	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48

^[1] according to IEC 61000-4-2 (contact discharge)

Low capacitance ESD protection for high-speed interfaces

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	C_{line_typ} (pF)	C_{line_max} (pF)	ESD rating max (kV) ^[1]	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional								
4	0	3.3	0.75	0.9	25		PESD3V3X4UHM	DFN1308-6	1.3 x 0.8 x 0.4
		5.5	1	-	8		IP4220CZ6	SOT457 (SC-74)	2.9 x 1.5 x 1.0
							PRTR5V0U4D		
			0.7	0.85	12		PUSB2X4D	SOT363 (SC-88)	2.9 x 1.5 x 1.0
							PUSB2X4Y		2.0 x 1.25 x 0.95
			0.6	0.8	8		IP4283CZ10-TBR	DFN2510A-10 (SOT1176)	2.5 x 1.0 x 0.48

^[1] according to IEC 61000-4-2 (contact discharge)

USB 3.x and eSATA protection and filtering for high-speed and super-speed lines

Products in **bold red** are under development, types in **bold** represent new products

Baseband interface	Number of protected lines	C _d (pF)	ESD rating max (kV)	R _{dyn} (Ω)	Remark	Type	Package	Size (mm)
USB3.0 - 5 Gbps	4	0.55	8	0.3 / 0.4	ESD Protection for high-speed interfaces	IP4292CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x. 1.0 x 0.48
		0.5	10			IP4294CZ10-TBR		
						PUSB3F96		
0.5		10	PUSB3F97					
USB3.1 - 10 Gbps		0.5	10			PUSB3F99		
		0.5	10			PUSB3FA0		
		0.29	15	0.27	TrEOS Protection	PUSB3FR4		
		0.29	15	0.27		PUSB3FA1		
0.17		15	0.4	PUSB3AB4				
0.17		15	0.4	PUSB3FA2				
	6	0.29	15	0.27		PUSB3FR6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.48
		0.27	15	0.5		PUSB3TB6		
		0.15	15	0.4		PUSB3AB6		

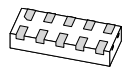
USB 3.x and eSATA protection and filtering for high-speed and super-speed lines

Products in **bold red** are under development, types in **bold** represent new products

Baseband interface	Number of protected lines	C_i (pF)	ESD rating max (kV)	R_{dyn} (Ω)	Remark	Type	Package	Size (mm)
USB3.1 - 10 Gbps	1	0.1	10	0.45	TrEOS Protection	PESD5V0R1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		0.15	15	0.25		PESD5V0H1BSF		
		0.2	20	0.23		PESD5V0C1BSF		
		0.2	20	0.23		PESD3V3C1BSF		
		0.24	15	0.28		PESD2V5Y1BSF		
		0.25	15	0.25		PESD3V3Y1BSF		
		0.28	20	0.19		PESD3V3Z1BSF		
		0.45	30	0.11		PESD3V3Z1BCSF		
		0.55	30	0.1		PESD3V3W1BCSF		
		0.45	20	0.1		PESD5V0C1USF		
		0.1	10	0.45		PESD7V0R1BSF		
		0.15	15	0.25		PESD7V0H1BSF		
		0.2	20	0.23		PESD7V0C1BSF		
		0.2	20	0.23		PESD9V0C1BSF		
		0.45	20	0.1		PESD6V5C1USF		
		0.25	15	0.16		PESD1USB3S		
	2	0.25	15	0.14	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3S	WLCSP5 	1.2 x 0.8 x 0.6
			20	0.22	Common Mode Filter with TrEOS Protection for ultra high-speed interfaces	PCMF1USB3B/C		

ESD protection, TVS, filtering and signal conditioning

Low capacitance ESD protection for high-speed interfaces - HDMI2.0, DisplayPort

Number of protected lines		V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	ESD rating ^[1] max (kV)	I_R max (μ A) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional									
4	0	5.5	0.5	0.6	10	-		IP4294CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
								PUSB3F96		
								PHDMI2F4		
		3.3	0.27	0.34	15	0.1		PUSB3FR4		
		5						PHDMI2FR4		
								PUSB3AB4		
0	4	3.3	0.17	0.2				PHDMI2AB4		
		5								

^[1] according to IEC 61000-4-2 (contact discharge)

TrEOS protection devices

Unique combination of low capacitance, low clamping and high robustness for very fast, sensitive data lines

Products in **bold red** are under development, types in **bold** represent new products

Type	device	V _{RWM} (V)	Uni- or bidirectional	C _d typ (pF)	ESD rating max (kV) (Ω)	R _{dyn} TLP (Ω)	8/20μs (A)	Number of protected lines	Package	Size (mm)
PUSB3FR4	ESD protection	3.3	uni	0.29	15	0.27	7	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3FR6				0.35	15	0.29	7	6	DFN2111-7	2.1 x 1.1 x 0.48
PUSB3AB4			bi	0.17	15	0.4	7	4	DFN2510A-10	2.5 x 1.0 x 0.48
PUSB3AB6				0.15	15	0.4	7	6	DFN2111-7	2.1 x 1.1 x 0.48
PCMF1USB3S	Common Mode Filter with ESD protection	5	uni	0.3	15	0.14		2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3S								4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3S								6	WLCSP15	2.4 x 1.2 x 0.5
PESD1USB3S	ESD protection in PCMF footprint	5	uni	0.45	15	0.14		2	WLCSP5	0.8 x 1.2 x 0.5
PESD2USB3S								4	WLCSP10	1.6 x 1.2 x 0.5
PESD3USB3S								6	WLCSP15	2.4 x 1.2 x 0.5
PCMF1USB3B/C	Common Mode Filter with ESD protection	4	bi	0.3	20	0.22	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3B/C				0.3	20	0.22	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3B/C				0.3	20	0.22	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PCMF1USB3BA/C				0.3	20	0.22	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PCMF2USB3BA/C				0.3	20	0.22	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PCMF3USB3BA/C				0.3	20	0.22	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PESD1USB3B/C	ESD protection in PCMF footprint	4	bi	0.29	20	0.2	9.5	2	WLCSP5	0.8 x 1.2 x 0.5
PESD2USB3B/C				0.29	20	0.2	9.5	4	WLCSP10	1.6 x 1.2 x 0.5
PESD3USB3B/C				0.29	20	0.2	9.5	6	WLCSP15	2.4 x 1.2 x 0.5
PESD3V3Z1BSF	ESD protection	3.3	bi	0.28	20	0.19	9.5	1	DSN0603-2	0.6 x 0.3 x 0.3
PESD3V3W1BSF				0.45	30	0.11	15			
PESD3V3W1BCSF				0.55	30	0.1	20			
PESD3V3C1BSF				0.2	20	0.23	9			
PESD4V0Z1BSF		4		0.28	30	0.19	9.5			
PESD4V0Z1BCSF				0.45	30	0.11	15			
PESD4V0W1BCSF				0.55	30	0.1	20			
PESD5V0R1BSF		5		0.1	10	0.45	4.5			
PESD5V0H1BSF				0.15	15	0.25	7			
PESD5V0C1BSF				0.2	20	0.23	9			
PESD5V0C1USF		6.5	uni	0.45	20	0.1	9			
PESD6V5C1USF			uni	0.45	20	0.1	9			
PESD7V0R1BSF		7	bi	0.1	10	0.45	4.5			
PESD7V0H1BSF				0.15	15	0.25	7			
PESD7V0C1BSF				0.2	20	0.23	9			
PESD9V0C1USF		9			0.2	20	0.23			

TrEOS2 protection devices

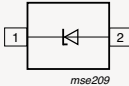
Industry-leading low trigger voltages V_{t1}

Types in **bold** represent new products

Type	device	V _{RWM} (V)	Uni- or bidirectional	C _d typ (pF)	ESD rating max (kV) (Ω)	R _{dyn} TLP (Ω)	Trigger voltage V _{t1}	Number of protected lines	Package	Size (mm)
PES2V0Y1BSF	ESD protection	2.0	bi	0.69	20	0.2	4.3	1	DSN0603-2	0.6 x 0.3 x 0.3
PES2V5Y1BSF		2.5		0.25	15	0.28	4.9			
PES3V3Y1BSF		3.3		0.24	15	0.25	7			
PES4V0Y1BSF		4		0.24	15	0.25	7			

General purpose ESD protection devices

Types in **bold** represent new products

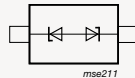
Number of protected lines		V_{RWM} (V)	$C_{line\ typ}$ (pF)	$C_{line\ max}$ (pF)	$I_{PP\ max}$ (A) ^[1]	ESD rating max (kV) ^[2]	$I_R\ max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
1	0	5	35	42	3.5	30	0.1		PESD5V0S1USF	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3
		5.5	12	15.4	1.2	30	0.1		PESD5V0L1USF		
		3.3	2.6	3.1		9	0.1 (@ 3 V)		PESD3V3U1UL	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5
			34	40	4.5	30	0.3		PESD3V3L1UL		
			207	300	15	30	2		PESD3V3S1UL		
		5	2	2.6		9	0.1		PESD5V0U1UL		
			25	30	3.5	26	0.1		PESD5V0L1UL		
		5	152	200	15	30	1		PESD5V0S1UL		
		12	38	75	5	30	0.05		PESD12VS1UL		
		15	32	70	5	30	0.05		PESD15VS1UL		
		24	23	50	3	23	0.05		PESD24VS1UL		
		36	18	30	2.5	30	0.01		PESD36VS1UL		
		5	25	30	3.5	26	0.1		PESD5V0L1ULD	DFN1006D-2 (SOD882D)	1.0 x 0.6 x 0.4
			152	200	15	30	1		PESD5V0S1ULD		
		8	70	90	13	30	0.5		PESD8V0S1ULD		
		12	38	75	5	30	0.05		PESD12VS1ULD		
		15	32	70	5	30	0.05		PESD15VS1ULD		
		24	23	50	3	23	0.05		PESD24VS1ULD		
		2.5	229	300	20	30	6		PESD5Z2.5	SOD523 (SC-79)	1.2 x 0.8 x 0.6
		3.3	2.6	3.1		9	0.1 (@ 3 V)		PESD3V3U1UB		
			34	40	4.5	30	0.3		PESD3V3L1UB		
			172	200	20	30	0.05		PESD5Z3.3		
			207	300	18	30	2		PESD3V3S1UB		
		5	2	2.6		9	0.1		PESD5V0U1UB		
			25	30	3.5	26	0.1		PESD5V0L1UB		
			89	150	10	30	0.05		PESD5Z5.0		
			152	200	15	30	1		PESD5V0S1UB		
		6	78	150	10	30	0.01		PESD5Z6.0		
		7	69	150	10	30	0.01		PESD5Z7.0		
		12	35	75	6	30	0.01		PESD5Z12		
			38	75	5	30	0.05		PESD12VS1UB		
		15	32	70	5	30	0.05		PESD15VS1UB		
		24	23	50	3	23	0.05		PESD24VS1UB		
		3.3	2.6	3.1		9	0.1 (@ 3 V)		PESD3V3U1UA	SOD323 (SC-76)	1.7 x 1.25 x 0.95
		5	2	2.6		9	0.1		PESD5V0U1UA		
			25	30	3.5	26	0.1		PESD5V0L1UA		
			480	530	47	30	4		PESD5V0S1UA		
		12	160	180	22.5	30	0.1		PESD12VS1UA		
		24	23	50	3	23	0.05		PESD24VS1UA	SOD323F (SC-90)	1.7 x 1.25 x 0.7
		5	480	530	47	30	4		PESD5V0S1UJ		
		12	160	180	22.5	30	0.1		PESD12VS1UJ		
		36	18	30	2.5	30	0.01		PESD36VS1UJ		

ESD protection, TVS, filtering and signal conditioning

^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 ^[2] according to IEC 61000-4-2 (contact discharge)

General purpose ESD protection protection devices

Types in **bold** represent new products

Number of protected lines		V _{RWM} (V)	C _{line typ} (pF)	C _{line max} (pF)	I _{PP max} (A) [1]	ESD rating max (kV) [2]	I _{R max} (μA) @ V _{RWM}	Configuration	Type	Package	Size (mm)			
Unidirectional	Bidirectional													
0	1	3.3	5.5	6	5.4	20	0.1		PESD3V3U1BCSF	 DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3			
			8.5	10	7.1	30	0.1		PESD3V3V1BCSF					
		5.5	5.3	6	1	20	0.1		PESD5V0V1BCSF					
					2	20	0.1		PESD5V0V1BDSF					
			12	4.5	1	15	0.1		PESD5V0V1BSF					
				15.4	3	30	0.1		PESD5V0L1BSF					
				35	45	8	30		0.1			PESD5V0S1BSF		
		16	5.7	6.5	1.3	12	0.05		PESD16VV1BSF			PESD18VV1BBSF	 SOD323 (SC-76)	1.7 x 1.25 x 0.95
		18	4	6	3	25	0.1							
		3.3	101	-	18	30	2		PESD3V3L1BA					
		5	75	-	15	30	1		PESD5V0L1BA					
		12	19	-	5	30	0.05		PESD12VL1BA					
		15	16	-	5	30	0.05		PESD15VL1BA					
		24	11	-	3	23	0.05		PESD24VL1BA					
		3.3	11	13	5	30	0.01		PESD3V3V1BL	 DFN1006-2 (SOD882)				
			22	30	10	30	0.05		PESD3V3T1BL					
			35	40	15	30	0.1		PESD3V3S1BL					
			65	78	34	30	0.05		PTVS3V3D1BAL					
		4.5	65	78	34	30	0.05		PTVS4V5D1BL					
		5	11	13	4.8	30	0.01		PESD5V0V1BL					
			35	45	12	30	0.1		PESD5V0S1BL					
		5.5	70	84	35	30	0.1		PTVS5V5D1BL	 DFN1006D-2 (SOD882D)				
		12	17	25	7.8	15	0.01		PESD12VV1BL					
		3	20	25	10	30	0.1		PESD3V3T1BLD		 SOD523 (SC-79)			
		2.9	11	13	4.8	30	0.01		PESD5V0V1BLD	 SOD323 (SC-76)				
			35	45	12	30	0.1		PESD5V0S1BLD					
			11	13	4.8	30	0.01		PESD5V0V1BB	 DFN1006-2 (SOD882)				
			35	45	12	30	0.1		PESD5V0S1BB		 DFN1006D-2 (SOD882D)			
			11	13	4.8	30	0.01		PESD5V0V1BA			 SOD523 (SC-79)		
			35	45	12	12	0.1		PESD5V0S1BA	 SOD323 (SC-76)				

^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5^[2] according to IEC 61000-4-2 (contact discharge)

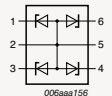
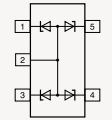
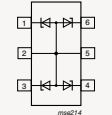
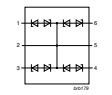
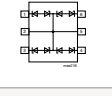
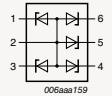
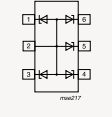
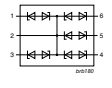
General purpose ESD protection devices

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	$I_{pp max}$ (A) ^[1]	ESD rating max (kV) ^[2]	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
Unidirectional	Bidirectional										
2	1	3.3	22	28	3	15	0.3		PESD3V3L2UM	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5
					2.5	15	0.025		PESD5V0L2UM		
		5	16	19	2.5	15	0.025		PESD5V0L2UMB	DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37
		3.3	207	300	18	30	2		PESD3V3S2UT	SOT23	2.9 x 1.3 x 1
		5.2	152	200	15	30	1		PESD5V2S2UT		
		12	38	75	5	30	1		PESD12VS2UT		
		15	32	70	5	30	1		PESD15VS2UT		
		24	23	50	3	23	1		PESD24VS2UT		
		36	17	35	2.5	30	1 (@ 30 V)		PESD36VS2UT		
		3.3	207	300	18	30	2		PESD3V3S2UAT	SOT23	2.9 x 1.3 x 1
		5	152	200	15	30	1		PESD5V0S2UAT		
		15	32	70	5	30	0.05		PESD15VS2UAT		
		24	23	50	3	23	0.05		PESD24VS2UAT		
		5	38	46	6.5	30	0.09 (@ 4 V)		PESD5V0L2UU	SOT323 (SC-70)	2 x 1.25 x 0.95
		6	34	40	5.5	30	0.018 (@ 4.3 V)		PESD6V0L2UU		
0	2	3.3	101	-	15	30	2		PESD3V3L2BT	SOT23	2.9 x 1.3 x 1
		5	75	-	13	30	1		PESD5V0L2BT		
		12	19	-	5	30	0.05		PESD12VL2BT		
		15	16	-	5	30	0.05		PESD15VL2BT		
		24	11	-	3	23	0.05		PESD24VL2BT		
			35	45	12	30	0.1		PESD5V0S2BT		
			2.9	3.5		10	0.1		PESD5V0U2BT	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.5
			18	20	9	30	0.01		PESD5V0U2BM		
			2.9	3.5	1.5	10	0.1		PESD5V0U2BMB	DFN1006B-3 (SOT883B)	1 x 0.6 x 0.37
			18	20	9	30	0.01		PESD5V0U2BMB		
			35	45	35	30	0.1		PESD5V0S2BQA	DFN1010D-3 (SOT1215)	1.1 x 1.0 x 0.37

^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5^[2] according to IEC 61000-4-2 (contact discharge)

General purpose ESD protection devices

Types in **bold** represent new products

Number of protected lines		V_{RWM} (V)	$C_{line typ}$ (pF)	$C_{line max}$ (pF)	$I_{PP max}$ (A) [1]	ESD rating max (kV) [2]	$I_R max$ (μA) @ V_{RWM}	Configuration	Type	Package	Size (mm)			
Unidirectional	Bidirectional													
4	3	3.3	22	28	3	20	0.3		PESD3V3L4UF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5			
			110	300	10	30	1 (@ 3 V)		PESD3V3S4UF					
		5	16	19	2.5	20	0.025		PESD5V0L4UF					
			85	220	10	30	0.1 (@ 4.3 V)		PESD5V0S4UF					
		3	200	240		8	2		BZA856A	 SOT353 (SC-88A)	2 x 1.25 x 0.95			
		3.3	22	28	3	20	0.3		PESD3V3L4UG					
		5	16	19	2.5	20	0.025		PESD5V0L4UG					
		3	200	240		8	2		BZA456A	 SOT457 (SC-74)	2.9 x 1.5 x 1			
		3.3	215	300	20	30	0.8		PESD3V3S4UD					
		5	165	220	20	30	0.2		PESD5V0S4UD					
		15	37	48		8	0.1		BZA420A					
		24	40	70	4	23	0.01		PESD24VS4UD					
0	4	3.3		9.9	6	20	0.1		PESD3V3L4BHM	DFN1308-6 (SOT8006)	1.3 x 0.8 x 0.4			
		5	2.9	3.5		10	0.1		PESD5V0U4BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5			
			45	75		15	0.1		BZA408B	 SOT457 (SC-74)	2.9 x 1.5 x 1.0			
5	4	3.3	20	24	3.2	15	2		PESD3V3L5UK	 DFN1010-6 (SOT891)	1 x 1 x 0.5			
		5	18.5	22		20	0.5		PESD5V0L5UK					
		3.3	22	28	2.5	20	0.3		PESD3V3L5UF	 DFN1410-6 (SOT886)	1.45 x 1 x 0.5			
		5	16	19	2.5	20	0.025		PESD5V0L5UF					
		3.3	22	28	2.5	20	0.3		PESD3V3L5UY	 SOT363 (SC-88)	2 x 1.25 x 0.95			
		5	16	19	2.5	20	0.025		PESD5V0L5UY					
		3.3	215	300	20	30	0.8		PESD3V3S5UD	 SOT457 (SC-74)	2.9 x 1.5 x 1.0			
		5	165	220	20	30	0.2		PESD5V0S5UD					
		24	45	70	4	23	0.015		PESD24VS5UD					
0	5	5	2.9	3.5	-	10	0.1		PESD5V0U5BF	DFN1410-6 (SOT886)	1.45 x 1 x 0.5			

^[1] 8 / 20 μs exponential decay waveform according to IEC 61000-4-5 ^[2] according to IEC 61000-4-2 (contact discharge)

Audio interface protection

Types in **bold** represent new products

Lines	$V_{RWM}(V)$	$V_{BR\ min}(V)$	$V_{BR\ max}(V)$	$C_D\ typ(pF)$	$C_D\ max(pF)$	$I_{PPM}\ 8/20\mu s(A)$	$V_{CL}\ 8/20\mu s @ I_{PPM}(V)$	$V_{ESD}(kV)$	Configuration	Type	Package
1	4			0.28	0.34	10	5	2		PESD4V0Z1BSF	DSN0603-2 (SOD962)
				0.45	0.60	15	5	30		PESD4V0Z1BCSF	
				0.55	0.65	20	5	30		PESD4V0W1BCSF	
	3.3	4.7		22	30	-	-	30		PESD3V3T1BL	DFN1006-2 (SOD882)
		4.5		65	78	34	13.2	30		PTVS3V3D1BAL	
	4.5	4.7		65	78	34	13.2	30		PTVS4V5D1BL	
	5.5	5.6	7.6	70	84	35	12.2	30		PTVS5V5D1BL	
	5	5.5	9.5	35	45	12	14	30		PESD5V0S1BL	DFN1010D-3 (SOT1215)
				70	90	28	11.5	30		PESD5V0S2BQA	
				35	45	12	14	30		PESD5V0S1BLD	
		5.8	7.8	11	13	4.8	12.5	30		PESD5V0V1BL	DFN1006-2 (SOD882)
				11	13	4.8	12.5	30		PESD5V0V1BLD	DFN1006D-2 (SOD882D)
	12	14.6	16.8	17	25	7.8	38	30		PESD12VV1BL	DFN1006-2 (SOD882)
2	5	5.8	7.8	18	20	9	12.5	30		PESD5V0V2BM	DFN1006-3 (SOT883)
				18	20	9	12.5	30		PESD5V0V2BMB	DFN1006B-3 (SOT883B)
	4			0.3		9.5	6	20		PCMF1USB3B/C	WLCSP5
				0.3		9.5	6	20		PCMF2USB3B/C	WLCSP10
				0.3		9.5	6	20		PCMF3USB3B/C	WLCSP15
				0.29		9.5	6	20		PESD1USB3B/C	WLCSP5
				0.29		9.5	6	20		PESD2USB3B/C	WLCSP10
				0.29		9.5	6	20		PESD3USB3B/C	WLCSP15

ESD protection, TVS, filtering and signal conditioning

Automotive high-speed network protection

Types in **bold** represent new products

Number of protected lines	V_{RWM} (V)	C_{line} typ (pF)	I_{RM} max (μA)	ESD rating max (kV) [1]	Configuration	Type	Package	Size (mm)
1	5.5	0.4	0.1	10		PESD5V0F1BLD	DFN1006D-2 (SOD882D) 	1.0 x 0.6 x 0.37
2	5	1	0.1	8		PESD2ETH-X	SOT143B 	2.9 x 1.3 x 1.0
		1.8	0.1	12		PESD2ETH-AX		
2	5	1.3	0.1	8		PESD2ETH-D	SOT457 	2.9 x 1.5 x 1.0
		2	0.1	12		PESD2ETH-AD		
4	5.5	0.6	1 @ 3 V	8		PESD1LVDS	DFN2510-10 (SOT1165) 	2.5 x 1.0 x 0.48
		0.6	1 @ 3 V	8		PRTR5V0U4D	SOT457 	2.9 x 1.5 x 1.0

[1] according to IEC 61000-4-2 (contact discharge)

Automotive in-vehicle network bus line protection

Number of protected lines bidirectional	V_{RWM} (V)	C_{line} typ (pF)	C_{line} max (pF)	I_{PPM} 8/20μs (A)	V_{CL} 8/20μs @ I_{PPM} (V)	ESD rating max (kV) [2]	I_T max [μA] @ V_{RWM}	Configuration	Type	Package	Size (mm)
1	24	14	17	3.5	42	30	0.05		PESD1IVN24-A	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD1IVN27-A		
2	24	14	17	3.5	42	30	0.05		PESD2IVN24-T	SOT23 	2.0 x 1.25 x 0.95
	27	14	17	3	45	30	0.05		PESD2IVN27-T		
1	27	14	17	3	45	30	0.05		PESD1IVN27-U	SOT323 	2.0 x 1.25 x 0.95
2	24	14	17	3.5	42	30	0.05		PESD2IVN24-U		
	27	14	17	3	45	30	0.05		PESD2IVN27-U		
1	15 (diode 1) 24 (diode 2)	13	17	3 (diode 1) 5 (diode 2)	70 (diode 1) 44 (diode 2)	23	0.05		PESD1LIN	SOD323 (SC-76) 	1.7 x 1.25 x 0.95
2	24	11	17	3	70	23	0.05		PESD1CAN	SOT23 	2.9 x 1.3 x 1.0
		25	30	5	41	30	0.01		PESD2CAN		
		11	17	3	70	23	0.05		PESD1FLEX	SOT323 	2.0 x 1.25 x 0.95
		9.3	12	3	50	23	0.05		PESD1CAN-U		
1	26.5	8.5	11	3	53	23	0.05		PESD1IVN-U	SOT323 	2.0 x 1.25 x 0.95
2									PESD2IVN-U		

[1] 8 / 20 μs surge pulse according to IEC 61000-4-5

[2] according to IEC 61000-4-2 (contact discharge)

Battery and charger port protection

Types in **bold** represent new products

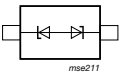
Number of protected lines	C _{line} (pF)	V _{RWM} (V)	I _{PPM} 8/20μs (A)	Type	Package	Size (mm)
1 x bi	65	3.3	34	PTVS3V3D1BAL	DFN1006-2 	1.0 x 0.6 x 0.48
	65	4.5	34	PTVS4V5D1BL		
	70	5.5	35	PTVS5V5D1BL		
1 x uni	160	12	22.5	PESD12VS1UJ	SOD323F (SC-90)	1.7 x 1.25 x 0.7 
	480	5	22.5	PESD5V0S1UJ		
	160	12	47	PESD12VS1UA	SOD323 (SC-76)	1.7 x 1.25 x 0.95 
	480	5	47	PESD5V0S1UA		
2 x bi	18	5	9	PESD5V0V2BM	DFN1006-3 (SOT883) 	1.0 x 0.6 x 0.48
	18	5	9	PESD5V0V2BMB	DFN1006B-3 (SOT883B) 	1.0 x 0.6 x 0.37
	35	5	15	PESD5V0S2BQA	DFN1010D-3 (SOT1215) 	1.1 x 1.0 x 0.37

HDMI and display port protection

Interface	Number of protected lines	C _{line} (pF)	Remark	Type	Package	Size (mm)
Display port	4	0.6	ESD protection for ultra high-speed interfaces	IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.55	ESD protection for ultra high-speed interfaces	IP4292CZ10-TBR		
		0.5	ESD protection for ultra high-speed interfaces	IP4294CZ10-TBR		
			ESD protection for ultra high-speed interfaces	PHDMI2F4		
		0.27	ESD protection for ultra high-speed interfaces	PHDMI2FR4		
		0.17	ESD protection for ultra high-speed interfaces	PHDMI2AB4		
HDMI	4	0.6	ESD protection for ultra high-speed interfaces	IP4283CZ10-TBR	DFN2510A-10 (SOT1176) 	2.5 x 1.0 x 0.48
		0.55	ESD protection for ultra high-speed interfaces	IP4292CZ10-TBR		
		0.5	ESD protection for HDMI 2.0	PHDMI2F4		
			ESD protection for ultra high-speed interfaces	IP4294CZ10-TBR		
		0.27	ESD protection for ultra high-speed interfaces	PHDMI2FR4		
		0.17	ESD protection for ultra high-speed interfaces	PHDMI2AB4		
LVDS	4	0.8	Very low clamp ESD protection with 12 kV IEC ruggedness	PUSB2X4D	SOT457 (SC-74) 	2.9 x 1.5 x 1.0
		0.8	Very low clamp ESD protection with 12 kV IEC ruggedness	PUSB2X4Y	SOT363 (SC-88) 	2.0 x 1.25 x 0.95

Antenna protection (NFC, WiFi,...)

Products in **bold red** are under development

Number of protected lines (Bidirectional)	V_{RWM} [V]	C_{line_typ} [pF]	C_{line_max} [pF]	ESD rating ^[1] max [kV]	Configuration	Type	Package	Size
1	18	0.28	0.45	10		PESD18VF1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		PESD1NFC-SF						
		0.35	0.5	10		PESD18VF1BL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
		PESD1NFC-L						
	24	0.25	0.4	10		PESD24VF1BSF	DSN0603-2 (SOD962) 	0.6 x 0.3 x 0.3
		PESD2NFC-SF						
		0.3	0.45	10		PESD24VF1BL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
		PESD2NFC-L						
	30	0.27		10		PESD30VF1BL		

^[1] according to IEC 61000-4-2 (contact discharge)

USB and SATA protection

Interface	Number of protected lines	R_{line}	C_{line} (pF)	Remark	Type	Package	Size (mm)
USB2.0 (Plastic package)	2	-	1.0	ESD protection for up to 2 ultra high-speed datalines	PRT5V0U2X	SOT143B	2.9 x 1.3 x 1.0
			1.8	ESD protection for up to 2 ultra high-speed datalines with 12 kV ESD robustness	PRT5V0U2AX		
				ESD protection for up to 2 ultra high-speed datalines	PRT5V0U2F	DFN1410-6 (SOT886)	1.45 x 1.0 x 0.48
				USB protection for USB OTG with 5.5 V Vbat protection	PUSBM5V5X4-TL	DFN1616-6 (SOT1189)	1.6 x 1.6 x 0.48
			USB protection for USB OTG with 12 V Vbat protection	PUSBM12VX4-TL			
	4		0.8	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4Y	SOT363 (SC-88)	2.0 x 1.25 x 0.95
			1	Very low clamp ESD protection for USB2.0 high-speed with 12 kV IEC ESD protection	PUSB2X4D	SOT457 (SC-74)	2.9 x 1.5 x 1.0
				Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	IP4220CZ6		
				Dual ESD protection for USB2.0 high-speed, SD-card, SIM card	PRT5V0U4D		

Common mode filter for USB 2.0

Interface	Number of protected lines	C_{line} (pF)	ESD rating max (kV) ^[1]	Remark	Type	Package	Size (mm)
USB2.0	2	1.5	15	Common Mode filter with ESD protection for high-speed interfaces such as USB 2.0	IP3319CX6	WLCSP6	1.34 x 0.95 x 0.57

^[1] according to IEC 61000-4-2 (contact discharge)

Common mode filter for USB 3.x

Products in **bold red** are under development, types in **bold** represent new products

Interface	Number of protected line pairs	Type	Differential Mode 3dB frequency	Common Mode rejection 800 MHz - 10 GHz	C_d typical	V_{RWM}	ESD rating	Channel series resistance	Package	Size (mm)
USB3.x	1	PCMF1USB3BA/C	~ 10 GHz		0.25	4	15	3	 WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3BA/C							 WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3BA/C							 WLCSP15	2.4 x 1.2 x 0.5
	1	PCMF1USB3B/C	8.1 GHz	>12	0.3	4	20	3	 WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3B/C							 WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3B/C							 WLCSP15	2.4 x 1.2 x 0.5
	1	PCMF1USB3S	6 GHz	>12	0.3	5	15	3	 WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2USB3S							 WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3USB3S							 WLCSP15	2.4 x 1.2 x 0.5
	1	PESD1USB3B	16.1 GHz	ESD protection in PCMF footprint	0.3	4	20	-	 WLCSP5	0.8 x 1.2 x 0.5
	2	PESD2USB3B							 WLCSP10	1.6 x 1.2 x 0.5
	3	PESD3USB3B							 WLCSP15	2.4 x 1.2 x 0.5
	1	PESD1USB3S	17 GHz	ESD protection in PCMF footprint	0.5	5	15	-	 WLCSP5	0.8 x 1.2 x 0.5
	2	PESD2USB3S							 WLCSP10	1.6 x 1.2 x 0.5
	3	PESD3USB3S							 WLCSP15	2.4 x 1.2 x 0.5

^{†1} according to IEC 61000-4-2 (contact discharge)

Common mode filter for HDMI and MIPI

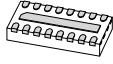
Interface	Number of protected line pairs unidirectional	Type	Differential Mode 3 dB frequency (typ.)	C_d pF typical	V_{RWM}	ESD rating ^{†1} max (kV)	Channel series resistance	Package	Size (mm)
HDMI2.0	1	PCMF1HDMI2S	>6 GHz	0.3	5	15	3 Ω	 WLCSP5	0.8 x 1.2 x 0.5
	2	PCMF2HDMI2S						 WLCSP10	1.6 x 1.2 x 0.5
	3	PCMF3HDMI2S						 WLCSP15	2.4 x 1.2 x 0.5

^{†1} according to IEC 61000-4-2 (contact discharge)

HDMI signal conditioning

Interface	Number of protected lines	Buffer	Level shifter	C_{line} (pF)	Resistor (Ω)	LDO	Remark	Type	Package	Size (mm)
HDMI2.0 Tx	13	yes	yes	100 Ω differential impedance	integrated	-	Fully integrated HDMI source solution with current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4786CZ32	DFN5050-32 (SOT617) 	5.0 x 5.0 x 0.85
							Fully integrated HDMI source solution with enhanced ESD protection, current limiter, buffer, and level shifter for DDC, CEC, and Hot Plug	IP4788CZ32		
SD3.0	6	yes	yes	-	internal	LDO	SD 3.0-compliant memory card with integrated dual voltage-level translator with EMI filter and ESD protection	IP4856CX25/C	WLCSP25 	2.4 x 2.4 x 0.4

LCD and camera RC filter with integrated protection

Number of protected lines	Line small-signal equivalents			Digital interface clock speed (MHz)	Insertion loss S21 ~ -3 dB (MHz)	Type	Package	Size (mm)
	R_{line} (Ω)	C_{line} (pF)	L_{line} (nH)					
4	40	18	-	~100	300	IP4252CZ8-4-TTL	DFN1714-8 (SOT1166) 	1.7 x 1.35 x 0.52
	100	45	-	~40	130	IP4254CZ8-4-TTL		
8	40	18	-	~100	300	IP4252CZ16-8-TTL	DFN3314-16 (SOT1168) 	3.3 x 1.35 x 0.53
	100	45	-	~40	130	IP4254CZ16-8-TTL		
		15	-	~110	330	IP4251CZ16-8-TTL		

Memory and SIM card filter with integrated protection

Types in **bold** represent new products

Interface	Number of protected lines	Line small-signal equivalents		Digital interface clock speed (MHz)	Remark	Type	Package	Size (mm)
		R_{line}	C_{line} (pF)					
SIM card	3	47 Ω / 100 Ω	20	~20	Integrated SIM-card EMI filter and ESD protection	IP4264CZ8-20-TTL	DFN1714-8 (SOT1166) 	1.7 x 1.35 x 0.52
SD 3.0	6	-	0.27	5000	6-line bidirectional ESD protection for ultra high-speed interfaces	PUSB3TB6	DFN2111-7 (SOT1358) 	2.1 x 1.1 x 0.5
			0.35			PUSB3FR6		
			0.15			PUSB3AB6		
SD 3.0	4	-	0.75		4-line unidirectional ESD protection	PESD3V3X4UHM	DFN1308-6 	1.3 x 0.8 x 0.4

TVS diodes for mobile applications

Types in **bold** represent new products

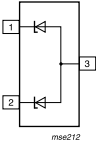
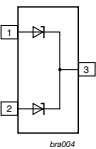
P_{RWM} 10/1000µs	V_{RWM}	V_{BR} min	V_{BR} max	I_{PPM} 8/20µs	V_{CL} 8/20µs	I_{PPM} 10/1000µs	V_{CL} 10/1000µs	Type	Package	Size
300	3.3	4.7	-	34	13.2	-	-	PTVS3V3D18AL	DFN1006-2 (SOD882) 	1.0 x 0.6 x 0.48
	4.5	4.7	-	34	13.2	-	-	PTVS4V5D1BL		
	5.5	5.6	7.6	35	12.2	-	-	PTVS5V5D1BL		
	7.5	8.33	9.21	178	19.7	23.3	12.9	PTVS7V5U1UPA	DFN2020-3 (SOT1061) 	2.0 x 2.0 x 0.62
	10	11.1	12.3	148	23	17.6	17	PTVS10VU1UPA		
	12	13.3	14.7	131	25.2	15.1	19.9	PTVS12VU1UPA		
	15	16.7	18.5	111	28.8	12.3	24.4	PTVS15VU1UPA		
	18	20	22.1	97	32	10.3	29.2	PTVS18VU1UPA		
	20	22.2	24.5	98.5	38.7	9.2	32.5	PTVS20VU1UPA		
	22	24.4	26.9	88.5	41	8.4	35.5	PTVS22VU1UPA		
	24	26.7	29.5	79	44.2	7.7	38.8	PTVS24VU1UPA		
	26	28.9	31.9	69	43.5	7	43	PTVS26VU1UPA		

TVS diodes for mobile applications

V_{RWM} (V)	V_{BR} min (V)	V_{BR} max (V)	8/20µs pulse		10/1000µs pulse		I_{RM} typ @ V_{RWM} (nA)	I_{RM} max @ V_{RWM} (nA)	R_{dyn} (TLP) - 8/20µs	Type	Package	Size
			V_{CL} @ I_{PPM} 8/20µs (V) max	I_{PPM} 8/20µs (A)	V_{CL} @ I_{PPM} 10/1000µs (V) max	I_{PPM} 10/1000µs (A)						
5	6.4	7.8	19.4	100	12	20	25	1000	0.1	PTVS5V0Z1USKP	DSN1608-2 (SOD964) 	1.6 x 0.8 x 0.27
			18	80	12	20	25	1000	0.06	PTVS5V0Z1USK		
7.5	8.33	9.65	22	100	13.5	17	1	200	0.08	PTVS7V5Z1USK		
10	11.1	12.9	27	75	18.2	12.5	0.1	200	0.11	PTVS10VZ1USK		
12	13.3	15.4	29	65	21.8	10.5	0.1	200	0.11	PTVS12VZ1USK		
15	16.7	19.4	36	52	27.4	7.5	0.1	200	0.13	PTVS15VZ1USK		
18	20	23.2	44	41	32.8	6.4	0.1	200	0.17	PTVS18VZ1USK		
20	22.2	25.4	48.3	41	36.9	6	1	200	0.2	PTVS20VZ1USK		
22	24.4	26.9	51	39	40	5	0.1	200	0.2	PTVS22VZ1USK		
26	28.9	33.4	57.5	32	46	4.5	0.1	200	0.15	PTVS26VZ1USK		

ESD protection, TVS, filtering and signal conditioning

TVS diodes, 24 W/40 W (automotive)

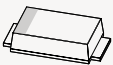
Power (W) (10 / 1000 µs waveform) [1]	V_{RWM} (V)	V_{BR} min (V) @ I_R	V_{BR} typ (V) @ I_R	V_{BR} max (V) @ I_R	I_R (mA)	ESD rating max (kV) [1]	C_{line} typ (pF)	V_{CL} max (V) @ I_{PP} [1]	I_{PP} (A) [1]	I_{RWM} max (µA) @ V_{RWM}	Configuration	Type	Package	Size (mm)
24	3	5.32	5.6	5.88	20	30	210	8	3	5		MMBZ5V6AL	SOT23 	2.9 x 1.3 x 1.0
		5.89	6.2	6.51	1	30	175	8.7	2.76	0.2		MMBZ6V2AL		
	4.5	6.48	6.8	7.14	1	30	150	9.6	2.5	0.3		MMBZ6V8AL		
	6	8.65	9.1	9.56	1	30	155	14	1.7	0.1		MMBZ9V1AL		
	6.5	9.5	10	10.5	1	30	130	14.2	1.7	0.02		MMBZ10VAL		
40	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VAL		
	12	14.25	15	15.75	1	30	85	21	1.9	0.005		MMBZ15VAL		
	13	15.2	16	16.8	1	30	76	23	1.9	0.005		MMBZ16VAL		
	13	15.68	16	16.32	1	30	76	23	1.9	0.005		MMBZ16VTAL		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VAL		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VAL		
	22	25.65	27	28.35	1	30	48	40	1	0.005		MMBZ27VAL		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VAL		
	8.5	11.4	12	12.6	1	30	110	17	2.35	0.005		MMBZ12VDL		
	12.8	14.3	15	15.8	1	30	85	21.2	1.9	0.005		MMBZ15VDL		
	14.5	17.1	18	18.9	1	30	70	25	1.6	0.005		MMBZ18VCL		
	17	19	20	21	1	30	65	28	1.4	0.005		MMBZ20VCL		
	22	25.65	27	28.35	1	30	48	38	1	0.005		MMBZ27VCL		
	26	31.35	33	34.65	1	30	45	46	0.87	0.005		MMBZ33VCL		

TVS diodes, 400 W

Power (W) (10/1000 µs waveform) ⁽¹⁾	V _{RWM} (V)	V _{BR} min (V) @ I _R	V _{BR} typ (V) @ I _R	V _{BR} max (V) @ I _R	I _R (mA)	V _{CL} max (V) @ I _{PP} ⁽¹⁾	I _{PP} (A) ⁽¹⁾	I _{RM} typ (µA) @ V _{RWM}	I _{RM} max (µA) @ V _{RWM}	Type (T _J max = 150 °C)	Type (T _J max = 185 °C)	Package	Size (mm)
350	3.5	5.20	5.60	6.00	10	8.0	43.8	5	600	PTVS3V3S1UR	PTVS3V3S1UTR		2.6 x 1.7 x 1.0
400	5.0	6.40	6.70	7.00	10	9.2	43.5	5	400	PTVS5V0S1UR	PTVS5V0S1UTR		
	6.0	6.67	7.02	7.37	10	10.3	38.8	5	400	PTVS6V0S1UR	PTVS6V0S1UTR		
	6.5	7.22	7.60	7.98	10	11.2	35.7	5	250	PTVS6V5S1UR	PTVS6V5S1UTR		
	7.0	7.78	8.20	8.60	10	12.0	33.3	3	100	PTVS7V0S1UR	PTVS7V0S1UTR		
	7.5	8.33	8.77	9.21	1	12.9	31.0	0.2	50	PTVS7V5S1UR	PTVS7V5S1UTR		
	8.0	8.89	9.36	9.83	1	13.6	29.4	0.03	25	PTVS8V0S1UR	PTVS8V0S1UTR		
	8.5	9.44	9.92	10.40	1	14.4	27.8	0.01	10	PTVS8V5S1UR	PTVS8V5S1UTR		
	9.0	10.00	10.55	11.10	1	15.4	26.0	0.005	5	PTVS9V0S1UR	PTVS9V0S1UTR		
	10	11.10	11.70	12.30	1	17.0	23.5	0.005	2.5	PTVS10VS1UR	PTVS10VS1UTR		
	11	12.20	12.85	13.50	1	18.2	22.0	0.005	2.5	PTVS11VS1UR	PTVS11VS1UTR		
	12	13.30	14.00	14.70	1	19.9	20.1	0.005	2.5	PTVS12VS1UR	PTVS12VS1UTR		
	13	14.40	15.15	15.90	1	21.5	18.6	0.001	0.1	PTVS13VS1UR	PTVS13VS1UTR		
	14	15.60	16.40	17.20	1	23.2	17.2	0.001	0.1	PTVS14VS1UR	PTVS14VS1UTR		
	15	16.70	17.60	18.50	1	24.4	16.4	0.001	0.1	PTVS15VS1UR	PTVS15VS1UTR		
	16	17.80	18.75	19.70	1	26.0	15.4	0.001	0.1	PTVS16VS1UR	PTVS16VS1UTR		
	17	18.90	19.90	20.90	1	27.6	14.5	0.001	0.1	PTVS17VS1UR	PTVS17VS1UTR		
	18	20.00	21.00	22.10	1	29.2	13.7	0.001	0.1	PTVS18VS1UR	PTVS18VS1UTR		
	20	22.20	23.35	24.50	1	32.4	12.3	0.001	0.1	PTVS20VS1UR	PTVS20VS1UTR		
	22	24.40	25.60	26.90	1	35.5	11.3	0.001	0.1	PTVS22VS1UR	PTVS22VS1UTR		
	24	26.70	28.10	29.50	1	38.9	10.3	0.001	0.1	PTVS24VS1UR	PTVS24VS1UTR		
	26	28.90	30.40	31.90	1	42.1	9.5	0.001	0.1	PTVS26VS1UR	PTVS26VS1UTR		
	28	31.10	32.80	34.40	1	45.4	8.8	0.001	0.1	PTVS28VS1UR	PTVS28VS1UTR		
	30	33.30	35.10	36.80	1	48.4	8.3	0.001	0.1	PTVS30VS1UR	PTVS30VS1UTR		
	33	36.70	38.70	40.60	1	53.3	7.5	0.001	0.1	PTVS33VS1UR	PTVS33VS1UTR		
	36	40.00	42.10	44.20	1	58.1	6.9	0.001	0.1	PTVS36VS1UR	PTVS36VS1UTR		
	40	44.40	46.80	49.10	1	64.5	6.2	0.001	0.1	PTVS40VS1UR	PTVS40VS1UTR		
	43	47.80	50.30	52.80	1	69.4	5.8	0.001	0.1	PTVS43VS1UR	PTVS43VS1UTR		
	45	50.00	52.65	55.30	1	72.7	5.5	0.001	0.1	PTVS45VS1UR	PTVS45VS1UTR		
	48	53.30	56.10	58.90	1	77.4	5.2	0.001	0.1	PTVS48VS1UR	PTVS48VS1UTR		
	51	56.70	59.70	62.70	1	82.4	4.9	0.001	0.1	PTVS51VS1UR	PTVS51VS1UTR		
	54	60.00	63.15	66.30	1	87.1	4.6	0.001	0.1	PTVS54VS1UR	PTVS54VS1UTR		
	58	64.40	67.80	71.20	1	93.6	4.3	0.001	0.1	PTVS58VS1UR	PTVS58VS1UTR		
	60	66.70	70.20	73.70	1	96.8	4.1	0.001	0.1	PTVS60VS1UR	PTVS60VS1UTR		
	64	71.10	74.85	78.60	1	103.0	3.9	0.001	0.1	PTVS64VS1UR	PTVS64VS1UTR		

⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

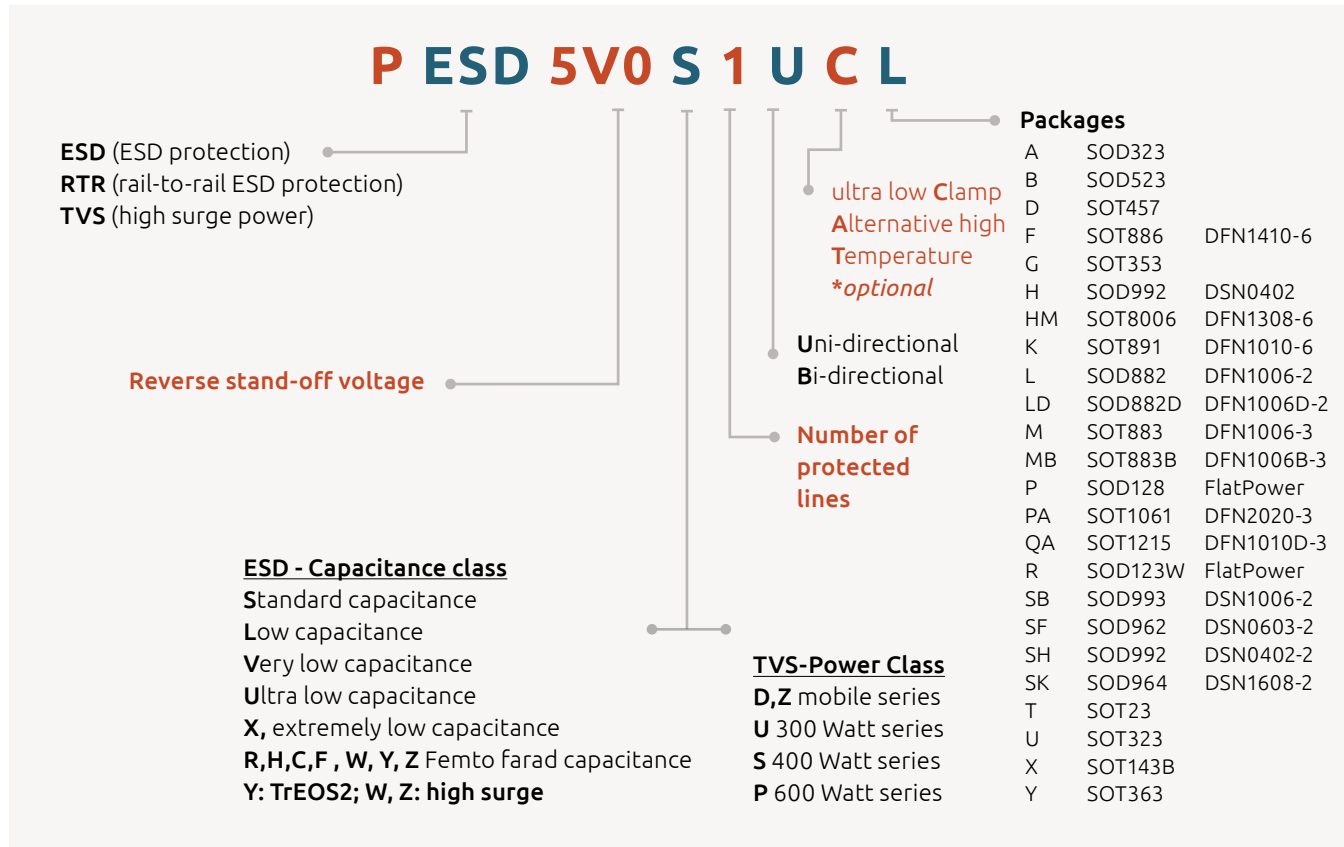
TVS diodes, 600 W

Power (W) (10 / 1000 µs waveform) ⁽¹⁾	V_{RWM} (V)	$V_{BR\ min}$ (V) @ I_R	$V_{BR\ typ}$ (V) @ I_R	$V_{BR\ max}$ (V) @ I_R	I_R (mA)	$V_{CL\ max}$ (V) @ I_{PP} ⁽¹⁾	I_{PP} (A) ⁽¹⁾	$I_{RM\ typ}$ (µA) @ V_{RWM}	$I_{RM\ max}$ (µA) @ V_{RWM}	Type ($T_j\ max = 150\ ^\circ C$)	Type ($T_j\ max = 185\ ^\circ C$)	Package	Size (mm)
600	3.5	5.20	5.60	6.00	10	8	75	5	600	PTVS3V3P1UP	PTVS3V3P1UTP	 SOD128	3.8 x 2.6 x 1.0
	5	6.40	6.70	7.00	10	9.2	65.2	5	400	PTVS5V0P1UP	PTVS5V0P1UTP		
	6	6.67	7.02	7.37	10	10.3	58.3	5	400	PTVS6V0P1UP	PTVS6V0P1UTP		
	6.5	7.22	7.60	7.98	10	11.2	53.6	5	250	PTVS6V5P1UP	PTVS6V5P1UTP		
	7	7.78	8.20	8.60	10	12	50	3	100	PTVS7V0P1UP	PTVS7V0P1UTP		
	7.5	8.33	8.77	9.21	1	12.9	46.5	0.2	50	PTVS7V5P1UP	PTVS7V5P1UTP		
	8	8.89	9.36	9.83	1	13.6	44.1	0.03	25	PTVS8V0P1UP	PTVS8V0P1UTP		
	8.5	9.44	9.92	10.40	1	14.4	41.7	0.01	10	PTVS8V5P1UP	PTVS8V5P1UTP		
	9	10.00	10.55	11.10	1	15.4	39	0.005	5	PTVS9V0P1UP	PTVS9V0P1UTP		
	10	11.10	11.70	12.30	1	17	35.3	0.005	2.5	PTVS10VP1UP	PTVS10VP1UTP		
	11	12.20	12.85	13.50	1	18.2	33	0.005	2.5	PTVS11VP1UP	PTVS11VP1UTP		
	12	13.30	14.00	14.70	1	19.9	30.2	0.005	2.5	PTVS12VP1UP	PTVS12VP1UTP		
	13	14.40	15.15	15.90	1	21.5	27.9	0.001	0.1	PTVS13VP1UP	PTVS13VP1UTP		
	14	15.60	16.40	17.20	1	23.2	25.9	0.001	0.1	PTVS14VP1UP	PTVS14VP1UTP		
	15	16.70	17.60	18.50	1	24.4	24.6	0.001	0.1	PTVS15VP1UP	PTVS15VP1UTP		
	16	17.80	18.75	19.70	1	26	23.1	0.001	0.1	PTVS16VP1UP	PTVS16VP1UTP		
	17	18.90	19.90	20.90	1	27.6	21.7	0.001	0.1	PTVS17VP1UP	PTVS17VP1UTP		
	18	20.00	21.00	22.10	1	29.2	20.5	0.001	0.1	PTVS18VP1UP	PTVS18VP1UTP		
	20	22.20	23.35	24.50	1	32.4	18.5	0.001	0.1	PTVS20VP1UP	PTVS20VP1UTP		
	22	24.40	25.60	26.90	1	35.5	16.9	0.001	0.1	PTVS22VP1UP	PTVS22VP1UTP		
	24	26.70	28.10	29.50	1	38.9	15.4	0.001	0.1	PTVS24VP1UP	PTVS24VP1UTP		
	26	28.90	30.40	31.90	1	42.1	14.2	0.001	0.1	PTVS26VP1UP	PTVS26VP1UTP		
	28	31.10	32.80	34.40	1	45.4	13.2	0.001	0.1	PTVS28VP1UP	PTVS28VP1UTP		
	30	33.30	35.10	36.80	1	48.4	12.4	0.001	0.1	PTVS30VP1UP	PTVS30VP1UTP		
	33	36.70	38.70	40.60	1	53.3	11.3	0.001	0.1	PTVS33VP1UP	PTVS33VP1UTP		
	36	40.00	42.10	44.20	1	58.1	10.3	0.001	0.1	PTVS36VP1UP	PTVS36VP1UTP		
	40	44.40	46.80	49.10	1	64.5	9.3	0.001	0.1	PTVS40VP1UP	PTVS40VP1UTP		
	43	47.80	50.30	52.80	1	69.4	8.6	0.001	0.1	PTVS43VP1UP	PTVS43VP1UTP		
	45	50.00	52.65	55.30	1	72.7	8.3	0.001	0.1	PTVS45VP1UP	PTVS45VP1UTP		
	48	53.30	56.10	58.90	1	77.4	7.8	0.001	0.1	PTVS48VP1UP	PTVS48VP1UTP		
	51	56.70	59.70	62.70	1	82.4	7.3	0.001	0.1	PTVS51VP1UP	PTVS51VP1UTP		
	54	60.00	63.15	66.30	1	87.1	6.9	0.001	0.1	PTVS54VP1UP	PTVS54VP1UTP		
	58	64.40	67.80	71.20	1	93.6	6.4	0.001	0.1	PTVS58VP1UP	PTVS58VP1UTP		
	60	66.70	70.20	73.70	1	96.8	6.2	0.001	0.1	PTVS60VP1UP	PTVS60VP1UTP		
	64	71.10	74.85	78.60	1	103	5.8	0.001	0.1	PTVS64VP1UP	PTVS64VP1UTP		

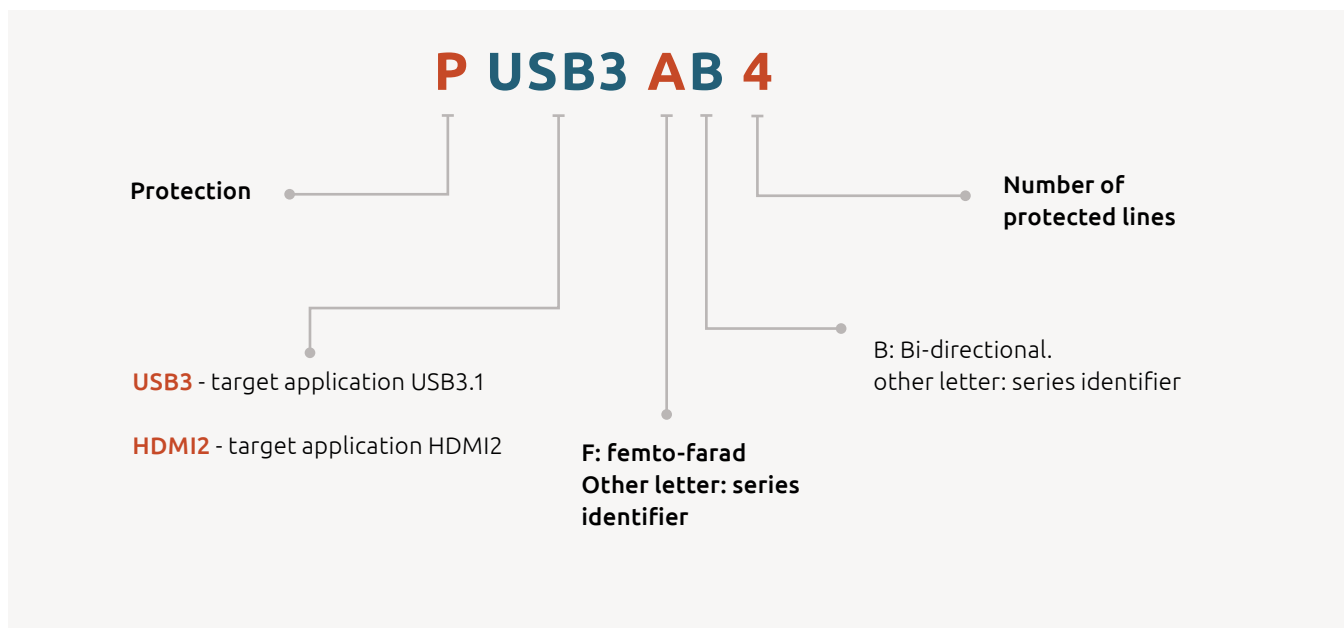
⁽¹⁾ 10 / 1000 µs according to IEC 61643-321

Nomenclatures

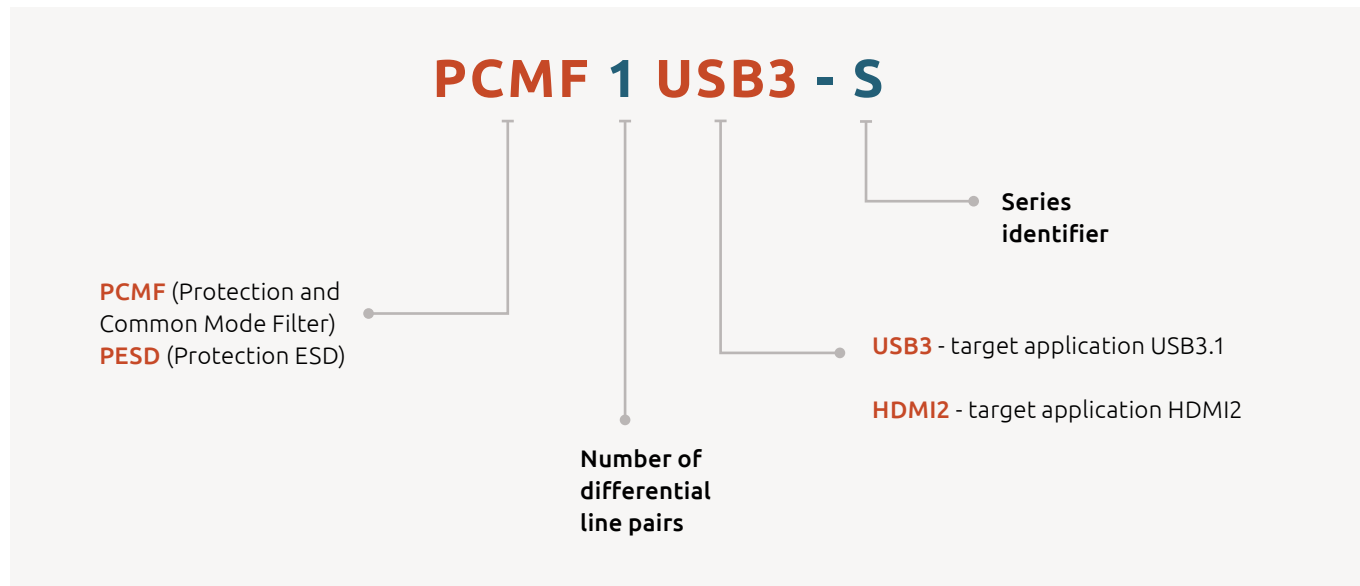
Nomenclature - protection devices



Nomenclature - application specific ESD protection



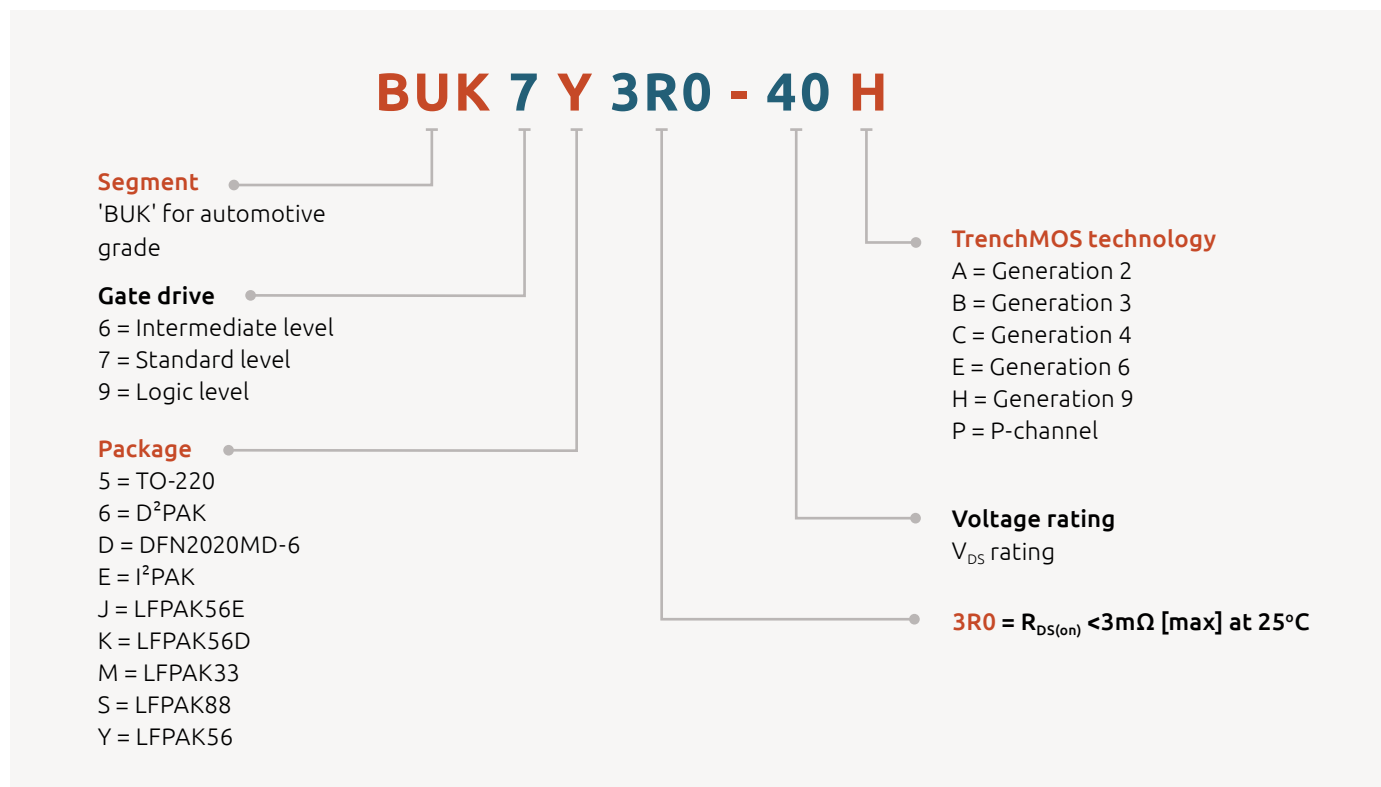
Nomenclature - common mode filter with ESD protection





Automotive MOSFETs.....	74
Automotive grade MOSFETs nomenclature.....	74
N-channel 30V automotive power MOSFETs.....	74
N-channel 40V automotive power MOSFETs.....	75
N-channel 55V-60V automotive power MOSFETs.....	77
N-channel 75V-80V automotive power MOSFETs.....	79
N-channel 100V automotive power MOSFETs.....	80
P-channel 30V-60V automotive power MOSFETs.....	81
Small-signal automotive MOSFETs – Low $R_{DS(on)}$	82
Small-signal automotive MOSFETs – High $R_{DS(on)}$	84
Small-signal automotive MOSFETs – Dual.....	84
Small-signal MOSFETs complementary.....	84
Power MOSFETs	86
N-channel 25V-30V Power MOSFETs.....	86
N-channel 40V-60V Power MOSFETs.....	88
N-channel 75V-200V Power MOSFETs.....	90
P-channel Power MOSFETs.....	92
Power MOSFETs nomenclature	93
Small-signal MOSFETs	94
Small-signal MOSFETs in DFN1006 and DFN1006B packages	94
Small-signal MOSFETs in DFN0606	94
Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages	95
Small-signal low-leakage MOSFETs.....	95
Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages	96
Small-signal MOSFETs in WLCSP4 and WLCSP6 packages.....	97
Small-signal MOSFETs single (N-channel)	98
Small-signal MOSFETs single (P-channel).....	100
Small-signal MOSFET-Schottky combination.....	100
Small-signal MOSFETs dual.....	102
Small-signal MOSFETs complementary	102
Small-signal MOSFETs nomenclature	104

Automotive grade MOSFETs nomenclature



N-channel 30V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
D ² PAK (SOT404) 	BUK762R7-30B	30	2.7		75	0.5
	BUK763R4-30B	30	3.4		75	0.59
LFPACK56; Power-SO8 (SOT669) 	BUK9Y07-30B	30	6	7	75	1.42
	BUK7Y07-30B	30	7		75	1.42
	BUK9Y11-30B	30	9	11	59	2
	BUK7Y10-30B	30	10		67	1.76
	BUK9Y22-30B	30	19	22	38	2.53
	BUK7Y20-30B	30	20		40	2.53
LFPACK56D (SOT1205) 	BUK9K5R1-30E	30	4.4	5.3	40	2.21
	BUK9K5R6-30E	30	4.7	5.8	40	2.36
	BUK7K5R1-30E	30	5.1		40	2.21
	BUK7K5R6-30E	30	5.6		40	2.36
LFPACK33 (SOT1210) 	BUK9M5R2-30E	30	4.1	5.2	70	1.89
	BUK9M6R6-30E	30	5.3	6.6	70	2
	BUK9M10-30E	30	7.8	10	54	2.75
	BUK9M17-30E	30	14	17	37	3.4

N-channel 40V automotive power MOSFETs

Types in **bold red** are in development, types in **bold** represent new products

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)	
TO-220AB (SOT78)		BUK751R8-40E	40	1.8		120	0.43
		BUK752R3-40E	40	2.3		120	0.51
		BUK753R1-40E	40	3.1		100	0.64
		BUK758R3-40E	40	7.4		75	1.56
LFPAK88 (SOT1235)		BUK750R7-40H	40	0.7			
		BUK750R9-40H	40	0.9			
		BUK751R0-40H	40	1		325	0.39
D ² PAK (SOT404)		BUK961R6-40E	40	1.4	1.6	120	0.43
		BUK761R6-40E	40	1.6		120	0.43
		BUK761R7-40E	40	1.6		120	0.46
		BUK762R0-40E	40	2		120	0.51
		BUK962R6-40E	40	2.4	2.8	100	0.57
		BUK762R6-40E	40	2.6		100	0.57
		BUK963R1-40E	40	2.7	3.1	100	0.64
		BUK762R9-40E	40	2.9		100	0.64
		BUK964R1-40E	40	3.5	4.1	75	0.82
		BUK764R0-40E	40	4		75	0.82
		BUK965R4-40E	40	4.4	5.4	75	1.09
		BUK765R3-40E	40	4.9		75	1.09
		BUK768R1-40E	40	7.2		75	1.56
		I ² PAK (SOT226)		BUK7E1R8-40E	40	1.8	
BUK7E1R9-40E	40			1.9		120	0.46
BUK7E2R3-40E	40			2.3		120	0.51
BUK7E3R1-40E	40			3.1		100	0.64
BUK7E8R3-40E	40			7.4		75	1.56
LFPAK56E (SOT1023)		BUK9J0R9-40H	40	0.9	1.2	220	0.3
		BUK7J1R0-40H	40	1		220	0.3
		BUK7J1R4-40H	40	1.4		120	0.38
LFPAK56; Power-SO8 (SOT669)		BUK9Y1R3-40H	40	1.3	1.8	120	0.38
		BUK7Y1R4-40H	40	1.4		190	0.38
		BUK9Y1R6-40H	40	1.6	2.2	120	0.51
		BUK7Y1R7-40H	40	1.7		120	0.51
		BUK9Y1R9-40H	40	1.9	2.6	120	0.69
		BUK7Y2R0-40H	40	2		120	0.69
		BUK9Y2R4-40H	40	2.4	3.2	120	0.79
		BUK9Y3R0-40E	40	2.5	3	100	0.77
		BUK7Y2R5-40H	40	2.5		120	0.79
		BUK9Y2R8-40H	40	2.8	3.9	120	0.87
		BUK7Y3R0-40H	40	3		120	0.87
		BUK7Y3R5-40H	40	3.5		120	1.3
		BUK7Y3R5-40E	40	3.5		100	0.9
		BUK9Y3R5-40E	40	3.6	3.8	100	0.9
		BUK9Y4R4-40E	40	3.7	4.4	100	1.02
		BUK7Y4R4-40E	40	4.4		100	1.02
		BUK9Y7R6-40E	40	6	7.6	79	1.58
		BUK7Y7R6-40E	40	7.6		79	1.58
		BUK9Y12-40E	40	10	12	52	2.31
		BUK7Y12-40E	40	12		52	2.31
		BUK9Y21-40E	40	17	21	33	3.33
		BUK7Y21-40E	40	21		33	3.33
		BUK9Y29-40E	40	25	29	25	4.03
		BUK7Y29-40E	40	29		26	4.03

N-channel 40V automotive power MOSFETs

Products in **bold red** are under development

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)
LFPAK56D (SOT1205)	BUK7K6R2-40E	40	5.8		40	2.21
	BUK9K6R2-40E	40	6	6.2	40	2.21
	BUK9K6R8-40E	40	6.1	7.2	40	2.36
	BUK7K6R8-40E	40	6.8			2.36
	BUK9K8R7-40E	40	8	9.4	30	2.84
	BUK7K8R7-40E	40	8.5			2.84
	BUK9K18-40E	40	16	20	30	3.96
	BUK7K18-40E	40	19		24	3.96
	BUK9K25-40E	40	24	29	18	4.68
	BUK7K25-40E	40	25			4.68
LFPAK33 (SOT1210)	BUK7M3R3-40H	40	3.3			
	BUK9M3R3-40H	40		3.3		
	BUK7M4R3-40H	40	4.3			
	BUK9M4R3-40H	40		4.3		
	BUK7M5R0-40H	40	5			
	BUK9M5R0-40H	40		5		
	BUK7M6R0-40H	40	6			
	BUK9M6R0-40H	40		6		
	BUK7M6R3-40E	40	6.3		70	1.89
	BUK7M6R7-40H	40	6.7			
	BUK9M6R7-40H	40		6.7		
	BUK7M8R0-40E	40	8		69	2
	BUK7M8R5-40H	40	8			
	BUK9M8R5-40H	40		8		
	BUK7M10-40E	40	10		56	2.43
	BUK7M12-40E	40	12		48	2.75
	BUK7M9R5-40H	40	9.5			
	BUK9M9R5-40H	40		9.5		
	BUK7M21-40E	40	21		33	3.4
	BUK7M11-40H	40	11			
	BUK9M11-40H	40		11		
	BUK7M45-40E	40	45		19	4.8
	BUK9M14-40E	40	11	14	44	2.75
	BUK9M24-40E	40	20	24	30	3.4
	BUK7M15-40H	40	15			
	BUK9M15-40H	40		15		
	BUK7M20-40H	40	20			
	BUK9M20-40H	40		20		
	BUK9M52-40E	40	40	52	18	4.8
	BUK9M7R2-40E	40	5.8	7.2	70	1.89
	BUK9M9R1-40E	40	7.3	9.1	64	2
	BUK9M11-40E	40	9	11	53	2.43

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK953R5-60E	60	3.4	3.7	120	0.51
	BUK954R8-60E	60	4.5	4.9	100	0.64
D ² PAK (SOT404)	BUK7610-55AL	55	10		75	0.5
	BUK9620-55A	55	18	20	54	1.2
	BUK7620-55A	55	20		54	1.2
	BUK9624-55A	55	22	24	46	1.4
	BUK9628-55A	55	25	28	42	1.5
	BUK9635-55A	55	32	35	34	1.8
	BUK7635-55A	55	35		35	1.7
	BUK9675-55A	55	68	75	20	2.4
	BUK7675-55A	55	75		20	2.4
	BUK962R5-60E	60	2.3	2.5	120	0.43
	BUK762R4-60E	60	2.4		120	0.43
	BUK962R8-60E	60	2.5	2.8	120	0.46
	BUK762R6-60E	60	2.6		120	0.46
	BUK963R3-60E	60	3	3.3	120	0.51
	BUK763R1-60E	60	3.1		120	0.51
	BUK964R2-60E	60	3.9	4.2	100	0.57
	BUK763R9-60E	60	3.9		100	0.57
	BUK964R8-60E	60	4.4	4.8	100	0.64
	BUK764R4-60E	60	4.5		100	0.64
	BUK966R5-60E	60	5.9	6.5	75	0.82
	BUK766R0-60E	60	6		75	0.82
	BUK969R0-60E	60	8	9	75	1.09
	BUK768R3-60E	60	8.3		75	1.09
	BUK9614-60E	60	13	14	56	1.56
	BUK7613-60E	60	13		58	1.56
I ² PAK (SOT226)	BUK7E2R6-60E	60	2.6		120	0.43
	BUK7E3R5-60E	60	3.5		120	0.51
	BUK7E4R6-60E	60	4.6		100	0.64
	BUK7E13-60E	60	13		58	1.56

N-channel 55V-60V automotive power MOSFETs

Package name	Type number	V _{DS} [max] (V)	R _{DS(on)} [max] @ 10 V (mΩ)	R _{DS(on)} [max] @ 5 V (mΩ)	I _D [max] @ 25 °C (A)	R _{th(j-mb)} [max] (K/W)
LFPAK56; Power-SO8 (SOT669) 	BUK9Y4R8-60E	60	4.1	4.8	100	0.63
	BUK7Y4R8-60E	60	4.8		100	0.63
	BUK9Y6R0-60E	60	5.2	6	100	0.77
	BUK9Y7R2-60E	60	5.6	7.2	100	0.9
	BUK7Y6R0-60E	60	6		100	0.77
	BUK7Y7R2-60E	60	7.2		100	0.9
	BUK9Y8R7-60E	60	7.5	8.7	86	1.02
	BUK7Y8R7-60E	60	8.7		87	1.02
	BUK9Y15-60E	60	13	15	53	1.58
	BUK7Y15-60E	60	15		53	1.59
	BUK9Y25-60E	60	22	25	34	2.31
	BUK7Y25-60E	60	25		34	2.31
	BUK9Y43-60E	60	38	43	22	3.33
	BUK7Y43-60E	60	43		22	3.33
	BUK9Y59-60E	60	52	59	17	4.03
	BUK7Y59-60E	60	59		17	4.03
LFPAK56D (SOT1205) 	BUK7K12-60E	60	9.3			2.21
	BUK7K13-60E	60	10		40	2.36
	BUK9K12-60E	60	11	12	35	2.21
	BUK9K13-60E	60	12	13	40	2.36
	BUK7K17-60E	60	14		30	2.84
	BUK9K17-60E	60	16	17	26	2.84
	BUK7K35-60E	60	30		21	3.96
	BUK9K35-60E	60	32	35	22	3.96
	BUK7K52-60E	60	45		15	4.68
	BUK9K52-60E	60	49	55	16	4.68
LFPAK33 (SOT1210) 	BUK7M9R9-60E	60	9.9		60	1.89
	BUK9M12-60E	60	11	12	54	1.89
	BUK7M12-60E	60	12		53	2
	BUK9M15-60E	60	13	15	47	2
	BUK7M15-60E	60	15		43	2.43
	BUK9M19-60E	60	17	19	38	2.43
	BUK7M19-60E	60	19		36	2.75
	BUK9M24-60E	60	21	24	32	2.75
	BUK7M33-60E	60	33			3.4
	BUK9M42-60E	60	37	42	22	3.4
	BUK7M42-60E	60	42		20	4.17
	BUK9M53-60E	60	46	53	17	4.17
	BUK7M67-60E	60	67		14	4.8
	BUK9M85-60E	60	73	85	13	4.8
SOT223 	BUK9832-55A/CU	55	29	32		
	BUK9880-55A/CU	55	73	80		
	BUK7880-55A/CU	55	80			
	BUK98150-55A/CU	55	137	150		
	BUK78150-55A/CU	55	150			

N-channel 75V-80V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (m Ω)	$R_{DS(on)}$ [max] @ 5 V (m Ω)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78)	BUK753R8-80E	80	4		120	0.43
D ² PAK (SOT404)	BUK7613-75B	75	13		75	0.95
	BUK9616-75B	75	14	16	67	0.95
	BUK7623-75A	75	23		53	1.1
	BUK763R8-80E	80	3.8		120	0.43
	BUK964R2-80E	80	4	4.2	120	0.43
	BUK764R2-80E	80	4.2		120	0.46
	BUK964R7-80E	80	4.5	4.7	120	0.46
	BUK769R6-80E	80	9.6		75	0.82
	BUK9611-80E	80	10	11	75	0.82
LFPAK56; Power-SO8 (SOT669)	BUK7Y7R8-80E	80	7.8		100	0.63
	BUK9Y8R5-80E	80	8	8.5	100	0.63
	BUK7Y9R9-80E	80	9.9		89	0.77
	BUK9Y11-80E	80	10	11	84	0.77
	BUK9Y14-80E	80	14	15	62	1.02
	BUK7Y14-80E	80	14		65	1.02
	BUK9Y25-80E	80	25	27	37	1.58
	BUK7Y25-80E	80	25		39	1.58
	BUK9Y41-80E	80	41	45	24	2.33
	BUK7Y41-80E	80	41		25	2.31
	BUK9Y72-80E	80	72	78	15	3.33
	BUK7Y72-80E	80	72		16	3.33
	BUK9Y107-80E	80	98	107	12	4.03
	BUK7Y98-80E	80	98		12	4.03
LFPAK56D (SOT1205)	BUK7K15-80E	80	15		23	2.21
	BUK7K17-80E	80	17		21	2.36
	BUK7K23-80E	80	23		17	2.21
	BUK9K20-80E	80	17	19	23	2.84
	BUK9K22-80E	80	19	22	21	2.36
	BUK9K30-80E	80	26	30	17	2.84
LFPAK33 (SOT1210)	BUK7M17-80E	80	17		43	1.89
	BUK9M23-80E	80	20	23	37	1.89
	BUK7M22-80E	80	22		37	2
	BUK7M27-80E	80	27		30	2.43
	BUK9M28-80E	80	28	28	33	2
	BUK9M35-80E	80	35	35	26	2.43

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
TO-220AB (SOT78) 	BUK755R4-100E	100	5.2		120	0.43
D ² PAK (SOT404) 	BUK765R0-100E	100	5		120	0.43
	BUK965R8-100E	100	5.6	5.8	120	0.43
	BUK768R1-100E	100	8.1		100	0.57
	BUK969R3-100E	100	8.9	9.3	100	0.57
	BUK7613-100E	100	13		72	0.82
	BUK9615-100E	100	14	15	66	0.82
	BUK7631-100E	100	31		34	1.56
	BUK9637-100E	100	36	37	31	1.56
	BUK9660-100A	100	58	60	26	1.4
	BUK7660-100A	100	60		26	1.4
	BUK9675-100A	100	72	75	23	1.5
	BUK7675-100A	100	75		23	1.5
	BUK96180-100A	100	173	180	11	2.8
I ² PAK (SOT226) 	BUK7E5R2-100E	100	5.2		120	0.43
LFPAK56; Power-SO8 (SOT669) 	BUK9Y12-100E	100	12	12	85	0.63
	BUK7Y12-100E	100	12		85	0.63
	BUK9Y15-100E	100	15	15	69	0.77
	BUK7Y15-100E	100	15		68	0.77
	BUK9Y19-100E	100	18	19	56	0.9
	BUK7Y19-100E	100	19		56	0.9
	BUK9Y22-100E	100	22	22	49	1.02
	BUK7Y22-100E	100	22		49	1.02
	BUK9Y38-100E	100	38	38	30	1.58
	BUK7Y38-100E	100	38		30	1.58
	BUK9Y65-100E	100	64	65	19	2.31
	BUK7Y65-100E	100	65		19	2.31
	BUK9Y113-100E	100	110	113	12	3.33
	BUK7Y113-100E	100	113		12	3.33
	BUK9Y153-100E	100	146	153	9.4	4.03
	BUK7Y153-100E	100	153		9.4	4.03

N-channel 100V automotive power MOSFETs

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	$R_{DS(on)}$ [max] @ 5 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56D (SOT1205)	BUK7K29-100E	100	25		29.5	2.21
	BUK9K29-100E	100	27	29	30	2.21
	BUK7K32-100E	100	28		29	2.36
	BUK9K32-100E	100	31	33	26	2.36
	BUK7K45-100E	100	38		21	2.84
	BUK9K45-100E	100	42	45	21	2.84
	BUK7K89-100E	100	83		13	3.96
	BUK9K89-100E	100	85	89	13	3.96
	BUK7K134-100E	100	121		9.8	4.68
	BUK9K134-100E	100	154	159	8.5	4.68
LFPAK33 (SOT1210)	BUK9M34-100E	100	34	34	29	1.89
	BUK9M43-100E	100	43	44	26	1.88
	BUK9M120-100E	100	119	120	12	3.4
	BUK9M156-100E	100	150	156	9.3	4.17
SOT223	BUK98180-100A/CU	100	173	180	4.6	
	BUK9875-100A/CU	101	72	75	7	

P-channel 30V-60V automotive power MOSFETs

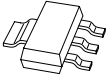
Types in **bold** represent new products

Package name	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ 10 V (mΩ)	I_D [max] @ 25 °C (A)	$R_{th(j-mb)}$ [max] (K/W)
LFPAK56	BUK6Y12-30P	30	12	67	1.4
	BUK6Y20-30P	30	20	41	2.3
	BUK6Y15-40P	40	15	63	1.4
	BUK6Y25-40P	40	25	40	2.3
	BUK6Y32-60P	60	32	39	1.4
	BUK6Y57-60P	60	57	23	2.3

Small-signal automotive MOSFETs – Low $R_{DS(on)}$

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N-channel	20	8	4.7	0.45	1	2	-	24	29	40	
			12.9	0.4	0.9	2	-	10	12	16	
		12	11.4	0.4	0.9	2	-	12	15	20	
			6.3	0.75	1.25	2	-	16	24	-	
	30	12	11.3	0.4	0.9	2	-	13	14	17	
			5	0.4	0.9	2	-	28	32	37	
			4	0.75	1.25	2	-	55	72	-	
			5.5	1	2.5	2	17	22	-	-	
		20	3.9	1	2.5	2	30	39	-	-	
			3.7	1	2.5	2	54	70	-	-	
		40	15	1.4	2.1	-	18	22	-	-	
			19	1.3	2.7	-	17	22	-	-	
			19	2.4	4	-	18	-	-	-	
			5	1.5	2.5	2	25	30	-	-	
			2.7	1	2.5	1	64	79	-	-	
			9	1	2.5	1	85	112	-	-	
			2.5	1	2.5	1	95	120	-	-	
	60	20	13	1.3	2.7	-	32	38	-	-	
			13	1.3	2.7	2	42	49	-	-	
			4	1.3	2.7	2	42	49	-	-	
			3.1	1.3	2.7	2	46	52	-	-	
			11	1.3	2.7	2	65	78	-	-	
			3	1.3	2.7	2	72	85	-	-	
			9	1.3	2.7	2	96	108	-	-	
			6	1.3	2.7	2	160	188	-	-	
			1.5	1.3	2.7	2	176	196	-	-	
			0.8	1.3	2.7	2	300	332	-	-	
			10	1.3	2.7	2	72	84	-	-	
			2.8	1.3	2.7	2	80	92	-	-	
	80	20	7	1.3	2.7	2	175	195	-	-	
			1.9	1.3	2.7	2	175	195	-	-	
			1.1	1.3	2.7	2	345	390	-	-	
			1.5	1.3	2.7	2	285	301	-	-	
	100	20	1.1	1.3	2.7	2	527	555	-	-	
			11.8	0.47	0.9	-	-	15	17	21	
P-channel	20	8	5.6	0.45	0.95	2	-	27	38	50	
			2	0.5	1.1	-	-	100	155	210	
			2.3	0.45	0.95	-	-	120	150	200	
			10.3	0.47	0.9	2	-	19	22	28	
		12	5	0.47	0.9	2.3	-	28	31	36	
			5.3	0.75	1.25	2	-	28	42	-	
			5	0.47	0.9	2	-	39	45	56	
			5.7	0.75	1.25	2	-	41	56	-	
			3.5	0.75	1.25	-	-	48	71	-	
			3.3	0.75	1.25	2	-	67	99	-	
			2.4	1	2.5	2	-	97	147	-	
		30	8.8	1	2.5	-	24	32	-	-	
			4.2	1	3	2	35	47	-	-	
	40	20	1.5	1	2.5	1	180	220	-	-	
			14	1.4	2.7	-	30	45	-	-	
	60	20	8	1.9	3.2	-	95	125	-	-	

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	DFN2020MD-6 (SOT1220)	DFN2020D-6 (SOT1118D)	DFN1010D-3 (SOT1215)
						
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65	1.1 x 1.0 x 0.37
	1700	600	250	1250	1250	1000
			PMV28UNEA			
				PMPB10XNEA		
				PMPB12UNEA		
			PMV20XNEA	PMPB20XNEA		
				PMPB13XNEA		
				PMPB29XNEA		
					PMDPB56XNEA	
		PMN25ENEA	PMV25ENEA			
			PMV50ENEA			
			PMV100ENEA			
		PMN20ENA		BUK9D23-40E		
				BUK6D23-40E		
				BUK7D25-40E		
		PMN30ENEA	PMV30ENEA			
			PMV65ENEA			
				BUK6D120-40E		
			PMV130ENEA			
		PMN40ENA		BUK6D43-60E		
				BUK6D56-60E		
				PMPB55ENEA		
		PMN55ENEA	PMV55ENEA			
				BUK6D88-60E		
				PMPB85ENEA		
		PMN120ENEA	PMV120ENEA	BUK6D125-60E		
				BUK6D210-60E		
		PMN230ENEA	PMV230ENEA			
			PMV450ENEA			
				BUK6D98-80E		
				PMPB95ENEA		
				BUK6D230-80E		
				PMPB215ENEA		
						PMXB360ENEA
	PMT280ENEA	PMN280ENEA	PMV280ENEA	BUK6D335-100E		
	PMT560ENEA					
				PMPB15XPA		
			PMV27UPEA			
			NX2301P			
			BSH205G2			
				PMPB20XPEA		
				PMPB29XPEA		
			PMV30XPEA			
				PMPB43XPEA		
		PMN42XPEA				
			PMV48XPA			
			PMV65XPEA			
			PMV100XPEA			
				PMPB27EPA		
			PMV50EPEA	PMPB50EPEA		
			PMV250EPEA			
				BUK6D43-40P		
				BUK6D120-60P		

Small-signal automotive MOSFETs – High $R_{DS(on)}$

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	8	0.4	0.6	1.1	2	-	1000	1400	2000	
			0.36	0.9	1.5	-	900	1000	-	-	
			0.36	0.48	1.6	1.5	1000	1100	1400	-	
			0.3	1	2.5	2	1000	1300	-	-	
			0.3	1	2.5	3	1100	1300	-	-	
			0.2	0.8	1.5	yes	2700	3000	4000	-	
P	30	8	0.23	0.6	1.1	2		2800	5300	-	
	50	20	0.2	1.1	2.1	1	5300	6000	-	-	

Small-signal automotive MOSFETs – Dual

Package											
Size (mm)											
P_{tot} (mW)											
Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	ESD protection (kV)	$R_{DS(on)}$ typ (m Ω) @ V_{GS} =				
							10 V	4.5 V	2.5 V	1.8 V	
N	30	12	4	0.75	1.25	2	-	55	72	-	
N	20	8	0.73	0.5	0.95	2	-	290	420	600	
P			0.5	0.5	1.3	2	-	670	1200	1800	

Small-signal MOSFETs complementary

Package	Type	Polarity	V_{DS} (V)	V_{GS} (V)	I_D (A)	$V_{GS(th)}$ min (V)	$V_{GS(th)}$ max (V)	
SOT363 (SC-88) (2.0 x 1.25 x 0.95) 	NX3008CBKS	N	30	8	0.35	0.6	1.1	
		P	30	8	0.2	0.6	1.1	

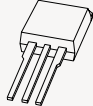
	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006 (SOT883)
				
	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.5
	250	300	200	250
	NX3008NBK	NX3008NBKS	NX3008NBKW	
	BSS138P	BSS138PS	BSS138PW	
	BSS138BK	BSS138BKS	BSS138BKW	
	2N7002BK	2N7002BKS	2N7002BKW	2N7002BKM
	2N7002CK			
	BSS138AKA			
	NX3008PBK	NX3008PBKS	NX3008PBKW	
	BSS84AK	BSS84AKS	BSS84AKW	BSS84AKM

	SOT363 (SC-88)	DFN2020D-6 (SOT1118D)
		
	2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65
	300	1250
		PMDPB56XNEA
	PMGD290UCEA	

	t _{on} typ (ns)	t _{off} typ (ns)	QG typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-

N-channel 25V-30V Power MOSFETs

Types in **bold red** are in development

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN1R1-30PL	30	1.3	1.6	120	118
	PSMN1R6-30PL	30	1.7	2.1	100	101
	PSMN1R8-30PL	30	1.8	2.3	100	83
	PSMN2R0-30PL	30	2.1	2.8	100	55
	PSMN2R7-30PL	30	2.7	3.6	100	32
	PSMN3R4-30PL	30	3.4	4.1	100	31
	PSMN4R3-30PL	30	4.3	6.2	100	19
	PSMN017-30PL	30	17	23	32	5.1
	PSMN022-30PL	30	22	34	30	4.4
D ² PAK (SOT404) 	PSMNR90-30BL	30	1	1.4	120	118
	PSMN1R5-30BLE	30	1.5	1.85	120	108
	PSMN1R8-30BL	30	1.8	2.1	100	83
	PSMN1R6-30BL	30	1.9	2.2	100	101
	PSMN2R0-30BL	30	2.1	2.9	100	55
	PSMN2R7-30BL	30	3	3.7	100	32
	PSMN3R4-30BL	30	3.3	3.8	100	31
	PSMN3R4-30BLE	30	3.4	5	120	37
	PSMN4R3-30BL	30	4.1	5.2	100	19
	PSMN017-30BL	30	17	23	32	5.1
	PSMN022-30BL	30	22	30	30	4.4
IPAK (SOT226) 	PSMN1R1-30EL	30	1.3	1.6	120	118
	PSMN017-30EL	30	17	23	32	5.1
LFPAK56 (Power-SO8) 	PSMNR51-25YLH	25	0.51	0.75	300	52
	PSMNR60-25YLH	25	0.6	0.89	300	40.9
	PSMN0R7-25YLD	25	0.74	0.92	300	50.9
	PSMN0R9-25YLD	25	0.86	1.2	300	41.5
	PSMN1R0-25YLD	25	1.02	1.4	100	33.2
	PSMN1R1-25YLC	25	1.15	1.5	100	39
	PSMN1R2-25YLD	25	1.15	1.7	100	28
	PSMN1R2-25YL	25	1.2	1.9	100	50.6
	PSMN1R2-25YLC	25	1.3	1.7	100	31
	PSMN1R5-25YL	25	1.5	2.2	100	36
	PSMN1R7-25YLD	25	1.68	2.4	100	21.5
	PSMN2R0-25YLD	25	2	2.9	100	15.7
	PSMN2R9-25YLC	25	3.15	4.1	100	16
	PSMN4R0-25YLC	25	4.5	5.8	84	10.9
	PSMN5R4-25YLD	25	5.4	8.4	70	5.7
	PSMN6R0-25YLD	25	6.03	10	61	4.9
	PSMN6R0-25YLB	25	6.1	7.9	73	9

N-channel 25V-30V Power MOSFETs

Types in **bold red** are in development, types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(bot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMNR58-30YLH	30	0.66	0.86	300	48
	PSMNR70-30YLH	30	0.7	0.98	300	40
	PSMN0R9-30YLD	30	0.87	1.1	300	51
	PSMN1R0-30YLD	30	1.02	1.3	300	38.2
	PSMN1R0-30YLC	30	1.15	1.4	100	50
	PSMN1R2-30YLD	30	1.24	1.6	100	32
	PSMN1R2-30YLC	30	1.25	1.7	100	38
	PSMN1R3-30YL	30	1.3	2	100	46.6
	PSMN1R4-30YLD	30	1.42	1.9	100	27.6
	PSMN1R5-30YL	30	1.5	1.9	100	36.2
	PSMN1R5-30YLC	30	1.55	2.1	100	30
	PSMN1R7-30YL	30	1.7	2.1	100	36.2
	PSMN2R0-30YLD	30	2	2.5	100	21.8
	PSMN2R0-30YL	30	2	2.6	100	30
	PSMN2R0-30YLE	30	2	3.5	100	41
	PSMN2R2-30YLC	30	2.15	2.8	100	26
	PSMN2R4-30YLD	30	2.4	3.1	100	18
	PSMN2R5-30YL	30	2.4	3.2	100	27
	PSMN2R6-30YLC	30	2.8	3.7	100	18
	PSMN3R0-30YL	30	3	4	100	21
	PSMN3R0-30YLD	30	3	4	100	14.5
	PSMN3R5-30YL	30	3.5	4.6	100	19
	PSMN4R0-30YL	30	4	5.3	100	17.6
	PSMN4R0-30YLD	30	4	5.5	95	9.6
	PSMN4R1-30YLC	30	4.35	5.7	92	11
	PSMN5R0-30YL	30	5	6.7	91	14.1
	PSMN6R0-30YL	30	6	7.9	79	11
	PSMN6R0-30YLD	30	6	8.4	66	6.7
	PSMN6R1-30YLD	30	6.1	8.4	66	6.4
	PSMN6R0-30YLB	30	6.5	8.1	71	9
	PSMN7R0-30YL	30	7	9.1	76	10
	PSMN7R0-30YLC	30	7.1	8.9	61	7.9
	PSMN7R5-30YLD	30	7.5	10	51	5.8
	PSMN9R1-30YL	30	9.1	14	57	8.4
	PSMN9R5-30YLC	30	9.8	12	44	5
	PSMN013-30YLC	30	13	17	32	4
	PSMN011-30YLC	30	11.6	15	37	4.9
	PSMN3R2-30YLC	30	3.5	4.6	100	14.2
	PSMN4R5-30YLC	30	4.8	6.1	84	9.6
LFPAK56-UL2595 (SOT1023A)	PSMN0R9-30ULD	30	0.87	1.09	300	

N-channel 25V-30V Power MOSFETs

Types in **bold red** are in development, types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (mΩ)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK33 (SOT1210)	PSMN1R5-25MLH	25	1			
	PSMN2R0-25MLD	25	2	3.1	70	15.9
	PSMN2R8-25MLC	25	2.8	3.8	70	16.3
	PSMN3R5-25MLD	25	3.51	5.4	70	8.7
	PSMN3R9-25MLC	25	4.15	5.6	70	9.7
	PSMN5R3-25MLD	25	5.3	8.4	70	5.9
	PSMN6R1-25MLD	25	6.13	10	60	4.9
	PSMN9R0-25MLC	25	8.65	11	55	5.4
	PSMN1R6-30MLH	30	1.9	2.6	100	16
	PSMN2R4-30MLD	30	2.4	3.2	70	16
	PSMN3R0-30MLC	30	3.15	4.1	70	16.1
	PSMN4R2-30MLD	30	4.3	5.7	70	9.2
	PSMN4R4-30MLC	30	4.65	6	70	10.6
	PSMN6R4-30MLD	30	6.4	8.3	66	6.5
	PSMN6R5-30MLD	30	6.5	8.6	65	6.4
	PSMN7R0-30MLC	30	7	9	67	8.2
	PSMN7R5-30MLD	30	7.6	10	57	5.8
	PSMN9R8-30MLC	30	9.8	12	50	5
	PSMN013-30MLC	30	13	17	39	3.7
	PSMN020-30MLC	30	18	27	31.8	4.6

N-channel 40V-60V Power MOSFETs

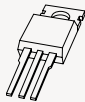
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (mΩ)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (mΩ)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78)	PSMN1R5-40PS	40	1.6		150	136
	PSMN1R9-40PL	40	1.7	1.9	150	230
	PSMN2R2-40PS	40	2.1		100	110
	PSMN2R1-40PL	40	2.2	2.6	150	168.9
	PSMN2R8-40PS	40	2.8		100	71
	PSMN4R5-40PS	40	4.6		100	35
	PSMN8R0-40PS	40	7.6		77	17
	PSMN2R0-60PSR	60	2		120	137
	PSMN2R0-60PS	60	2.2		120	137
	PSMN2R5-60PL	60	2.6	3.1	150	223
	PSMN2R6-60PS	60	2.6		150	140
	PSMN3R0-60PS	60	3		100	130
	PSMN3R3-60PL	60	3.4	3.8	130	175
	PSMN4R2-60PL	60	3.9	4.3	130	151
	PSMN3R9-60PS	60	3.9		130	103
	PSMN4R6-60PS	60	4.6		100	70.8
	PSMN7R6-60PS	60	7.8		92	38.7
	PSMN015-60PS	60	15		50	20.9
LFPAK88 (SOT1235)	PSMNR70-40SSH	40	0.7			
	PSMNR90-40SSH	40	0.9			
	PSMN1R0-40SSH	40	1			

N-channel 40V-60V Power MOSFETs

Types in **bold red** are in development, types in **bold** represent new products

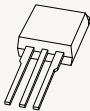
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V or } 5\text{ V}$ (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN1R1-40BS	40	1.3		120	136
	PSMN2R2-40BS	40	2.2		100	130
	PSMN2R8-40BS	40	2.9		100	71
	PSMN4R5-40BS	40	4.5		100	35
	PSMN8R0-40BS	40	7.6		77	21
	PSMN1R7-60BS	60	2		120	137
	PSMN3R0-60BS	60	3.2		100	130
	PSMN4R6-60BS	60	4.4		100	70.8
	PSMN7R6-60BS	60	7.8		92	38.7
	PSMN015-60BS	60	15		50	20.9
IPAK (SOT226) 	PSMN1R5-40ES	40	1.6		120	136
	PSMN2R0-60ES	60	2.2		120	137
	PSMN3R0-60ES	60	3		100	130
LFPAK56 (Power-SO8) 	PSMNR90-40YLH	40	0.9			
	PSMN1R0-40YSH	40	1			
	PSMN1R0-40YLD	40	1.1	1.4	280	127
	PSMN1R4-40YLD	40	1.4	1.9	240	96
	PSMN1R5-40YSD	40	1.5			
	PSMN1R7-40YLD	40	1.7			
	PSMN1R8-40YLC	40	1.8	2.1	100	96
	PSMN1R9-40YSD	40	1.9			
	PSMN2R0-40YLD	40	2			
	PSMN2R2-40YSD	40	2.2			
	PSMN2R5-40YLD	40	2.5			
	PSMN2R6-40YS	40	2.8		100	63
	PSMN2R8-40YSD	40	2.8			
	PSMN3R2-40YLD	40	3.2			
	PSMN3R3-40YS	40	3.3		100	49
	PSMN3R5-40YLD	40	3.5			
	PSMN4R0-40YS	40	4.2		100	38
	PSMN5R8-40YS	40	5.7		90	28.8
	PSMN8R3-40YS	40	8.6		70	20
	PSMN014-40YS	40	14		46	12
	PSMN4R0-60YS	60	4		100	56
	PSMN4R1-60YL	60	4.1	4.8	100	103
	PSMN5R2-60YL	60	5.2	6	100	78.4
	PSMN5R5-60YS	60	5.2		100	56
	PSMN5R6-60YL	60	5.6	7.2	100	66.8
	PSMN7R0-60YS	60	6.4		89	45
	PSMN7R5-60YL	60	7.5	8.7	86	60.6
	PSMN8R5-60YS	60	8		76	39
	PSMN012-60YS	60	11		59	28.4
	PSMN013-60YL	60	13	15	53	33.2
	PSMN030-60YS	60	15		29	13
	PSMN017-60YS	60	16		44	20
LFPAK56-UL2595 (SOT1023A) 	PSMN1R0-40ULD	40	1.1	1.4		
LFPAK33 (SOT1210) 	PSMN011-60ML	60	11	13	61	37.2
	PSMN011-60MS	60	11		61	23

N-channel 75V-200V Power MOSFETs

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
TO-220 (SOT78) 	PSMN3R3-80PS	80	3.3		120	139
	PSMN3R5-80PS	80	3.5		120	139
	PSMN4R4-80PS	80	4.1		100	112
	PSMN4R3-80PS	80	4.3		120	111
	PSMN5R0-80PS	80	4.7		100	87
	PSMN6R5-80PS	80	6.9		100	71
	PSMN8R7-80PS	80	8.7		90	52
	PSMN012-80PS	80	11		74	36
	PSMN017-80PS	80	17		50	26
	PSMN4R3-100PS	100	4.3		120	170
	PSMN4R8-100PSE	100	4.8		120	196
	PSMN5R0-100PS	100	5		120	170
	PSMN5R6-100PS	100	5.6		100	141
	PSMN7R0-100PS	100	6.8		100	125
	PSMN7R8-100PSE	100	7.8		100	128
	PSMN8R5-100PS	100	8.5		100	111
	PSMN8R5-100PSF	100	8.5		98	44.5
	PSMN9R5-100PS	100	9.6		98	45
	PSMN013-100PS	100	13		68	59
	PSMN016-100PS	100	16		57	49
	PSMN018-100PSF	100	18		57	21.3
	PSMN027-100PS	100	27		53	21
	PSMN034-100PS	100	35		32	23.8
	PSMN015-110P	110	15		75	90
	PHP27NQ11T	110	50		27.6	30
	PHP23NQ11T	110	70		23	22
	PHP18NQ11T	110	90		18	21
	PSMN6R3-120PS	120	6.7		70	207.1
	PSMN7R8-120PS	120	7.9		70	167
	PSMN030-150P	150	30		55.5	98
	PHP28NQ15T	150	65		28.5	24
	PSMN057-200P	200	57		39	96
	PHP33NQ20T	200	77		32.7	32.2
	PHP20NQ20T	200	130		20	65

N-channel 75V-200V Power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10\text{ V}$ (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5\text{ V}$ or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
D ² PAK (SOT404) 	PSMN2R8-80BS	80	3		120	139
	PSMN3R3-80BS	80	3.5		120	111
	PSMN4R4-80BS	80	4.5		100	125
	PSMN5R0-80BS	80	5.1		100	101
	PSMN6R5-80BS	80	6.9		100	71
	PSMN8R7-80BS	80	8.7		90	52
	PSMN012-80BS	80	11		74	36
	PSMN017-80BS	80	17		50	26
	PSMN050-80BS	80	46		22	11
	PSMN3R8-100BS	100	3.9		120	170
	PSMN3R7-100BSE	100	4		120	170
	PSMN4R8-100BSE	100	4.8		120	196
	PSMN5R6-100BS	100	5.6		100	141
	PSMN7R0-100BS	100	6.8		100	125
	PSMN7R6-100BSE	100	7.6		75	128
	PSMN9R5-100BS	100	9.6		89	82
	PSMN013-100BS	100	14		68	59
	PSMN016-100BS	100	16		57	49
	PSMN027-100BS	100	27		37	30
	PSMN034-100BS	100	35		32	23.8
	PHB45NQ15T	150	42		45.1	32
	PSMN057-200B	200	57		39	96
	PHB33NQ20T	200	77		32.7	32.2
I ² PAK (SOT226) 	PSMN3R3-80ES	80	3.3		120	139
	PSMN3R5-80ES	80	3.5		120	139
	PSMN4R3-80ES	80	4.3		120	111
	PSMN4R3-100ES	100	4.3		120	170
	PSMN5R0-100ES	100	5		120	170
	PSMN7R0-100ES	100	6.8		100	125
	PSMN8R5-100ES	100	8.5		100	111
	PSMN8R5-100ESF	100	8.5		97	45
	PSMN018-100ESF	100	18		53	21
	PSMN6R3-120ES	120	6.7		70	207.1
	PSMN7R8-120ES	120	7.9		70	167

N-channel 75V-200V Power MOSFETs

Types in **bold red** are in development

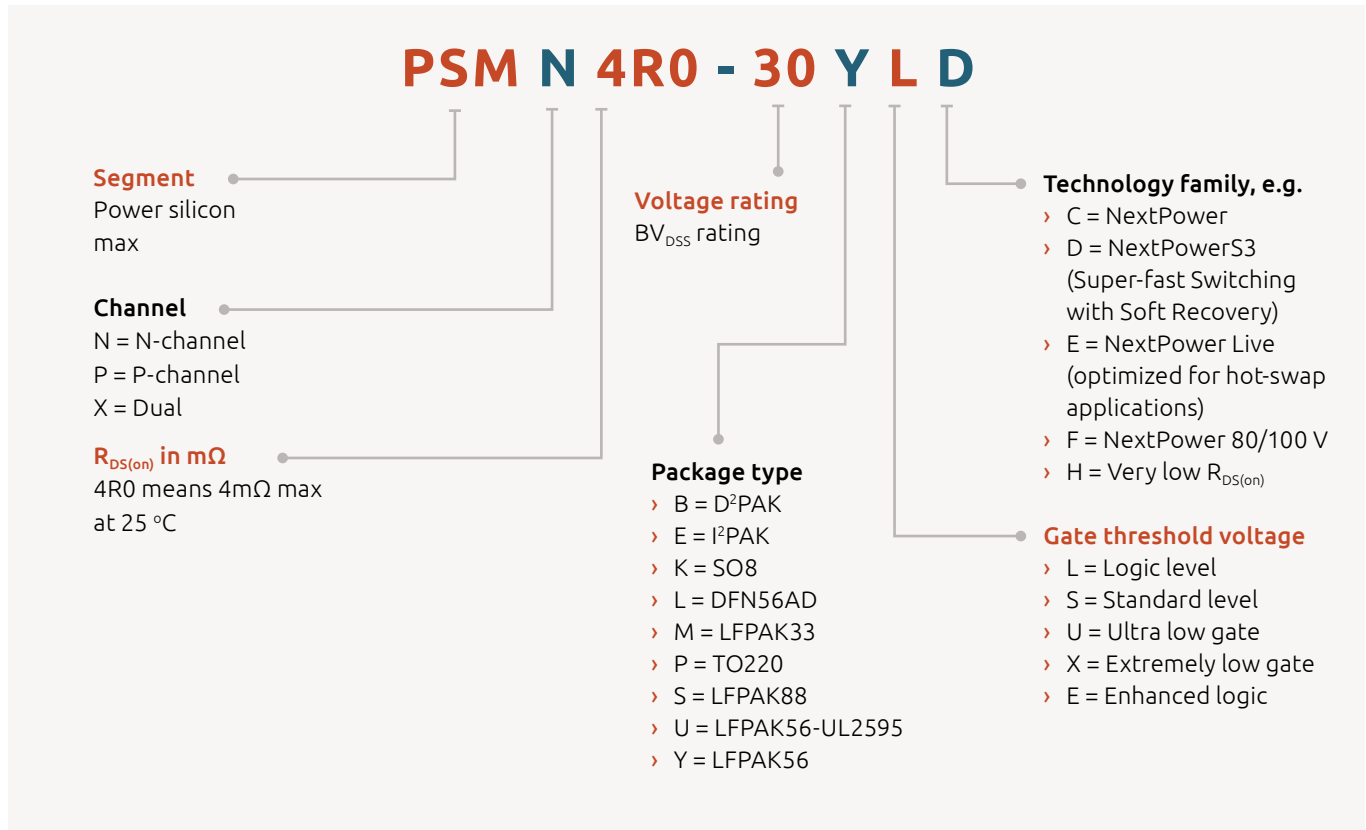
Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	$R_{DS(on)}$ [max] @ $V_{GS} = 4.5$ V or 5 V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56 (Power-SO8)	PSMN8R0-80YL	80	8	8.5	100	104
	PSMN8R2-80YS	80	8.5		82	55
	PSMN010-80YL	80	10	11	84	84.7
	PSMN011-80YS	80	11		67	45
	PSMN013-80YS	80	12.9		60	37
	PSMN014-80YL	80	14	15	62	56.9
	PSMN018-80YS	80	18		45	26
	PSMN025-80YL	80	25	27	37	34.3
	PSMN026-80YS	80	28		34	20
	PSMN041-80YL	80	41	45	25	21.9
	PSMN045-80YS	80	45		24	12.5
	PSMN3R9-100YSF	100	4			
	PSMN5R6-100YSF	100	5.6		158	63
	PSMN6R9-100YSF	100	6.9		128	51
	PSMN8R7-100YSF	100	8.7		100	39
	PSMN011-100YSF	100	10.6			
	PSMN012-100YL	100	12	12	85	118
	PSMN012-100YS	100	12		60	64
	PSMN013-100YSE	100	13		82	75
	PSMN015-100YL	100	15	15	69	86.3
	PSMN016-100YS	100	16		51	54
	PSMN019-100YL	100	19	19	56	72.4
	PSMN021-100YL	100	21	22	49	65.6
	PSMN020-100YS	100	21		43	41
	PSMN028-100YS	100	28		42	33
	PSMN038-100YL	100	38	38	30	39.2
	PSMN039-100YS	100	39		28.1	23
	PSMN069-100YS	100	72		17	14
	PSMN059-150Y	150	59		43	27.9
	PSMN102-200Y	200	102		21.5	30.7
LFPAK33 (SOT1210)	PSMN040-100MSE	100	37		30	30
	PSMN075-100MSE	100	71		18	16.4
SOT873	PML260SN	200	294		8.8	13.3
	PML340SN	220	386		7.3	13.2

P-channel Power MOSFETs

Types in **bold** represent new products

Package	Type number	V_{DS} [max] (V)	$R_{DS(on)}$ [max] @ $V_{GS} = 10$ V (m Ω)	I_D [max] (A)	$Q_{G(tot)}$ [typ] (nC)
LFPAK56	PSMP012-30YE	30	12	67	52
	PSMP020-30YE	30	20	41	24
	PSMP015-40YE	40	15	63	43.5
	PSMP025-40YE	40	25	39	28
	PSMP032-60YE	60	32	39	46
	PSMP057-60YE	60	57	23	21

Power MOSFETs nomenclature



Small-signal MOSFETs

Small-signal MOSFETs in DFN1006 and DFN1006B packages

Package																DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
																	
Size (mm)																1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
Ptot (mW)																250	250
Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protec- tion (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =							
										10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V		
N-channel	20	8	1.9	0.45	0.95	5.3	16	1.6	2	-	120	160	210	270	-	PMZ130UNE	
			1.6	0.45	0.95	5.3	16	1.6	2	-	170	200	240	300	-		PMZB150UNE
			1	0.5	0.95	6	86	0.45	2	-	270	360	470	600	-	PMZ290UNE2	PMZB290UNE2
			0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210	PMZ600UNE	PMZB600UNE
	30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	300	-	PMZ200UNE	PMZB200UNE
			1	0.45	0.95	4	12	0.8	2	-	390	460	30	610	-	PMZ390UNE	PMZB390UNE
			0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-	PMZ550UNE	PMZB550UNE
	60	20	0.45	1.1	2.1	5	12	0.5	2	1000	1300	-	-	-	-	2N700BKM	2N7002BKMB
			0.35	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-	NX7002BKM	NX7002BKMB
P-channel	20	8	1.4	0.45	0.95	4	26	1.3	1.8	-	330	420	520	-	-	PMZ350UPE	PMZB350UPE
			0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500	PMZ950UPE	PMZB950UPE
	30	8	1	0.45	0.95	2.9	22	1.45	2	-	430	470	750	950	-	PMZ320UPE	PMZB320UPE
			0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-	PMZ1200UPE	PMZB1200UPE
	50	20	0.23	1.1	2.1	13	48	0.26	1	4500	5700	-	-	-	-	BSS84AKM	BSS84AKMB

Small-signal MOSFETs in DFN0606

Types in **bold** represent new products

Package															DFN0606-3 (SOT8001)	
																
Size (mm)															0.6 x 0.6 x 0.37	
Ptot (mW)															250	
Polarity	VDS (V)	VGS (V)	ID (A)	VGS(th) min (V)	VGS(th) max (V)	ton typ (ns)	toff typ (ns)	QG typ (nC)	ESD protec- tion (kV)	RDS(on) typ (mΩ) @ VGS =						
										10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V	
N-channel	20	8		0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210	PMH600UNE
	30	8		0.45	0.95	4	12	0.6	2	-	550	660	770	890	-	PMH550UNE
	60	20		1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-	NX7002BKH
P-channel	20	8		0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500	PMH950UPE
	30	10		0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-	PMH1200UPE

Small-signal MOSFETs in DFN1010D-3 single and DFN1010B-3 dual packages

Package																	DFN1010D-3 (SOT1215)	DFN1010B-6 (SOT1216)
																		
Size (mm)																	1.1 x 1.0 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)																	1000	350
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _c typ (nC)	ESD protec- tion (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =							
											10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V		
Single	N-channel	12	8	3.2	0.4	0.9	6	18	6.6	1	-	34	39	46	50	121	PMXB40UNE	
		20	8	3.2	0.5	0.9	6	17	5.7	1	-	42	48	56	64	-	PMXB43UNE	
		30	20	3.2	1	2	3	11	3.6	-	49	56	-	-	-	-	PMXB56EN	
				3.2	1	2.5	3	11	6	1	44	56	-	-	-	-	PMXB65ENE	
		80	20	1.1	1.3	2.7	2	9	3	2	345	390	-	-	-	-	PMXB360ENEA	
	P-channel	12	8	3.2	0.4	1	6.2	27	6.7	1.5	-	59	78	120	198	880	PMXB65UPE	
		20	8	2.9	0.4	1	6	29	6.8	1	-	69	86	130	205	950	PMXB75UPE	
				1.2	0.45	0.95	3	18	1.25	1.5	-	350	450	600	760	1200	PMXB350UPE	
		30	20	2.4	1	2.5	4	16	6.2	1	100	125	-	-	-	-	PMXB120EPE	
Dual	N-ch	20	8	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMDXB600UNE
		30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMDXB550UNE
		60	20	0.26	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	-	-		NX7002BKXB
	P-ch	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		PMDXB950UPE
		30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		PMDXB1200UPE
Complementary	N	20	8	0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	1125	2210		PMCB900UE
	P	20	8	0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500		
	N	30	8	0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	890	-		PMCB1000UE
	P	30	8	0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	3000	-		

Small-signal low-leakage MOSFETs

Package																DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)	DFN1010B-6 (SOT1216)
																		
Size (mm)																1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37	1.1 x 1.0 x 0.37
P _{tot} (mW)																250	250	350
Config.	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	I _{DSS} max (nA)	I _{GSS} max (nA)	ESD Protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =								
										4.5 V	2.5 V	1.8 V	1.5 V	1.2 V				
Single	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210	PMZ600UNEL	PMZB600UNEL		
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500	PMZ950UPEL	PMZB950UPEL		
Dual	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210			PMDXB600UNEL	
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500			PMDXB950UPEL	
Compl.	N	20	8	0.6	0.45	0.95	25	50	1	470	620	845	1125	2210				PMCB900UEL
	P	20	8	0.5	0.45	0.95	25	50	1	1020	1270	1700	2300	3500				

Small-signal MOSFETs in DFN2020MD-6 single and DFN2020-6 dual packages

Types in **bold** represent new products

Package															DFN2020MD-6 (SOT1220)	DFN2020-6 (SOT1118)
Size (mm)															2.0 x 2.0 x 0.65	2.0 x 2.0 x 0.65
P _{tot} (mW)															1250	1250
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protec- tion (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											10 V	4.5 V	2.5 V	1.8 V		
Single	N-channel	20	8	11.3	0.4	1	9	26	8.8	1	-	14	17	21	PMPB12UNE	
				12.9	0.4	0.9	13	54	23	2.2	-	10	12	16	PMPB10XNE	
			12	5.9	0.75	1.25	16	49	31	2	-	14	20	-	PMPB20XNEA	
				10.4	0.4	0.9	9	31	13.4	-	-	18	21	23	PMPB15XN	
				10.1	0.4	0.9	9	31	11.6	2	-	19	23	31	PMPB23XNE	
		30	12	11.3	0.4	0.9	12	54	24	1	-	13	14	17	PMPB13XNE	
				5	0.4	0.9	8	33	12.4	1	-	28	32	37	PMPB29XNE	
				5.5	0.45	1.2	6	21	5.1	-	-	37	55	-	PMPB33XN	
			20	13	1	2	9	17	13.7	-	12	14	-	-	PMPB11EN	
				10.4	1	2	9	9	7.2	-	16.5	20.5	-	-	PMPB20EN	
				10	1	2.5	6	28	13	2	17	28	-	-	PMPB25ENE	
				6.9	1	2.5	4	17	6	2	30	39	-	-	PMPB50ENE	
				5.1	1	2.5	3	15	3.5	2	54	70	-	-	PMPB100ENE	
		60	20	4	1.3	2.7	4.5	13.5	7.5	2	42	48	-	-	PMPB55ENE	
				3	1.3	2.7	4	10.5	6.2	2	72	85	-	-	PMPB85ENE	
		80	20	2.8	1.3	2.7	5	15	9.9	2	80	92	-	-	PMPB95ENE	
				1.9	1.3	2.7	3.5	9.5	4.8	2	175	195	-	-	PMPB215ENE	
	P-channel	20	12	12.7	0.45	0.9	6	64	22	-	-	14	19	24	PMPB14XP	
				10.3	0.47	0.9	16	43	28.8	-	-	19	21	27	PMPB19XP	
				10.3	0.47	0.9	13	92	30	2.4	-	19	22	28	PMPB20XPE	
				5	0.47	0.9	12	91	30	2.3	-	28	31	36	PMPB29XPE	
				8.5	0.75	1.25	10	43	12.5	2	-	29	45	-	PMPB30XPE	
				7.9	0.47	0.9	12	62	15	-	-	30	35	45	PMPB33XP	
				5	0.47	0.9	9	57	15.6	1	-	39	45	56	PMPB43XPE	
		30	20	5	0.47	0.9	15	28	14	-	-	47	54	74	PMPB47XP	
				9.5	1	2.5	3	28	19	-	24	32	-	-	PMPB24EP	
				6.8	1	2.5	7.4	27	17	-	40	55	-	-	PMPB48EP	
Dual	Nch	20	12	5.3	0.4	0.9	4	40	14.4	-	-	32	40	60		PMDPB30XN
		30	12	3.1	0.75	1.25	9	19	2.9	2	-	55	72	-		PMDPB56XNEA
	P-channel	20	8	3.1	0.5	1.5	6	18	1.65	1.8	-	95	130	-		PMDPB95XNE2
				4.5	0.45	0.95	7	41	6.3	2	-	58	74	97		PMDPB58UPE
				3.7	0.45	0.95	6	47	5.4	2	-	82	107	142		PMDPB85UPE
				4.5	0.47	0.9	4	135	16.5	-	-	55	75	110		PMDPB55XP
		12	7	4.2	0.75	1.25	7	33	5	2	-	66	98			PMDPB70XPE
				3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMDPB80XP
				3.8	0.45	1	3	112	5.2	-	-	70	89	-		PMDPB70XP
		30	12	3.8	0.45	1	3	112	5.2	-	-	70	89	-		PMDPB70XP
MOSFET-Schottky	P-channel	20	12	3.7	0.4	1	6	120	5.7	-	-	80	95	120		PMFPB8032XP
Pre-biased NPN	P	30	12	3.4	0.45	1	3	112	5.2	-	-	85	105	-		PMC85XP
Complementary	N	20	12	5.3	0.4	0.9	4	40	14.4	-	-	26	33	50		PMCPB5530X
	P	20	12	4.5	0.4	0.9	4	40	8.1	-	-	55	75	110		

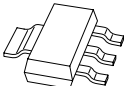
Small-signal MOSFETs in WLCSP4 and WLCSP6 packages

Package															WLCSP4	WLCSP6
Size (mm)															0.78 x 0.78 x 0.35	1.48 x 0.98 x 0.35
P _{tot} (mW)															1300	1300
Configuration	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =					
											4.5 V	2.5 V	1.8 V	1.5 V		
	N	12	8	6	0.4	0.9	6.3	30	6	2	36	46	60	86	PMCM4401VNE	
		20	8	5.4	0.4	0.9	4	27	6	2	43	55	65	75	PMCM4401UNE	
	P	12	8	4.9	0.4	0.9	4.8	25.1	6.8	2	55	77	110	-	PMCM4401VPE	
		20	8	4	0.4	0.9	4	31	5.9	2	75	95	130	-	PMCM4401UPE	
				4.2	0.4	0.9	4	26	6	2	65	88	120	-	PMCM4402UPE	
	N	12	8	9.6	0.4	0.9	10.8	97.5	16.1	2	15	18	22	30		PMCM6501VNE
		20	8	8.7	0.4	0.9	7	100	19	2	17	20	22	30		PMCM6501UNE
	P	12	8	8.2	0.4	0.9	8	72	19.6	2	19	25	37	-		PMCM6501VPE
		20	8	7.3	0.4	0.9	6	105	19	2	22	28	38	-		PMCM6501UPE
Common drain	N	20	8	4.1	0.4	0.9	6	39	9	2	40	50	63	-		PMCM6501CUNE

Small-signal MOSFETs single (N-channel)

Package													
Size (mm)													
P _{tot} (mW)													
V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =				
									10 V	4.5 V	2.5 V	1.8 V	
20	8	4.7	0.45	1	8.2	39.5	6.2	2	-	24	29	40	
		1.9	0.4	1	8	31	2.2	2	-	63	77	114	
		2.2	0.4	1	6	21	2.6	2	-	64	78	110	
		1.9	0.45	0.95	5.3	16	1.6	2	-	120	155	195	
		1.6	0.45	0.95	5.3	16	1.6	2	-	155	190	235	
		1	0.5	0.95	6	86	0.45	2	-	270	360	470	
		0.6	0.45	0.95	5.6	19	0.4	1	-	470	620	845	
	12	6.3	0.75	1.25	16	44	9.9	2	-	16	24	-	
		8.6	0.47	0.9	7	135	7.7	-	-	15	18	22	
		9.1	0.4	0.9	9	31	12	1	-	15	19	22	
		5.4	0.4	0.9	7	35	6.2	-	-	24	30	40	
		6	0.4	0.9	5.5	22	5.1	1	-	28	38	42	
30	8	1.5	0.45	0.95	5	17	1.6	2	-	210	240	270	
		1	0.45	0.95	4	12	0.8	2	-	390	460	530	
		0.59	0.45	0.95	4	12	0.6	2	-	550	660	770	
		0.4	0.6	1.1	26	88	0.52	2	-	1000	1400	2000	
	12	7.2	0.4	0.9	8	33	12.4	2	-	19	22	17	
		5.7	0.4	0.9	9	34	7	-	-	33	42	54	
		4.4	0.4	0.9	9	34	7	-	-	36	43	56	
		0.9	0.5	1.5	8	11	0.74	2	-	234	324	-	
	20	7.6	1	2	9	9	7.2	-	17	21	-	-	
		5.5	1	2.5	8	33	12.6	2	17	22	-	-	
		3.9	1	2.5	6.3	14.1	6	2	30	39	-	-	
		3.1	1	2.5	18	78	6.5	-	28	37	-	-	
		4.5	1	2.5	3	11	6	1	30	44	-	-	
		5.1	1	2	3	11	3.6	-	35	43	-	-	
		2.1	1	2.5	3	15	2.6	2	70	90	-	-	
		0.18	0.8	1.5	10	51	0.34	-	2700	3000	4000	-	
		0.18	0.8	1.5	10	51	0.34	-	2700	3000	4000	-	
40	20	2.7	1	2.5	6	12	4.1	1	64	79	-	-	
		2.5	1	2.5	14	14	2.4	1	95	120	-	-	
55	10	0.3	0.4	1.3	4	11	1	3	-	2300	2400	3100	
60	20	3.1	1.3	2.7	9	33	12.7	2	46	52	-	-	
		2.1	1.3	2.7	6.4	15.9	5.9	2	96	108	-	-	
		1.5	1.3	2.7	6.3	13	3.9	2	176	196	-	-	
		0.8	1.3	2.7	5.3	10.2	2.4	2	300	332	-	-	
		0.19	0.8	1.5	6	11	0.33	yes	2800	3500	4500	-	
		0.27	0.5	1.5	7.9	12.5	0.49	2	2100	2200	2600	-	
		0.1	0.6	1.4	2	5		2	2800	3800	-	-	
		0.19	1.1	2.1	12	34	0.33	yes	3000	3700	-	-	
		0.27	1.1	2.1	4.7	6.9	1	2	2200	2500	-	-	
100	20	1.5	1.3	2.7	4.8	9.3	4.5	1	285	300	-	-	
		1.1	1.3	2.7	5.7	10.2	2.9	1	527	555	-	-	

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT323 (SC-70)	DFN1006 (SOT883)	DFN1006B (SOT883B)
						
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	1700	600	250	200	250	250
		PMN28UNE	PMV28UNEA			
				PMF63UNE		
			PMV65UNE			
					PMZ130UNE	
						PMZB150UNE
					PMZ290UNE2	PMZB290UNE2
					PMZ600UNE	PMZB600UNE
			PMV20XNEA			
			PMV16XN			
		PMN16XNE				
			PMV30UN2			
		PMN30UNE				
					PMZ200UNE	PMZB200UNE
					PMZ390UNE	PMZB390UNE
					PMZ550UNE	PMZB550UNE
			NX3008NBK	NX3008NBKW		
			PMV20XNE			
		PMN30UN				
			PMV40UN2			
				PMF250XNE		
			PMV20EN			
		PMN25ENE	PMV25ENEA			
			PMV50ENEA			
			PMV37EN2			
		PMN40ENE	PMV42ENE			
			PMV45EN2			
			PMV90ENE			
			NX3020NAK	NX3020NAKW		
			PMV65ENEA			
			PMV130ENEA			
			B5H111BK			
		PMN55ENE	PMV55ENEA			
		PMN120ENE	PMV120ENEA			
		PMN230ENE	PMV230ENEA			
			PMV450ENEA			
			NX138AK			
			NX138BK	NX138BKW		
			BSN20BK			
			NX7002AK	NX7002AKW		
			NX7002BK	NX7002BKW	NX7002BKM	NX7002BKMB
	PMT280ENEA	PMN280ENEA	PMV280ENEA			
	PMT560ENEA					

Small-signal MOSFETs

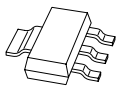
Small-signal MOSFETs single (P-channel)

Package													
Size (mm)													
P _{tot} (mW)													
V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	R _{DS(on)} typ (mΩ) @ V _{GS} =				
									10 V	4.5 V	2.5 V	1.8 V	
20	8	5.6	0.45	0.95	11	83	14.7	2	-	27	38	50	
		5.3	0.45	0.95	41	122	14.7	2	-	30	38	51	
		5.4	0.45	0.95	34	128	15.5	-	-	34	42	57	
		4	0.47	0.9	400	2180	10.5	3	-	50	57	70	
		2	0.5	1.1	7	50	6	-	-	100	155	210	
		1.2	0.45	0.95	33	52	3.3	-	-	170	210	280	
		2.3	0.45	0.95	5	43	3.7	-	-	120	150	200	
		1.4	0.45	0.95	9	35	1.3	1.8	-	330	420	520	
		0.5	0.45	0.95	2.3	13.5	1.19	1	-	1020	1270	1700	
	12	4.5	0.75	1.25	7.9	59	11	2	-	28	42	-	
		6.8	0.47	0.9	12	62	15	-	-	30	35	48	
		5.7	0.75	1.25	44	60	11.5	2	-	41	56	-	
		4.1 / 3.5	0.75	1.25	24	84	8.5	-	-	48	71	-	
		4.4	0.47	0.9	7	135	7.7	-	-	48	60	82	
		4.7	0.47	0.9	5.1	141	8.5	-	-	50	64	88	
		3.9	0.55	0.95	28	101	7.6	-	-	65	90	-	
		3.3	0.75	1.25	7	36	5	2	-	67	99	-	
		4.1	0.75	1.25	20	57	5.2	2	-	70	101	-	
		3.9	0.47	0.9	6	120	5	-	-	72	88	110	
		3.2	0.47	0.9	6	120	5	-	-	77	95	120	
		2	0.65	1.15	48	64	4.8	-	-	90	125	-	
		2.3	0.7	1.3	5.3	36	3.4	2	-	100	155	-	
		1	0.65	1.15	26	44	2.6	-	-	175	240	-	
30	8	1	0.45	0.95	2.9	22	1.45	2	-	400	480	600	
		0.41	0.45	0.95	3	14	0.7	2	-	1200	1700	2100	
		0.23	0.6	1.1	49	103	0.55	2	-	2800	5300	-	
	20	5.3	1	3	6	36	12.8	2	35	49	-	-	
		4.4	1	3	5	19	6.5	2	60	96	-	-	
40	20	1.8	1	2.5	10	40	4.7	1	180	220	-	-	
50	20	0.2	1.1	2.1	24	73	0.26	1	5300	6000	-	-	
70	20	2.4	1	3	6	42	10.6	2	130	150	-	-	

Small-signal MOSFET–Schottky combination

Package														DFN2020-6 (SOT1118)	
															
Size (mm)														2.0 x 2.0 x 0.65	
P _{tot} (mW)														1250	
Configuration	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	I _F (A)	V _R (V)	V _F typ. (mV)	R _{DS(on)} typ (mΩ) @ V _{GS} =			
												4.5 V	2.5 V	1.8 V	
Single + Schottky	20	8	3.7	0.4	1	20	170	5.7	2	30	455	80	95	120	PMFPB8040XP

Types in **bold** represent new products

	SOT223	SOT457 (SC-74)	SOT23	SOT363 (SC-88)	SOT323 (SC-70)	DFN1006-3 (SOT883)	DFN1006B-3 (SOT883B)
							
	6.5 x 3.5 x 1.65	2.9 x 1.5 x 1.0	2.9 x 1.3 x 1.0	2.0 x 1.25 x 0.95	2.0 x 1.25 x 0.95	1.0 x 0.6 x 0.48	1.0 x 0.6 x 0.37
	1700	600	250	300	200	250	250
			PMV27UPE				
			PMV33UPE				
			PMV32UP				
			PMV50UPE				
			NX2301P				
			PMV160UP				
			BSH205G2				
						PMZ350UPE	PMZB350UPE
						PMZ950UPE	PMZB950UPE
		PMN30XPE	PMV30XPEA				
		PMN30XP					
		PMN48XP	PMV48XP				
			PMV50XP				
		PMN52XP					
			PMV65XP				
			PMV65XPE				
		PMN70XPE					
		PMN70XP					
			PMV75UP				
				PMG85XP			
			PMV100XPEA				
					PMF170XP		
						PMZ320UPE	PMZB320UPE
						PMZ1200UPE	PMZB1200UPE
			NX3008PBK		NX3008PBKW		
		PMN50EPE	PMV35EPE				
		PMN70EPE					
			PMV250EPEA				
			BSS84AK		BSS84AKW	BSS84AKM	BSS84AKMB
	PMT200EPE						

Small-signal MOSFETs dual

Package										
Size (mm)										
P _{tot} (mW)										
Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	t _{on} typ (ns)	t _{off} typ (ns)	Q _G typ (nC)	ESD protection (kV)	
N-channel	20	8	0.6	0.45	0.95	5.6	19	0.4	1	
		12	5.3	0.4	0.9	4	40	14.4	-	
	30	8	0.59	0.45	0.95	4	12	0.6	2	
			0.35	0.6	1.1	26	88	0.52	2	
		12	3.1	0.75	1.25	9	19	2.9	2	
			3.1	0.5	1.5	6	18	1.65	1.8	
			1	0.5	1.5	6.5	14	0.7	2	
		20	0.18	0.8	1.5	10	51	0.34	yes	
	60	20	0.18	0.8	1.5	6	11	0.33	yes	
			0.26	0.5	1.5	7.9	12.5	0.49	2	
			0.17	1.1	2.1	12	34	0.33	yes	
			0.26	1.1	2.1	4.7	6.9	1	2	
P-channel	20	8	4.5	0.45	0.95	7	41	6.3	2	
			0.5	0.45	0.95	2.3	13.5	1.19	1	
			3.7	0.45	0.95	6	47	5.4	2	
		12	4.5	0.47	0.9	4	135	16.5	-	
			4.2	0.75	1	7	33	5	2	
			3.7	0.4	1	6	120	5.7	-	
	30	8	0.41	0.45	0.95	3	14	0.7	2	
			0.2	0.6	1.1	49	103	0.55	2	
		12	3.8	0.45	1	3	112	5.2	-	
	50	20	0.16	1.1	2.1	24	73	0.26	1	

Small-signal MOSFETs complementary

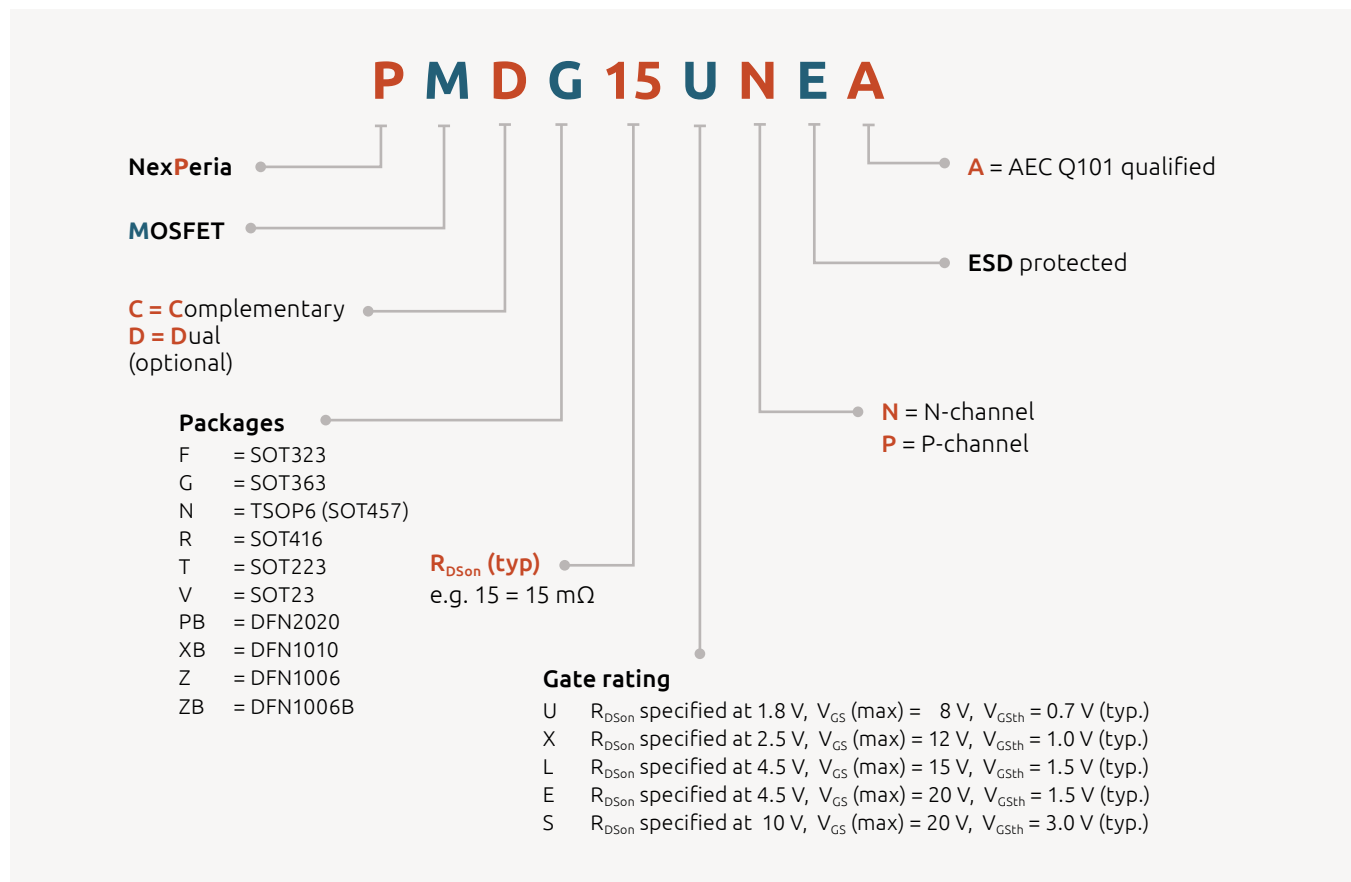
Package	Type	Polarity	V _{DS} (V)	V _{GS} (V)	I _D (A)	V _{GS(th)} min (V)	V _{GS(th)} max (V)	
 SOT363 (SC-88) (2.0 x 1.25 x 0.95)	NX3008CBKS	N	30	8	0.35	0.6	1.1	
		P	30	8	0.2	0.6	1.1	
	NX6020CAKS	N	60	20	0.17	1.1	2.1	
		P	50	20	0.16	1.1	2.1	
 DFN1010B-6 (1.1 x 1.0 x 0.37)	PM CXB900UE	N	20	8	0.6	0.45	0.95	
		P	20	8	0.5	0.45	0.95	
	PM CXB1000UE	N	30	8	0.59	0.45	0.95	
		P	30	8	0.41	0.45	0.95	
 DFN2020-6 (2.0 x 2.0 x 0.65)	PM CPB5530X	N	20	12	5.3	0.4	0.9	
		P	20	12	4.5	0.47	0.9	

					SOT363 (SC-88)	DFN2020-6 (SOT1118)	DFN1010B-6 (SOT1216)
							
					2.0 x 1.25 x 0.95	2.0 x 2.0 x 0.65	1.0 x 1.0 x 0.37
					300	1250	350
	$R_{DS(on)}$ typ (mΩ) @ $V_{GS} =$						
	10 V	4.5 V	2.5 V	1.8 V			
	-	470	620	845			PMDXB600UNE
	-	32	40	60		PMDPB30XN	
	-	550	660	770			PMDXB550UNE
	-	1000	1400	2000	NX3008NBKS		
	-	55	72	-		PMDPB56XNEA	
	-	95	130	-		PMDPB95XNE2	
	-	170	240	-	PMGD175XNE		
	2700	3000	4000	-	NX3020NAKS		
	2800	3500	4500	-	NX138AKS		
	2100	2200	2600	-	NX138BKS		
	3000	3700	-	-	NX7002AKS		
	2200	2500	-	-	NX7002BKS		NX7002BKXB
	-	58	74	97		PMDPB58UPE	
	-	1020	1270	1700			PMDXB950UPE
	-	82	107	142		PMDPB85UPE	
	-	55	75	110		PMDPB55XP	
	-	66	98	-		PMDPB70XPE	
	-	80	95	120		PMDPB80XP	
	-	1200	1700	2100			PMDXB1200UPE
	-	2800	5300	-	NX3008PBKS		
	-	70	89	-		PMDPB70XP	
	4500	5700	-	-	BSS84AKS		

Types in **bold** represent new products

	t_{on} typ (ns)	t_{off} typ (ns)	Q_G typ (nC)	ESD protection (kV)	$R_{DS(on)}$ typ (mΩ) @ $V_{GS} =$					
					10 V	4.5 V	2.5 V	1.8 V	1.5 V	1.2 V
	26	88	0.52	2	-	1000	1400	2000	-	-
	49	103	0.55	2	-	2800	5300	-	-	-
	6	20	0.33	yes	3000	3700				
	13	48	0.26	1	4500	5700				
	5.6	19	0.4	1	-	470	620	845	1125	2210
	2.3	13.5	1.19	1	-	1020	1270	1700	2300	3500
	4	12	0.6	2	-	550	660	770	890	-
	3	14	0.7	2	-	1200	1700	2100	3000	-
	19	56	14.4	-	-	26	33	50	-	-
	18	56	16.5	-	-	55	75	110	-	-

Small-signal MOSFETs nomenclature



AIRBAG

Automotive logic.....	108
Q100 Standard logic functions and packages.....	108
Q100 mini logic functions and packages.....	123
Asynchronous interface logic.....	131
Buffers/Inverters/Drivers.....	131
Schmitt-triggers.....	138
Transceivers.....	141
Voltage translators (level-shifters).....	142
I/O expansion	145
Analog Switches	145
Bus Switches.....	146
Decoders/Demultiplexers.....	147
Digital Multiplexers.....	148
Shift Registers.....	148
Synchronous interface logic	150
Latches/Registered drivers.....	150
Flip-flops	152
FIFO registers.....	154
Counters/frequency dividers.....	154
Multivibrators.....	155
Phase-locked loops	155
Control logic.....	156
AND Gates	156
Combination Gates	157
Configurable Gates	157
EXCLUSIVE-NOR Gates	158
EXCLUSIVE-OR Gates.....	158
NAND Gates.....	158
NOR Gates	160
OR Gates	161
Digital comparators	162
Parity generators-checkers.....	162
Nomenclatures	163

Q100 Standard logic functions and packages

Analog switches

Type number	Description	Features					Package (suffix)								
		Configuration	V _{CC} (V)	R _{ON} (Ω)	R _{ON} (FLAT) (Ω)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT137-1 (D)	SOT355-1 (PW)	SOT815-1 (BQ)
74HC4051-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4051-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	225	20	-40~125				•	•	•			
74HC4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4052-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4053-Q100	Triple single-pole, double-throw analog switch	SP8T-Z	2.0 - 10.0	200	20	-40~125				•	•	•			
74HCT4053-Q100	Triple single-pole, double-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	200	20	-40~125				•	•	•			
74HC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	2.0 - 10.0	105	23	-40~125	•	•	•						
74HCT4066-Q100	Quad single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125	•	•	•						
74HC4067-Q100	Single-pole, 16-throw analog switch	SP16T-Z	2.0 - 10.0	200	25	-40~125							•	•	•
74HCT4067-Q100	Single-pole, 16-throw analog switch; TTL-enabled	SP16T-Z	4.5 - 5.5	225	25	-40~125							•	•	•
74HC4851-Q100	Single-pole, octal-throw analog switch	SP8T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4851-Q100	Single-pole, octal-throw analog switch; TTL-enabled	SP8T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74HC4852-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	2.0 - 10.0	220	-	-40~125				•	•	•			
74HCT4852-Q100	Dual single-pole, quad-throw analog switch; TTL-enabled	SP4T-Z	4.5 - 5.5	240	-	-40~125				•	•	•			
74LV4052-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	1.0 - 6.0	125	15	-40~125				•	•				
74LV4053-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	1.0 - 6.0	150	30	-40~125				•	•	•			
74LVC4066-Q100	Quad single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125	•	•	•						
HEF4051B-Q100	Single-pole, octal-throw analog switch	SP8T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4052B-Q100	Dual single-pole, quad-throw analog switch	SP4T-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4053B-Q100	Triple single-pole, double-throw analog switch	SPDT-Z	3.0 - 15	175	30	-40~85				•	•				
HEF4066B-Q100	Quad single-pole, single-throw analog switch	SPST-NO	3.0 - 15	175	20	-40~85	•								
HEF4067B-Q100	Single-pole, 16-throw analog switch	SP16T-Z	3.0 - 15	175	20	-40~85							•		

Buffers/Inverters

Type number	Description	Features				Package (suffix)								
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC04-Q100	Hex inverter	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC125-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74AHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74AHC240-Q100	Octal inverter/line driver (3-state)	2.0 - 5.5	± 8	2.8	-40~125						•	•	•	
74AHCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125						•	•	•	
74AHC244-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
74AHC04-Q100	Hex inverter; unbuffered	2.0 - 5.5	± 8	2.4	-40~125	•	•	•						
74ALVC125-Q100	Quad buffer/line driver (3-state)	1.65 - 3.6	± 24	1.8	-40~85	•	•	•						
74ALVC541-Q100	Octal buffer/line driver (3-state)	1.65 - 3.6	± 24	2.3	-40~85						•	•	•	
74HC05-Q100	Hex inverter; open-drain	2.0 - 6.0	5.2	11	-40~125	•	•	•						
74HC04-Q100	Hex inverter	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•						
74HCT04-Q100	Hex inverter; TTL-enabled	4.5 - 5.5	± 4.0	8.0	-40~125	•	•	•						
74HC125-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT125-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125	•	•							
74HC126-Q100	Quad buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125	•	•							
74HCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125	•	•							
74HC240-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT240-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	9.0	-40~125						•	•	•	
74HC244-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•	•	•	
74HCT244-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•	•	•	
74HC365-Q100	Hex buffer/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125				•	•				
74HCT365-Q100	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC366-Q100	Hex inverter/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125				•	•				
74HCT366-Q100	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125				•	•				
74HC540-Q100	Octal inverter/line driver (3-state)	2.0 - 6.0	± 7.8	9.0	-40~125						•			
74HCT540-Q100	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	11	-40~125						•			
74HC541-Q100	Octal buffer/line driver (3-state)	2.0 - 6.0	± 7.8	10	-40~125						•	•		

Buffers/Inverters

Type number	Description	Features				Package (suffix)								
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74HCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 6	12	-40~125						•	•		
74HCU04-Q100	Hex inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40~125	•	•	•						
74LV244-Q100	Octal buffer/line driver (3-state)	1.0 - 5.5	± 16	8.0	-40~125						•	•		
74LVC04A-Q100	Hex inverter	1.65 - 5.5	± 24	2.0	-40~125	•	•	•						
74LVC06A-Q100	Hex inverter; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC07A-Q100	Hex buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•	•						
74LVC125A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC126A-Q100	Quad buffer/line driver (3-state)	1.2 - 3.6	± 24	2.4	-40~125	•	•	•						
74LVC541A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	3.3	-40~125						•	•	•	
74LVC16240A-Q100	16-bit inverter/line driver (3-state)	1.2 - 3.6	± 24	2.7	-40~125									•
74LVC244A-Q100	Octal buffer/line driver (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVCH244A-Q100	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	2.8	-40~125						•	•	•	
74LVC16244A-Q100	16-bit buffer/line driver (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LVCH16244A-Q100	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	± 24	3.0	-40~125									•
74LCU04A-Q100	Hex inverter; unbuffered	1.2 - 3.6	± 24	2.0	-40~125	•	•							
74LVT04-Q100	Hex inverter	2.7 - 3.6	-20 / +32	2.6	-40~85	•	•							
74LVT244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74LVTH244A-Q100	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	-32 / +64	2.6	-40~85						•	•		
74VHC126-Q100	Quad buffer/line driver (3-state)	2.0 - 5.5	± 8	3.3	-40~125	•	•	•						
74VHCT126-Q100	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.0	-40~125	•	•	•						
74VHC541-Q100	Octal buffer/line driver (3-state)	2.0 - 5.5	± 8	3.5	-40~125						•	•	•	
74VHCT541-Q100	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.5	-40~125						•	•	•	
HEF4049B-Q100	Hex inverter/line driver	3.0 - 15.0	-3 / +20	20	-40~85				•					
HEF4050B-Q100	Hex buffer/line driver	3.0 - 15.0	-3 / +20	40	-40~85				•					
HEF4069UB-Q100	Hex inverter; unbuffered	3.0 - 15.0	± 3.4	15	-40~85	•	•							

Counters/Frequency dividers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74HC161-Q100	Presetable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	± 5.2	19	-40~125				•	•	
74HC163-Q100	Presetable synchronous 4-bit binary counter; synchronous reset	2.0 - 6.0	± 5.2	17	-40~125				•	•	
74HCT163-Q100	Presetable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC193-Q100	Presetable synchronous 4-bit binary up/down counter	2.0 - 6.0	± 5.2	20	-40~125				•	•	
74HCT193-Q100	Presetable synchronous 4-bit binary up/down counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125				•	•	
74HC393-Q100	Dual 4-bit binary ripple counter	2.0 - 6.0	± 5.2	12	-40~125	•	•	•			
74HCT393-Q100	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	20	-40~125	•	•	•			
74HC4017-Q100	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	± 5.2	18	-40~125				•	•	•
74HCT4017-Q100	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125				•	•	•
74HC4020-Q100	14-stage binary ripple counter	2.0 - 6.0	± 5.2	11	-40~125				•	•	•
74HCT4020-Q100	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	15	-40~125				•	•	•
74HC4024-Q100	7-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125	•	•				
74HC4040-Q100	12-stage binary ripple counter	2.0 - 6.0	± 5.2	14	-40~125				•	•	•
74HCT4040-Q100	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	± 4.0	16	-40~125				•	•	•
74HC4060-Q100	14-stage binary ripple counter with oscillator	2.0 - 6.0	± 5.2	31	-40~125				•	•	•
74HCT4060-Q100	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	± 4.0	31	-40~125				•	•	•
74HC4520-Q100	Dual 4-bit synchronous binary counter	2.0 - 6.0	± 5.2	24	-40~125				•		
74HCT4520-Q100	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	± 4.0	24	-40~125				•		
74LV393-Q100	Dual 4-bit binary ripple counter	1.0 - 3.6	± 6	12	-40~125	•	•				
HEF4017B-Q100	5-stage Johnson decade counter	3.0 - 15	± 2.4	40	-40~85				•		
HEF4020B-Q100	14-stage binary ripple counter	3.0 - 15	± 2.4	30	-40~85				•		
HEF4040B-Q100	12-stage binary ripple counter	3.0 - 15	± 2.4	35	-40~85				•		
HEF4060B-Q100	14-stage binary ripple counter with oscillator	3.0 - 15	± 2.4	50	-40~85				•		
HEF4541B-Q100	Programmable timer	3.0 - 15	- 4/ + 2.7	38	-40~85	•					
HEF4520B-Q100	Dual 4-bit synchronous binary counter	3.0 - 15	± 2.4	15	-40~85				•		

Bus switches

Type number	Description	Features				Package (suffix)							
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} ($^{\circ}$ C)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)
74CBTLV3125-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•							
74CBTLV3126-Q100	Quad bus switch	2.3 - 3.6	3.3	7	-40~125	•	•						
74CBTLV3253-Q100	Dual 4:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3257-Q100	Quad 2:1 mux/demux	2.3 - 3.6	3.3	7	-40~125			•	•	•			
74CBTLV3245-Q100	Octal bus switch	2.3 - 3.6	3.3	7	-40~125							•	•
74CBTLVD3245-Q100	Octal bus switch level translator	3.0 - 3.6	1.8	7	-40~125							•	•
CBT3245A-Q100	Octal bus switch	4.5 - 5.5	3.9	7	-40~85						•	•	•

Digital decoders/Demultiplexers

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} ($^{\circ}$ C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC138-Q100	3-to-8 line decoder/demultiplexer; inverting	2.0 - 5.5	± 8	4.4	-40~125	•	•	•
74AHCT138-Q100	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	± 8	4.4	-40~125	•	•	•
74AHC139-Q100	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	± 8	3.9	-40~125	•	•	
74AHCT139-Q100	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•	
74HC237-Q100	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	± 5.2	18	-40~125	•		
74HC138-Q100	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	± 5.2	12	-40~125	•	•	•
74HCT138-Q100	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	•
74HC139-Q100	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	± 5.2	14	-40~125	•	•	
74HCT139-Q100	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 4	16	-40~125	•	•	
74HC238-Q100	3-to-8 decoder/demultiplexer	2.0 - 6.0	± 5.2	14	-40~125	•	•	•
74HCT238-Q100	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	± 4	18	-40~125	•	•	•
74LVC138A-Q100	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	± 24	2.7	-40~125	•	•	•
HEF4555B-Q100	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15	± 2.4	30	-40~85	•		

Digital multiplexers

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC157-Q100	Quad 2-input multiplexer	2.0 - 5.5	± 8	3.2	-40~125	•	•	•
74AHCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 8	3.2	-40~125	•	•	•
74AHC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 5.5	± 8	2.9	-40~125	•	•	
74AHCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 8	3.7	-40~125	•	•	
74HC151-Q100	8-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT151-Q100	8-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC153-Q100	Dual 4-input multiplexer	2.0 - 6.0	± 5.2	17	-40~125	•	•	
74HCT153-Q100	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	19	-40~125	•	•	
74HC157-Q100	Quad 2-input multiplexer	2.0 - 6.0	± 5.2	11	-40~125	•	•	•
74HCT157-Q100	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•	•	•
74HC251-Q100	8-input multiplexer (3-State)	2.0 - 6.0	± 5.2	18	-40~125	•	•	
74HCT251-Q100	8-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 4	22	-40~125	•	•	
74HC253-Q100	Dual 4-input multiplexer (3-State)	2.0 - 6.0	± 7.8	17	-40~125	•		
74HCT253-Q100	Dual 4-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	17	-40~125	•		
74HC257-Q100	Quad 2-input multiplexer (3-State)	2.0 - 6.0	± 7.8	11	-40~125	•	•	
74HCT257-Q100	Quad 2-input multiplexer; TTL-enabled (3-State)	4.5 - 5.5	± 6	13	-40~125	•	•	
74LVC157A-Q100	Quad 2-input multiplexer	1.2 - 3.6	± 24	2.5	-40~125	•	•	•

Flip-flops

Type number	Description	Features				Package (suffix)									
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74AHC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	± 8	3.7	-40~125	•	•	•							
74AHCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•							
74AHC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	± 8	4.2	-40~125						•	•	•		
74AHCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125						•	•	•		
74AHC374-Q100	Octal D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	4.4	-40~125						•	•			
74AHCT374-Q100	Octal D-type flip-flop; positive-edge trigger (3-state); TTL-enabled (3-state)	4.5 - 5.5	± 8	4.3	-40~125						•	•			
74AHC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	± 8	3.9	-40~125							•			
74AHCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125						•	•			
74AVC16374-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 12	1.5	-40~85										•

Flip-flops

Type number	Description	Features				Package (suffix)									
		V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)	SOT362-1 (DGG)
74HC74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	14	-40~125	•	•	•							
74HCT74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125	•	•	•							
74HC107-Q100	Dual J-K flip-flop with reset; negative-edge trigger	2.0 - 6.0	± 5.2	16	-40~125	•	•								
74HCT107-Q100	Dual J-K flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125	•									
74HC109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125				•						
74HCT109-Q100	Dual J-K flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125				•						
74HC174-Q100	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT174-Q100	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	18	-40~125				•	•					
74HC175-Q100	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	17	-40~125				•	•					
74HCT175-Q100	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	16	-40~125				•	•					
74HC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	± 5.2	15	-40~125						•	•	•		
74HCT273-Q100	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 4	15	-40~125						•	•	•		
74HC377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	± 7.8	13	-40~125						•	•			
74HCT377-Q100	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 6	14	-40~125						•	•			
74HC574-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	± 7.8	14	-40~125						•	•			
74HCT574-Q100	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	± 6	15	-40~125						•	•			
74LV74-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	± 12	11	-40~125	•	•								
74LVC74A-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	± 24	2.5	-40~125	•	•	•							
74LVC273-Q100	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	± 24	6.0	-40~125						•	•	•		
74LVC374A-Q100	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	2.7	-40~125						•	•	•		

Flip-flops

Type number	Description	Features				Package (suffix)								
		V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT815-1 (BQ)
74LVC573A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.4	-40~125						•	•	•	
74LVC823A-Q100	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	5.4	-40~125									•
74LVC16374A-Q100	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125									•
74LVCH16374A-Q100	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	± 24	3.8	-40~125									•
HEF4013B-Q100	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15	± 2.4	30	-40~85	•	•							
HEF4027B-Q100	Dual J-K flip-flop	3.0 - 15	± 2.4	30	-40~85				•					

Gates

Type number	Description	Features				Package (suffix)		
		V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74AHC00-Q100	Quad 2-input NAND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•	•
74AHCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74AHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•
74AHC08-Q100	Quad 2-input AND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC30-Q100	8-input NAND gate	2.0 - 5.5	± 8	3.6	-40~125	•	•	•
74AHCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•	•
74AHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	•
74AHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74AHC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•	•
74AHCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•	•
74ALVC00-Q100	Quad 2-input NAND gate	1.65 - 3.6	± 24	2.1	-40~85	•	•	•

Gates

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74ALVC32-Q100	Quad 2-input OR gate	1.65 - 3.6	± 24	2.0	-40~125	•	•	•
74HC00-Q100	Quad 2-input NAND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT00-Q100	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC02-Q100	Quad 2-input NOR gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	9.0	-40~125	•	•	•
74HC03-Q100	Quad 2-input NAND gate; open-drain	2.0 - 6.0	5.2	8.0	-40~125	•	•	
74HCT03-Q100	Quad 2-input NAND gate; open-drain; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74HC08-Q100	Quad 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•	•
74HCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	•
74HC10-Q100	Triple 3-input NAND gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HCT10-Q100	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC11-Q100	Triple 3-input AND gate	2.0 - 6.0	± 5.2	10	-40~125	•	•	
74HCT11-Q100	Triple 3-input AND gate; TTL-enabled	4.5 - 5.5	± 4	11	-40~125	•	•	
74HC20-Q100	Dual 4-input NAND gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT20-Q100	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	13	-40~125	•		•
74HC27-Q100	Triple 3-input NOR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	•
74HCT27-Q100	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	•
74HC30-Q100	8-input NAND gate	2.0 - 6.0	± 5.2	12	-40~125	•	•	
74HCT30-Q100	8-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125	•	•	
74HC32-Q100	Quad 2-input OR gate	2.0 - 6.0	± 5.2	6.0	-40~125	•	•	•
74HCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	9.0	-40~125	•	•	•
74HC86-Q100	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	11	-40~125	•	•	
74HCT86-Q100	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125	•	•	
74HC4002-Q100	Dual 4-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125	•	•	
74HC4075-Q100	Triple 3-input OR gate	2.0 - 6.0	± 5.2	8.0	-40~125	•	•	
74HCT4075-Q100	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	± 4	10	-40~125	•	•	
74LV08-Q100	Quad 2-input AND gate	1.0 - 5.5	± 12	7.0	-40~125	•	•	
74LVC00A-Q100	Quad 2-input NAND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC02A-Q100	Quad 2-input NOR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC08A-Q100	Quad 2-input AND gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74LVC11-Q100	Triple 3-input AND gate	1.2 - 3.7	± 24	3.7	-40~125	•	•	
74LVC32A-Q100	Quad 2-input OR gate	1.2 - 3.6	± 24	2.1	-40~125	•	•	•
74VHC02-Q100	Quad 2-input NOR gate	2.0 - 5.5	± 8	2.9	-40~125	•	•	•
74VHCT02-Q100	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125	•	•	•

Gates

Type number	Description	Features				Package (suffix)		
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)
74VHCT08-Q100	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74VHC32-Q100	Quad 2-input OR gate	2.0 - 5.5	± 8	3.5	-40~125	•	•	
74VHCT32-Q100	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
HEF4001B-Q100	Quad 2-input NOR gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4011B-Q100	Quad 2-input NAND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4030B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4070B-Q100	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	± 2.4	30	-40~85	•		
HEF4081B-Q100	Quad 2-input AND gate	3.0 - 15	± 2.4	20	-40~85	•		
HEF4082B-Q100	Dual 4-input AND gate	3.0 - 15	± 2.4	25	-40~85	•		

Latches/Registered drivers

Type number	Description	Features				Package (suffix)						
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 5.5	± 8	4.2	-40~125				•	•	•	
74AHCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.9	-40~125				•	•	•	
74HC259-Q100	8 bit addressable latch	2.0 - 6.0	± 5.2	18	-40~125	•	•	•				
74HCT259-Q100	8 bit addressable latch; TTL-enabled	4.5 - 5.5	± 4	20	-40~125	•	•	•				
74HC373-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	12	-40~125				•	•	•	
74HCT373-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	14	-40~125				•	•	•	
74HC573-Q100	Octal D-type transparent latch (3-state)	2.0 - 6.0	± 7.8	14	-40~125				•	•	•	
74HCT573-Q100	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	± 6	17	-40~125				•	•	•	
74LVC373A-Q100	Octal D-type transparent latch (3-state)	1.2 - 3.6	± 24	3.0	-40~125				•	•	•	
74LVC16373A-Q100	16-bit D-type transparent latch (3-state)	1.2 - 3.6	± 24	2.4	-40~125							•
74LVCH16373A-Q100	16-bit D-type transparent latch with bushold (3-state)	1.2 - 3.6	± 24	2.4	-40~125							•
HEF4043B-Q100	Quad R/S latch with set and reset (3-state)	3.0 - 15	± 2.4	25	-40~85	•						

Level shifters/Translators

Type number	Description	Features				Package (suffix)									
		V _{cc} (A) (V)	V _{cc} (B) (V)	I _o (mA)	T _{mb} (°C)	SOT402-1 (PW)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT137-1 (D)	SOT355-1 (PW)	SOT815-1 (BQ)	SOT362-1 (DGG)	SOT480-1 (DGV)	SOT364-1 (DGG)
74ALVC164245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	1.5 - 3.6	1.5 - 5.5	± 24	-40~125								•		
74AVC4T245-Q100	4-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•	•	•						
74AVC8T245-Q100	8-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125						•	•			
74AVC16T245-Q100	16-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125									•	
74AVC20T245-Q100	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125										•
74AVCH4T245-Q100	4-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•	•	•						
74HC4050-Q100	Hex buffer with 15V tolerant inputs	2.0 - 6.0	n.a	± 5.2	-40~125		•	•							
74LVC4T3144-Q100	4-bit dual supply buffer/line driver (3-state)	1.2 to 5.5	1.2 to 5.5	± 24	-40~125	•									
74LVC4245A-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	± 24	-40~125						•	•	•		
74LVC8T245-Q100	8-bit dual-supply voltage translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125							•	•		
74LVCH8T245-Q100	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125							•	•		
HEF4104B-Q100	Quad low-to-high voltage translator (3-state)	3.0 - 15.0	3.0 - 15.0	± 2.4	-40~85		•								

Multivibrators

Type number	Description	Features				Package (suffix)		
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)
74AHC123A-Q100	Dual retriggerable monostable multivibrator with reset	2.0 - 5.5	± 8	5.1	-40~125	•	•	•
74AHCT123A-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 8	5.0	-40~125	•	•	•
74HC123-Q100	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	± 7.8	9.0	-40~125	•	•	•
74HCT123-Q100	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	± 4	26	-40~125	•	•	•
74HC4538-Q100	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	± 5.2	27	-40~125	•	•	
74HCT4538-Q100	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	± 4	30	-40~125	•	•	
HEF4528B-Q100	Dual retriggerable monostable multivibrator with reset	3.0 - 15	± 2.4	40	-40~85	•		
HEF4538B-Q100	Dual retriggerable precision monostable multivibrator	3.0 - 15	± 2.4	60	-40~85	•		

Schmitt-triggers

Type number	Description	Features				Package (suffix)				
		V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74AHC14-Q100	Hex inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125	•	•	•		
74AHCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.0	-40~125	•	•	•		
74AHC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	± 8	3.3	-40~125	•	•	•		
74AHCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•	•		
74HC7014-Q100	Hex buffer precision Schmitt-trigger	2.0 - 6.0	± 5.2	27	-40~125	•				
74HC14-Q100	Hex inverter Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40~125	•	•	•		
74HCT14-Q100	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125	•	•	•		
74HC132-Q100	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	± 5.2	11	-40~125	•	•	•		
74HCT132-Q100	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4	17	-40~125	•	•	•		
74HC7541-Q100	Octal buffer/line driver Schmitt-trigger (3-State)	2.0 - 6.0	± 7.8	11	-40~125				•	•
74HCT7541-Q100	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	± 6	16	-40~125				•	•
74LV132-Q100	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	± 12	10	-40~125	•	•	•		
74LVC14A-Q100	Hex inverter Schmitt-trigger	1.2 - 3.6	± 24	3.2	-40~125	•	•	•		
74LVC132A-Q100	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	± 24	3.4	-40~125	•	•	•		
HEF40106B-Q100	Hex inverter Schmitt-trigger	4.5 - 15.5	± 2.4	30	-40~85	•	•			

Shift registers

Type number	Description	Features				Package (suffix)							
		V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74AHC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 5.5	± 8	4.5	-40~125	•	•	•					
74AHCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•	•					
74AHC594-Q100	8-bit serial-in/parallel-out shift register with output register	2.0 - 5.5	± 8	4.1	-40~125				•	•	•		
74AHCT594-Q100	8-bit serial-in/parallel-out shift register with output register; TTL-enabled	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
74AHC595-Q100	8-bit serial-in/parallel-out shift register with output register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
74AHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
74HC164-Q100	8-bit serial-in/parallel-out shift register	2.0 - 6.0	± 5.2	12	-40~125	•	•	•					
74HCT164-Q100	8-bit serial-in/parallel-out shift register; TTL-enabled	4.5 - 5.5	± 4	12	-40~125	•	•	•					
74HC165-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	16	-40~125				•	•	•		
74HCT165-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	14	-40~125				•	•	•		
74HC166-Q100	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	± 5.2	15	-40~125				•	•			
74HCT166-Q100	8-bit parallel or serial-in/serial-out shift register; TTL-enabled	4.5 - 5.5	± 4	23	-40~125				•				
74HCS94-Q100	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	± 7.8	14	-40~125			•					
74HCT594-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled	4.5 - 5.5	± 6	15	-40~125				•				
74HCS95-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	± 7.8	16	-40~125				•	•	•		
74HCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 6	25	-40~125				•	•	•		
74HCS97-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register	2.0 - 6.0	± 5.2	16	-40~125				•	•			
74HCT597-Q100	8-bit parallel or serial-in/parallel-out shift register with parallel input register; TTL-enabled	4.5 - 5.5	± 4	20	-40~125				•				
74HC4094-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	2.0 - 6.0	± 5.2	15	-40~125				•	•			
74HCT4094-Q100	8-bit serial-in/serial or parallel-out shift register with output register; TTL-enabled (3-state)	4.5 - 5.5	± 4	19	-40~125				•				
74LV164-Q100	8-bit serial-in/parallel-out shift register	1.0 - 5.5	± 12	12	-40~125	•	•	•					
74LV165-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	18	-40~125				•	•			

Shift registers

Type number	Description	Features				Package (suffix)							
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT108-1 (D)	SOT402-1 (PW)	SOT762-1 (BQ)	SOT109-1 (D)	SOT403-1 (PW)	SOT763-1 (BQ)	SOT163-1 (D)	SOT360-1 (PW)
74LV165A-Q100	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	± 12	7.5	-40~125				•	•			
74LV4060-Q100	14-stage binary ripple counter with oscillator	1.0 - 5.5	± 6	29	-40~125				•	•			
74LVC594A-Q100	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	± 24	3.1	-40~125				•	•	•		
74VHC595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	± 8	4.0	-40~125				•	•	•		
74VHCT595-Q100	8-bit serial-in/parallel-out shift register with output storage register; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.8	-40~125				•	•	•		
HEF4014B-Q100	8-bit shift register with synchronous parallel enable	3.0 - 15	± 2.4	40	-40~85				•				
HEF4021B-Q100	8-bit shift register with asynchronous parallel load	3.0 - 15	± 2.4	40	-40~85				•	•			
HEF4094B-Q100	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	3.0 - 15	± 2.4	50	-40~85				•	•			
HEF4794B-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85				•				
HEF4894B-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.0 - 15	-20	45	-40~85							•	•
NPIC6C595-Q100	8-bit serial-in/parallel-out shift register with output storage register (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C596A-Q100	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	2.3 - 5.5	-100	90	-40~125				•	•	•		
NPIC6C4894-Q100	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	3.5 - 15	-100	105	-40~125							•	•

Transceivers

Type number	Description	Features				Package (suffix)			
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT163-1 (D)	SOT360-1 (PW)	SOT764-1 (BQ)	SOT362-1 (DGG)
74AHC245-Q100	Octal transceiver (3-state)	2.0 - 5.5	± 8	3.5	-40~125	•	•	•	
74AHCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 8	5.0	-40~125	•	•	•	
74AVC16245-Q100	16-bit transceiver (3-state)	1.2 - 3.6	± 12	2.0	-40~85				•
74HC245-Q100	Octal transceiver (3-state)	2.0 - 6.0	± 7.8	7.0	-40~125	•	•	•	
74HCT245-Q100	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	± 6	10	-40~125	•	•	•	
74LVC245A-Q100	Octal transceiver (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVCH245A-Q100	Octal transceiver with bus hold (3-state)	1.2 - 3.6	± 24	2.9	-40~125	•	•	•	
74LVC162245A-Q100	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	± 12	3.3	-40~125				•

Q100 mini logic functions and packages

Analog switches

Type number	Description	Features					Package (suffix)					
		Configuration	V_{CC} (V)	R_{ON} (Ω)	$R_{ON}(FLAT)$ (Ω)	T_{amb} ($^{\circ}C$)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 5.5	40	5	-40~125	•	•				
74AHC1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	40	5	-40~125	•	•				
74HC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40~125	•	•				
74HCT1G66-Q100	Single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125	•	•				
74HC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	2.0 - 9.0	105	23	-40~125					•	•
74HCT2G66-Q100	Dual single-pole, single-throw analog switch; TTL-enabled	SPST-NO	4.5 - 5.5	118	23	-40~125					•	•
74LVC1G53-Q100	Single-pole, double-throw analog switch	SPDT-Z	1.65 - 5.5	15	1.5	-40~125					•	•
74LVC1G66-Q100	Single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125	•	•				
74LVC1G384-Q100	Single-pole, single-throw analog switch	SPST-NC	1.65 - 5.5	15	1.5	-40~125	•	•				
74LVC1G3157-Q100	Single-pole, double-throw analog switch	SPDT	1.65 - 5.5	15	1.5	-40~125			•	•		
74LVC2G66-Q100	Dual single-pole, single-throw analog switch	SPST-NO	1.65 - 5.5	15	1.5	-40~125					•	•

Bus switches

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	V_{PASS} (V)	R_{ON} (Ω)	T_{amb} ($^{\circ}C$)	SOT96-1 (D)	SOT530-1 (PW)
CBT3306-Q100	Dual bus switch	4.5 - 5.5	3.9	7	-40~85	•	•

Buffers/Inverters

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pLH} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1GU04-Q100	Single inverter; unbuffered	2.0 - 5.5	± 8	2.6	-40~125	•	•				
74AHC3GU04-Q100	Triple inverter; unbuffered	2.0 - 5.5	± 8	2.5	-40~125					•	•
74AHC1G04-Q100	Single inverter	2.0 - 5.5	± 8	3.1	-40~125	•	•				
74AHC1G04-Q100	Single inverter; TTL-enabled	4.5 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G07-Q100	Single buffer; open-drain	2.0 - 5.5	8	4.2	-40~125	•	•				
74AHC1G17-Q100	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	± 8	3.2	-40~125	•					
74AHC1G17-Q100	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125	•					
74AHC1G125-Q100	Single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G125-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G126-Q100	Single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G126-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125	•	•				
74AHC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125					•	•
74AHC2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125					•	•
74AHC2G126-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125					•	•
74AHC2G126-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125					•	•
74AHC2G241-Q100	Dual buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125					•	•
74AHC2G241-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125					•	•
74AHC3G04-Q100	Triple inverter	2.0 - 5.5	± 8	3.1	-40~125					•	•
74AHC3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 8	3.0	-40~125					•	•
74AUP1G04-Q100	Single inverter	1.1 - 3.6	± 1.9	4.0	-40~125	•	•				
74AUP1G06-Q100	Single inverter; open-drain	1.1 - 3.6	1.9	4.5	-40~125	•					
74AUP1G34-Q100	Single buffer	1.1 - 3.6	± 1.9	3.9	-40~125	•					
74AUP1G125-Q100	Single buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125	•					
74AUP2G04-Q100	Dual inverter	1.1 - 3.6	± 1.9	4.0	-40~125			•			
74AUP2GU04-Q100	Dual inverter; unbuffered	1.1 - 3.6	± 1.9	2.3	-40~125			•			
74HC1GU04-Q100	Single inverter; unbuffered	2.0 - 6.0	± 2.6	5.0	-40~125	•	•				
74HC2GU04-Q100	Dual inverter; unbuffered	2.0 - 6.0	± 5.2	5.0	-40~125			•	•		
74HC3GU04-Q100	Triple inverter; unbuffered	2.0 - 6.0	± 5.2	6.0	-40~125					•	•
74HC1G04-Q100	Single inverter	2.0 - 6.0	± 2.6	7.0	-40~125	•	•				
74HCT1G04-Q100	Single inverter; TTL-enabled	4.5 - 5.5	± 2.0	8.0	-40~125	•	•				
74HC1G125-Q100	Single buffer/line driver (3-state)	2.0 - 6.0	± 2.6	9.0	-40~125	•	•				
74HCT1G125-Q100	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 2.0	10	-40~125	•	•				

Buffers/Inverters

Type number	Description	Features				Package (suffix)					
		V _{CC} (V)	I _O (mA)	t _{prop} (ns)	T _{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74HC2G04-Q100	Dual inverter	2.0 - 6.0	± 5.2	8.0	-40~125			•	•		
74HCT2G04-Q100	Dual inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•		
74HC2G34-Q100	Dual buffer	2.0 - 6.0	± 5.2	9.0	-40~125			•	•		
74HCT2G34-Q100	Dual buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125			•	•		
74HC2G125-Q100	Dual buffer/line driver (3-state)	2.0 - 6.0	± 5.2	10	-40~125					•	•
74HCT2G125-Q100	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	± 4.0	12	-40~125					•	•
74HC3G04-Q100	Triple inverter	2.0 - 6.0	± 5.2	8.0	-40~125					•	•
74HCT3G04-Q100	Triple inverter; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125					•	•
74HC3G07-Q100	Triple buffer; open-drain	2.0 - 6.0	5.2	9.0	-40~125					•	•
74HCT3G07-Q100	Triple buffer; open-drain; TTL-enabled	4.5 - 5.5	4	9.0	-40~125					•	•
74HC3G34-Q100	Triple buffer	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT3G34-Q100	Triple buffer; TTL-enabled	4.5 - 5.5	± 4.0	10	-40~125						•
74LVC1G04-Q100	Single inverter	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1G06-Q100	Single inverter; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•				
74LVC1G07-Q100	Single buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•	•				
74LVC1G34-Q100	Single buffer	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1G125-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G126-Q100	Single buffer/line driver (3-state)	1.65 - 5.5	± 32	2.0	-40~125	•	•				
74LVC1GU04-Q100	Single inverter; unbuffered	1.65 - 5.5	± 32	1.6	-40~125	•	•				
74LVC2G04-Q100	Dual inverter	1.65 - 5.5	± 32	2.7	-40~125			•	•		
74LVC2G06-Q100	Dual inverter; open-drain	1.65 - 5.5	32	2.3	-40~125			•	•		
74LVC2G07-Q100	Dual buffer; open-drain	1.65 - 5.5	32	2.6	-40~125			•	•		
74LVC2G125-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.3	-40~125					•	•
74LVC2G126-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.4	-40~125					•	•
74LVC2G240-Q100	Dual inverter/line driver (3-state)	1.65 - 5.5	± 32	2.5	-40~125					•	•
74LVC2G241-Q100	Dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.6	-40~125					•	•
74LVC2GU04-Q100	Dual inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40~125			•	•		
74LVC3G04-Q100	Triple inverter	1.65 - 5.5	± 32	2.7	-40~125					•	•
74LVC3G07-Q100	Triple buffer; open-drain	1.65 - 5.5	32	2.1	-40~125					•	•
74LVC3G34-Q100	Triple buffer	1.65 - 5.5	± 32	2.2	-40~125					•	•

Digital decoders/Demultiplexers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	SOT457 (GV)
74LVC1G18-Q100	1-to-2 demultiplexer (3-state)	1.65 - 5.5	± 32	2.3	-40~125	•	•
74LVC1G19-Q100	1-to-2 demultiplexer	1.65 - 5.5	± 32	1.8	-40~125	•	

Digital multiplexers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	SOT457 (GV)
74LVC1G157-Q100	Single 2-input multiplexer	1.65 - 5.5	± 32	2.2	-40~125	•	•

Flip-flops

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G79-Q100	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	± 8	3.5	-40~125	•	•				
74AHCT1G79-Q100	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AUP1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	± 1.9	8.1	-40~125						•
74AUP1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	± 1.9	7.4	-40~125			•			
74AUP1G374-Q100	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	± 1.9	7.9	-40~125			•			
74AUP2G79-Q100	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	8.5	-40~125						•
74LVC1G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125					•	•
74LVC1G79-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.2	-40~125	•	•				
74LVC1G80-Q100	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.4	-40~125	•	•				
74LVC1G175-Q100	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	± 32	3.1	-40~125			•	•		
74LVC2G74-Q100	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125					•	•

Gates

Type number	Description	Features				Package (suffix)					
		V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (CW)	SOT457 (CV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G09-Q100	Single 2-input AND gate; open-drain	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate	2.0 - 5.5	± 8	3.4	-40~125	•	•				
74AHC1G86-Q100	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 8	3.5	-40~125	•	•				
74AHC2G00-Q100	Dual 2-input NAND gate	2.0 - 5.5	± 8	3.5	-40~125					•	•
74AHC2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G08-Q100	Dual 2-input AND gate; TTL-enabled	4.5 - 5.5	± 8	3.6	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 8	3.3	-40~125					•	•
74AUP1G02-Q100	Single 2-input NOR gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G08-Q100	Single 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40~125	•					
74AUP1G32-Q100	Single 2-input OR gate	1.1 - 3.6	± 1.9	7.9	-40~125	•					
74AUP1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	3.3	-40~125	•					
74AUP1T98-Q100	Configurable gate with voltage level translation	2.3 - 3.6 V	± 1.9	8.7	-40~125			•			
74HC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 2.6	9.0	-40~125	•	•				
74HC1G00-Q100	Single 2-input NAND gate	2.0 - 6.0	± 2.6	7.0	-40~125	•					
74HCT1G00-Q100	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 2	10	-40~125	•	•				
74HC1G02-Q100	Single 2-input NOR gate	2.0 - 6.0	± 2.6	7.0	-40~125	•	•				
74HCT1G02-Q100	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 2.0	9.0	-40~125	•	•				
74HC1G08-Q100	Single 2-input AND gate	2.0 - 6.0	± 5.2	7.0	-40~125	•	•				
74HCT1G08-Q100	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	± 2	11	-40~125	•	•				
74HC1G32-Q100	Single 2-input OR gate	2.0 - 6.0	± 2.6	8.0	-40~125	•	•				
74HCT1G32-Q100	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74HC2G00-Q100	Dual 2-input NAND gate	2.0 - 6.0	± 5.6	9.0	-40~125					•	•
74HCT2G00-Q100	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G02-Q100	Dual 2-input NOR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G02-Q100	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	± 4	12	-40~125					•	•
74HC2G08-Q100	Dual 2-input AND gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•

Gates

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74HCT2G08-Q100	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	± 4	14	-40~125					•	•
74HC2G32-Q100	Dual 2-input OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G32-Q100	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	± 4.0	13	-40~125					•	•
74HC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	± 5.2	9.0	-40~125					•	•
74HCT2G86-Q100	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 4.0	11	-40~125					•	•
74HCT1G86-Q100	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	± 2.0	10	-40~125	•	•				
74LVC1G00-Q100	Single 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125	•	•				
74LVC1G02-Q100	Single 2-input NOR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G08-Q100	Single 2-input AND gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G10-Q100	Single 3-input NAND gate	1.65 - 5.5	± 32	2.6	-40~125			•			
74LVC1G11-Q100	Single 3-input AND gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1G32-Q100	Single 2-input OR gate	1.65 - 5.5	± 32	2.1	-40~125	•	•				
74LVC1G38-Q100	Single 2-input NAND gate; open-drain	1.65 - 5.5	32	2.3	-40~125	•	•				
74LVC1G57-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G58-Q100	Configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	3.8	-40~125			•	•		
74LVC1G86-Q100	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.4	-40~125	•	•				
74LVC1G332-Q100	Single 3-input OR gate	1.65 - 5.5	± 32	2.6	-40~125			•	•		
74LVC1GX04-Q100	Crystal driver	1.65 - 5.5	± 24	2.8	-40~125			•	•		
74LVC2G00-Q100	Dual 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125						•
74LVC2G02-Q100	Dual 2-input NOR gate	1.65 - 5.5	± 32	2.4	-40~125					•	•
74LVC2G08-Q100	Dual 2-input AND gate	1.65 - 5.5	± 24	2.1	-40~125					•	•
74LVC2G32-Q100	Dual 2-input OR gate	1.65 - 5.5	± 32	2.2	-40~125					•	•
74LVC2G34-Q100	Dual buffer	1.65 - 5.5	± 32	2.2	-40~125			•	•		
74LVC2G86-Q100	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.3	-40~125					•	•

Latches/Registered drivers

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT363 (GW)	
74AUP1G373-Q100	Single D-type transparent latch (3-state)	1.1 - 3.6	±1.9	8.5	-40~125	•	

Multivibrators

Type number	Description	Features				Package (suffix)	
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT505-2 (DP)	SOT765-1 (DC)
74LVC1G123-Q100	Single retriggerable monostable multivibrator	1.65 - 5.5	± 32	3.5	-40~125	•	•

Schmitt-triggers

Type number	Description	Features				Package (suffix)					
		V_{CC} (V)	I_O (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT353-1 (GW)	SOT753 (GV)	SOT363 (GW)	SOT457 (GV)	SOT505-2 (DP)	SOT765-1 (DC)
74AHC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125	•	•				
74AHC1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125	•	•				
74AHC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125					•	•
74AHC3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 8	4.1	-40~125					•	•
74HC1G14-Q100	Single inverter Schmitt-trigger	2.0 - 6.0	± 2.6	10	-40~125	•	•				
74HCT1G14-Q100	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 2.0	15	-40~125	•	•				
74HC2G14-Q100	Dual inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125			•	•		
74HCT2G14-Q100	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC2G17-Q100	Dual buffer Schmitt-trigger	2.0 - 6.0	± 5.2	12	-40~125			•	•		
74HCT2G17-Q100	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125			•	•		
74HC3G14-Q100	Triple inverter Schmitt-trigger	2.0 - 6.0	± 5.2	16	-40~125					•	•
74HCT3G14-Q100	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	± 4.0	21	-40~125					•	•
74LVC1G14-Q100	Single inverter Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC1G17-Q100	Single buffer Schmitt-trigger	1.65 - 5.5	± 32	3.0	-40~125	•	•				
74LVC2G14-Q100	Dual inverter Schmitt-trigger	1.65 - 5.5	± 32	3.9	-40~125			•	•		
74LVC2G17-Q100	Dual buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125			•	•		
74LVC3G17-Q100	Triple buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125					•	•

Level shifters/Translators

Type number	Description	Features				Package (suffix)				
		V _{CC} (A) (V)	V _{CC} (B) (V)	I _O (mA)	T _{amb} (°C)	SOT353-1 (GW)	SOT363 (GW)	SOT505-2 (DP)	SOT765-1 (DC)	SOT552-1 (DP)
74AUP1T34-Q100	Single dual supply translating buffer	1.1 - 3.6	1.1 - 3.6	± 1.9	-40~125	•				
74AVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125			•	•	
74AVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	± 12	-40~125		•			
74AXP1T57-Q100	Dual-supply translating configurable multiple function gate, Schmitt-trigger inputs	0.7 - 2.75	1.2 - 5.5	± 12	-40~125				•	
74AXP2T08-Q100	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	± 12	-40~125					•
74LVC1T45-Q100	Single dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVCH1T45-Q100	Single dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125		•			
74LVC2T45-Q100	Dual-bit dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	
74LVCH2T45-Q100	Dual-bit dual-supply voltage level translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	± 24	-40~125				•	

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74ABT04	Hex inverter	4.5 - 5.5	TTL	-15 / 20	50	2.2	100	-40~85
74ABT125	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.1	100	-40~85
74ABT126	Quad buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	3.0	100	-40~85
74ABT162244	16-bit buffer/line driver with 30 Ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	50	3.2	100	-40~85
74ABT16240A	16-bit inverter/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.0	150	-40~85
74ABT16244A	16-bit buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.1	150	-40~85
74ABT244	Octal buffer/line driver (3-state)	4.5 - 5.5	TTL	-32 / 64	50	2.9	100	-40~85
74AHC04	Hex inverter	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74AHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74AHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC1G125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G126	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC1G14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1G17	Single buffer with Schmitt-trigger inputs	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC1GU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.6	60	-40~125
74AHC244	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC2G125	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC2G241	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
74AHC3G04	Triple inverter	2.0 - 5.5	CMOS	±8	50	3.1	60	-40~125
74AHC3G14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74AHC3GU04	Triple inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.5	60	-40~125
74AHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74AHC9541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±8	15	3.4	60	-40~125
74AHCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT04A	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.1	60	-40~125
74AHCT07A	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	±8	15	4.0	60	-40~125
74AHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT14	Hex inverting; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT14A	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.7	60	-40~125
74AHCT17A	Hex buffer; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	15	3.2	60	-40~125
74AHCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT1G17	Single buffer with Schmitt-trigger inputs; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT244A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AHCT2G126	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT2G241	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
74AHCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74AHCT3G14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74AHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
74AHCT541A	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	15	3.5	60	-40~125
74AHC04	Hex inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	2.4	60	-40~125
74AHC07A	Hex buffer; Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	15	3.8	60	-40~125
74AHC14A	Hex inverter; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHC17A	Hex buffer; Schmitt-trigger	1.8 - 5.5	CMOS	±16	15	3.2	60	-40~125
74AHC244A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74AHC541A	Octal buffer/line driver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	15	3.0	60	-40~125
74ALVC04	Hex inverter	1.65 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVC125	Quad buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	1.8	145	-40~85
74ALVC14	Hex inverter; Schmitt-trigger	1.65 - 3.6	TTL	±24	30	2.4	150	-40~85
74ALVC16244	16-bit buffer/line driver (3-state)	1.2 - 3.6	TTL	±24	50	1.9	150	-40~85
74ALVC244	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.9	130	-40~85
74ALVC541	Octal buffer/line driver (3-state)	1.65 - 3.6	TTL	±24	30	2.3	130	-40~85
74ALVCH162244	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.7	150	-40~85
74ALVCH16244	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	TTL	±24	30	1.9	150	-40~85
74ALVCH162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	30	2.9	150	-40~85
74ALVCH16825	18-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVCH16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	TTL	±24	30	2.0	150	-40~85
74ALVT16244	16-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTTL	-32 / 64	50	1.5	200	-40~85
74ALVT162827	20-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	LVTTTL	±12	50	2.2	75	-40~85
74ALVT16827	20-bit buffer/line driver with bus hold (3-state)	2.3 - 3.6	LVTTTL	-32 / 64	50	1.3	200	-40~85
74AUP1G04	Single inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP1G06	Single inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP1G07	Single buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125
74AUP1G125	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G126	Single buffer/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.3	70	-40~125
74AUP1G14	Single inverter; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G16	Single buffer	1.1 - 3.6	CMOS	±1.9	30	4.7	70	-40~125
74AUP1G240	Single inverter/line driver (3-state)	1.1 - 3.6	CMOS	±1.9	30	4.2	70	-40~125
74AUP1G34	Single buffer	1.1 - 3.6	CMOS	±1.9	30	3.9	70	-40~125
74AUP1GU04	Single inverter; unbuffered	1.1 - 3.6	CMOS	±1.9	30	2.3	70	-40~125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.9	70	-40~125
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	CMOS	±4	15	3.6	70	-40~125
74AUP2G04	Dual inverter	1.1 - 3.6	CMOS	±1.9	30	4.0	70	-40~125
74AUP2G06	Dual inverter; open drain	1.1 - 3.6	CMOS	1.9	30	4.5	70	-40~125
74AUP2G07	Dual buffer; open drain	1.1 - 3.6	CMOS	1.9	30	4.4	70	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74AUP2G125	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G126	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.3	70	-40~125
74AUP2G14	Dual inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G16	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP2G17	Dual buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	7.8	70	-40~125
74AUP2G240	Dual inverter/line driver (3-state)	1.1 - 3.6	CMOS	+1.9	30	4.2	70	-40~125
74AUP2G241	Dual buffer/line driver (3-state)	1.1 - 3.6	CMOS	+ 1.9	30	4.3	70	-40~125
74AUP2G34	Dual buffer	1.1 - 3.6	CMOS	+1.9	30	3.9	70	-40~125
74AUP2GU04	Dual inverter; unbuffered	1.1 - 3.6	CMOS	+1.9	30	2.3	70	-40~125
74AUP3G04	Triple inverter	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G14	Triple inverter; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AUP3G16	Triple buffer	1.1 - 3.6	CMOS	+1.9	30	4.0	70	-40~125
74AUP3G17	Triple buffer; Schmitt-trigger	1.1 - 3.6	CMOS	+1.9	30	4.7	70	-40~125
74AVC16244	16-bit buffer/line driver (3-state)	0.8 - 3.6	CMOS/LVTTL	-12	30	2.0	200	-40~85
74AVC1T1004	1-to-4 translating fan-out buffer	0.8 - 3.6	CMOS/LVTTL	±12	15	4.9	200	-40~125
74AVC4T3144	4-bit dual-supply buffer/level-translator (3-state)	0.8 - 3.6	CMOS/ LVTTL	±12	15	3.5	200	-40~125
74AVC9112	1-to-4 fan-out buffer	0.8 - 3.6	CMOS/LVTTL	±12	15	4.0	200	-40~125
74AVCH16244	16-bit buffer/line driver with bus hold (3-state)	0.8 - 3.6	CMOS/LVTTL	+12	30	2.0	200	-40~85
74AXP1G04	Single inverter	0.7 - 2.75	CMOS	+4.5	5	2.6	70	-40~85
74AXP1G06	Single inverter; open drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G07	Single buffer; open-drain	0.7 - 2.75	CMOS	4.5	5	3.5	70	-40~85
74AXP1G125	Single buffer/line driver (3-state)	0.7 - 2.75	CMOS	+4.5	5	2.7	70	-40~85
74AXP1G14	Single inverter; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.9	70	-40~85
74AXP1G17	Single buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G17	Dual buffer; Schmitt-trigger	0.7 to 2.75	CMOS	+4.5	5	2.8	70	-40~85
74AXP2G34	Dual buffer	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74AXP2G3404	Single buffer and Single inverter	0.7 to 2.75	CMOS	+4.5	5	2.5	70	-40~85
74HC04	Hex inverter	2.0 - 6.0	CMOS	+5.2	50	7.0	36	-40~125
74HC05	Hex inverter; open drain	2.0 - 6.0	CMOS	5.2	50	11	36	-40~125
74HC125	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC126	Quad buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC14	Hex inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+5.2	50	12	36	-40~125
74HC1G04	Single inverter	2.0 - 6.0	CMOS	+2.6	50	7.0	36	-40~125
74HC1G125	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G126	Single buffer/line driver (3-state)	2.0 - 6.0	CMOS	+2.6	50	9.0	36	-40~125
74HC1G14	Single inverter; Schmitt-trigger	2.0 - 6.0	CMOS	+2.6	50	10	36	-40~125
74HC1GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	+ 2.6	50	5.0	36	-40~125
74HC240	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC241	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	7.0	36	-40~125
74HC244	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	+7.8	50	9.0	36	-40~125
74HC2G04	Dual inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC2G125	Dual buffer/line driver (3-state)	2.0 - 6.0	CMOS	±5.2	50	10	36	-40~125
74HC2G14	Dual inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125

Buffers/Inverters/Drivers

Type numbe	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74HC2G17	Dual buffer; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	12	36	-40~125
74HC2G34	Dual buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC2GU04	Single inverter; unbuffered	2.0 - 6.0	CMOS	±2.6	50	5.0	36	-40~125
74HC365	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC366	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC367	Hex buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	8.0	36	-40~125
74HC368	Hex inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC3G04	Triple inverter	2.0 - 6.0	CMOS	±5.2	50	8.0	36	-40~125
74HC3G06	Triple inverter; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G07	Triple buffer; open drain	2.0 - 6.0	CMOS	5.2	50	9.0	36	-40~125
74HC3G14	Triple inverter; Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	16	36	-40~125
74HC3G16	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3G34	Triple buffer	2.0 - 6.0	CMOS	±5.2	50	9.0	36	-40~125
74HC3GU04	Triple inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	6.0	36	-40~125
74HC540	Octal inverter/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	9.0	36	-40~125
74HC541	Octal buffer/line driver (3-state)	2.0 - 6.0	CMOS	±7.8	50	10	36	-40~125
74HC7014	Hex buffer; precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	50	27	36	-40~125
74HC7540	Octal inverter/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	11	36	-40~125
74HC7541	Octal buffer/line driver; Schmitt-trigger (3-State)	2.0 - 6.0	CMOS	±7.8	15	10	36	-40~125
74HC9114	9-bit inverter; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HC9115	9-bit buffer; Schmitt-trigger; open-drain (3-state)	2.0 - 6.0	CMOS	5.2	15	12	36	-40~125
74HCT04	Hex inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	8.0	36	-40~125
74HCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	17	36	-40~125
74HCT1G04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±2	50	8.0	36	-40~125
74HCT1G125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G126	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±2	50	10	36	-40~125
74HCT1G14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2	50	15	36	-40~125
74HCT240	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	9.0	36	-40~125
74HCT241	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT244	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT2G04	Dual inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT2G125	Dual buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	12	36	-40~125
74HCT2G14	Dual inverter; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125
74HCT2G17	Dual buffer; Schmitt-trigger; TTL-enabled	4.5 to 5.5	TTL	±4	50	21	36	-40~125
74HCT2G34	Dual buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	32	-40~125
74HCT365	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT366	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT367	Hex buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT368	Hex inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT3G04	Triple inverter; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G06	Triple inverter; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125

Buffers/Inverters/Drivers

Types in **bold** represent new products

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74HCT3G07	Triple buffer; open drain; TTL-enabled	4.5 - 5.5	TTL	4	50	9.0	36	-40~125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	50	21	36	-40~125
74HCT3G16	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT3G34	Triple buffer; TTL-enabled	4.5 - 5.5	TTL	±4	50	10	36	-40~125
74HCT540	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	11	36	-40~125
74HCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	12	36	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-State)	4.5 - 5.5	TTL	±6	15	16	36	-40~125
74HCT9114	9-bit inverter Schmitt-trigger; open-drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	15	13	36	-40~125
74HCU04	Hex inverter; unbuffered	2.0 - 6.0	CMOS	±5.2	50	5.0	36	-40~125
74LV04	Hex inverter	1.0 - 5.5	CMOS	±12	50	6.0	30	-40~125
74LV04AT	Hex buffer	4.5 - 5.5	TTL	±12	15	3.3	60	-40~125
74LV05A	Hex inverter; open-drain	2.0 - 5.5	CMOS	12	15	2.9	60	-40~125
74LV07A	Hex buffer; open-drain	2.0 - 5.5	CMOS	16	15	3.6	60	-40~125
74LV07AT	Hex buffer; open-drain; TTL-enabled	4.5 - 5.5	TTL	16	15	3.5	60	-40~125
74LV14	Hex inverter; Schmitt-trigger	1.0 - 5.5	TTL	±12	50	13	30	-40~125
74LV14A	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV17A	Hex buffer; Schmitt-trigger	2.0 - 5.5	CMOS	±12	15	3.4	60	-40~125
74LV1T04	Single supply translating inverter	1.6 - 5.5	CMOS	±8	15	3.1	60	-40~125
74LV1T34	Single supply translating buffer	1.6 - 5.5	CMOS	±8	15	3.1	60	-40~125
74LV1T125	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	3.2	60	-40~125
74LV1T126	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	CMOS	±8	15	3.2	60	-40~125
74LV244	Octal buffer/line driver (3-state)	1.0 - 5.5	CMOS	±16	50	8.0	30	-40~125
74LV244A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV244AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LV365	Hex buffer/line driver (3-state)	1.0 - 3.6	CMOS	±8	50	9.0	30	-40~125
74LV540A	Octal buffer/line driver (3-state); inverting	1.65 - 5.5	CMOS/LVTTL	±16	15	3.1	60	-40~125
74LV541A	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±16	15	2.9	60	-40~125
74LV541AT	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	15	2.8	60	-40~125
74LVC04A	Hex inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC06A	Hex inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC07A	Hex buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC125A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC126A	Quad buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	175	-40~125
74LVC14A	Hex inverter; Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	50	3.2	175	-40~125
74LVC162244A	16-bit buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125
74LVC16240A	16-bit inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC16241A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.9	175	-40~125
74LVC16244A	16-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVC1G04	Single inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G06	Single inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC1G07	Single buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.2	175	-40~125
74LVC1G125	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.1	175	-40~125

Buffers/Inverters/Drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVC1G126	Single buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.0	175	-40~125
74LVC1G14	Single inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G16	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1G17	Single buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.0	175	-40~125
74LVC1G34	Single buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC1GU04	Single inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	1.6	175	-40~125
74LVC2244A	Octal buffer/line driver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	3.1	175	-40~125
74LVC240A	Octal inverter/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.5	175	-40~125
74LVC244A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LVC2G04	Dual inverter	1.65 - 5.5	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVC2G06	Dual inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.3	175	-40~125
74LVC2G07	Dual buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.6	175	-40~125
74LVC2G125	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC2G126	Dual buffer/line driver; TTL-enabled (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.4	175	-40~125
74LVC2G14	Dual inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.9	175	-40~125
74LVC2G16	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC2G17	Dual buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC2G240	Dual inverter/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.5	175	-40~125
74LVC2G241	Dual buffer/line driver (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	50	2.6	175	-40~125
74LVC2G34	Dual buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC2GU04	Dual inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC3G04	Triple inverter	1.65 - 5.5	CMOS/LVTTL	±32	50	2.7	175	-40~125
74LVC3G06	Triple inverter; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.0	175	-40~125
74LVC3G07	Triple buffer; open drain	1.65 - 5.5	CMOS/LVTTL	32	50	2.1	175	-40~125
74LVC3G14	Triple inverter; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.2	175	-40~125
74LVC3G16	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVC3G17	Triple buffer; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	50	3.6	175	-40~125
74LVC3G34	Triple buffer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	175	-40~125
74LVC3GU04	Triple inverter; unbuffered	1.65 - 5.5	CMOS/LVTTL	±32	50	2.3	175	-40~125
74LVC541A	Octal buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.3	175	-40~125
74LVC827A	10-bit buffer/line driver (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	4.0	175	-40~125
74LVCH162244A	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	50	2.9	175	-40~125
74LVCH16244A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	3.0	175	-40~125
74LVCH16541A	16-bit buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.7	175	-40~125
74LVCH244A	Octal buffer/line driver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.8	175	-40~125
74LVCU04A	Hex inverter; unbuffered	1.2 - 3.6	CMOS/LVTTL	±24	50	2.0	175	-40~125
74LVT04	Hex inverter	2.7 - 3.6	TTL	-20 / 32	50	2.6	150	-40~85
74LVT125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVT126	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.4	150	-40~85
74LVT14	Hex inverter; Schmitt-trigger	2.7 - 3.6	TTL	-32 / 64	50	3.8	150	-40~85
74LVT162240A	16-bit inverter/line driver with bus hold and 30 Ω termination (3-state)	2.7 - 3.6	TTL	±12	50	2.6	150	-40~85
74LVT162244B	16-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.8	150	-40~85
74LVT16240A	16-bit inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85

Buffers/Inverters/Drivers

Type numbe	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	Output Load CL (pF)	t _{pd} (ns)	f _{max} (MHz)	T _{amb} (°C)
74LVT16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74LVT2241	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	3.3	150	-40~85
74LVT2244	Octal buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	50	2.9	150	-40~85
74LVT240	Octal inverter/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.5	150	-40~85
74LVT241	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.8	150	-40~85
74LVT244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVT244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTH125	Quad buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.9	150	-40~85
74LVTH16244B	16-bit buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74LVTH244A	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.6	150	-40~85
74LVTH244B	Octal buffer/line driver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	50	2.0	150	-40~85
74LVTN16244B	16-bit buffer/line driver (3-state)	2.7 - 3.6	TTL	-32 / 64	50	1.8	150	-40~85
74VHC125	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.0	60	-40~125
74VHC126	Quad buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.3	60	-40~125
74VHC14	Hex inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
74VHC244	Octal inverter/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHC541	Octal buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
74VHCT125	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT126	Quad buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.0	60	-40~125
74VHCT14	Hex inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
74VHCT244	Octal inverter/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	5.0	60	-40~125
74VHCT541	Octal buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
HEF40098B	Hex inverter	3.0 - 15.0	CMOS	-10 / 20	50	25	10	-40~125
HEF40244B	Octal buffer/line driver (3-state)	3.0 - 15.0	CMOS	-62 / 45	50	30	10	-40~125
HEF4049B	Hex inverter/line driver	3.0 - 15.0	CMOS	-3 / 20	50	20	10	-40~125
HEF4050B	Hex buffer/line driver	3.0 - 15.0	CMOS	-3 / 20	50	40	10	-40~125
HEF4069UB	Hex inverter; unbuffered	3.0 - 15.0	CMOS	±3.4	50	15	10	-40~125
PDI1284P11	Printer parallel interface transceiver/buffer	3.0 - 3.6	LVTTTL	±14	50	13.9		0~70
XC7SET04	Single inverter; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.5	60	-40~125
XC7SET125	Single buffer/line driver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.4	60	-40~125
XC7SET14	Single inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125
XC7SH04	Single inverter	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7SH125	Single buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7SH14	Single inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7SHU04	Single inverter; unbuffered	2.0 - 5.5	CMOS	±8	50	3.5	60	-40~125
XC7WH126	Dual buffer/line driver (3-state)	2.0 - 5.5	CMOS	±8	50	3.4	60	-40~125
XC7WH14	Triple inverter; Schmitt-trigger	2.0 - 5.5	CMOS	±8	50	3.2	60	-40~125
XC7WT14	Triple inverter; Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	50	4.1	60	-40~125

Schmitt-triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40~125
74AHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74AHC1G14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC1G17	Single buffer Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC3G14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125
74AHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	60	6	-40~125
74AHCT17A	Hex buffer Schmitt-trigger	4.5 - 5.5	TTL	±8	3.2	50	60	8	-40~125
74AHCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT1G17	Single buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
74AHCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125
74AHCV07A	Hex buffer Schmitt-trigger; open-drain	1.8 - 5.5	CMOS	16	3.8	15	60	6	-40~125
74AHCV14A	Hex inverter Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV17A	Hex buffer Schmitt-trigger	1.8 - 5.5	CMOS	±16	3.2	15	60	6	-40~125
74AHCV244A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74AHCV245A	Octal transceiver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	15	60	8	-40~125
74AHCV541A	Octal buffer/line driver Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.0	15	60	8	-40~125
74ALVC14	Hex inverter Schmitt-trigger	1.65 - 3.6	TTL	±24	2.4	50	150	6	-40~85
74AUP1G132	Single 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10.0	30	70	1	-40~125
74AUP1G14	Single inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40~125
74AUP1G17	Single buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	1	-40~125
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AUP2G14	Dual inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	4.7	30	70	2	-40~125
74AUP2G17	Dual buffer Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	7.8	30	70	2	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	2	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	2	-40~125

Schmitt-triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP3G14	Triple inverter Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AUP3G17	Triple Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	2.4	30	70	3	-40~125
74AXP1G14	Single inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	1	-40~85
74AXP1G17	Single buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1T14	Dual-supply Schmitt-trigger inverter	0.75 - 2.75	CMOS	±12	4.9	5	45	1	-40~125
74AXP1T57	Single dual-supply translating configurable gate; Schmitt-trigger inputs	0.75 - 2.75	CMOS	±12	4.8	5	45	1	-40~125
74AXP2G14	Dual inverter Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.9	5	70	2	-40~85
74AXP2G17	Dual buffer Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	2.8	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HC14	Hex inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	6	-40~125
74HC1G14	Single inverter Schmitt-trigger	2.0 - 6.0	CMOS	±2.6	10	50	36	1	-40~125
74HC2G14	Dual inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	2	-40~125
74HC2G17	Dual buffer Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	12	50	36	2	-40~125
74HC3G14	Triple inverter Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	16	50	36	3	-40~125
74HC7014	Hex buffer precision Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	27	50	36	6	-40~125
74HC7540	Octal inverter/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC7541	Octal buffer/line driver Schmitt-trigger (3-state)	2.0 - 6.0	CMOS	±7.8	11	50	36	8	-40~125
74HC9114	9-bit inverter Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40~125
74HC9115	9-bit buffer Schmitt-trigger; open drain (3-state)	2.0 - 6.0	CMOS	5.2	12	50	36	9	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74HCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	6	-40~125
74HCT1G14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±2.0	15	50	36	1	-40~125
74HCT2G14	Dual inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125
74HCT2G17	Dual buffer Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	2	-40~125
74HCT3G14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4.0	21	50	36	3	-40~125
74HCT7540	Octal inverter/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125
74HCT7541	Octal buffer/line driver Schmitt-trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	16	50	36	8	-40~125

Schmitt-triggers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74HCT9114	9-bit inverter Schmitt-trigger; open drain; TTL-enabled (3-state)	4.5 - 5.5	TTL	4	13	50	36	9	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LV14	Hex inverter Schmitt-trigger	1.0 - 5.5	TTL	±12	13	50	30	6	-40~125
74LV14A	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±12	3.4	15	60	6	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	175	4	-40~125
74LVC14A	Hex inverter Schmitt-trigger	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	175	6	-40~125
74LVC1G14	Single inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G17	Single buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.0	50	175	1	-40~125
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	6.3	50	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	8.4	50	150	1	-40~125
74LVC2G14	Dual inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.9	50	175	2	-40~125
74LVC2G17	Dual buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	2	-40~125
74LVC3G14	Triple inverter Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.2	50	175	3	-40~125
74LVC3G17	Triple buffer Schmitt-trigger	1.65 - 5.5	CMOS/LVTTL	±32	3.6	50	175	3	-40~125
74LVT14	Hex inverter Schmitt-trigger	2.7 - 3.6	TTL	±32	3.8	50	150	6	-40~125
74VHC14	Hex inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	6	-40~125
74VHCT14	Hex inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	6	-40~125
HEF40106B	Hex inverter Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	6	-40~85
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~125
XC7SET14	Single inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	1	-40~125
XC7SH14	Single inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
XC7WH14	Triple inverter Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.2	50	60	3	-40~125
XC7WT14	Triple inverter Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.1	50	60	3	-40~125

Transceivers

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _{vv} (°C)
74ABT162245A	16-bit transceiver with 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	100	-40~85
74ABT16245B	16-bit transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.3	16	150	-40~85
74ABT245	Octal transceiver (3-state)	4.5 - 5.5	TTL	-32 / 64	2.9	8	100	-40~85
74ABTH162245A	16-bit transceiver with bus hold and 30 ohm termination resistors (3-state)	4.5 - 5.5	TTL	-32 / 12	3.0	16	80	-40~85
74AHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40~125
74AHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40~125
74AHCT245A	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.0	8	60	-40~125
74AHCV245A	Octal transceiver; Schmitt-trigger (3-state)	1.8 - 5.5	CMOS	±16	3.2	8	60	-40~125
74ALVC16245	16-bit transceiver (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
74ALVC245	Octal transceiver (3-state)	1.65 - 3.6	TTL	±24	2.3	8	130	-40~85
74ALVCH162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±12	2.4	16	150	-40~85
74ALVCH16245	16-bit transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	1.9	16	150	-40~85
74ALVCH162601	18-bit universal bus transceiver with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±12	3.1	18	150	-40~85
74ALVCH16500	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.9	18	150	-40~85
74ALVCH16501	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16543	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.8	16	150	-40~85
74ALVCH16600	18-bit universal bus transceiver with bus hold; negative edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16601	18-bit universal bus transceiver with bus hold; positive edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.8	18	150	-40~85
74ALVCH16646	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16652	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	2.6	16	150	-40~85
74ALVCH16952	16-bit registered transceiver with bus hold (3-state)	1.65 - 3.6	TTL	±24	3.2	16	150	-40~85
74ALVT162245	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	2.3	16	75	-40~85
74AVC16245	16-bit transceiver (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74AVC4T774	4-bit dual supply translating transceiver (3-state)	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	4	200	-40~125
74AVCH16245	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS	±12	2.0	16	200	-40~85
74HC245	Octal transceiver (3-state)	2.0 - 6.0	CMOS	±7.8	7.0	8	36	-40~125
74HCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	10	8	36	-40~125
74LV245	Octal transceiver (3-state)	1.0 - 5.5	TTL	±16	7.0	8	30	-40~125
74LV245A	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±16	3	8	60	-40~125
74LV245AT	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±16	3	8	60	-40~125
74LVC162245A	16-bit transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	16	175	-40~125
74LVC16245A	16-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	3.0	16	175	-40~125
74LVC2245A	Octal transceiver with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	8	175	-40~125
74LVC245A	Octal transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.9	8	175	-40~125
74LVC32245A	32-bit transceiver (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.2	32	175	-40~125
74LVCH162245A	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTTL	±12	3.3	16	175	-40~125
74LVCH16245A	16-bit transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	3.0	16	175	-40~125
74LVCH245A	Octal transceiver with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTTL	±24	2.9	8	175	-40~125

Transceivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Number of bits	f _{max} (MHz)	T _{vv} (°C)
74LVT162245B	16-bit transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	2.5	16	150	-40~85
74LVT16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2.2	16	150	-40~85
74LVT16543A	16-bit registered transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	2	16	150	-40~85
74LVT2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40~85
74LVT245	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40~85
74LVT245B	Octal transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	2	8	150	-40~85
74LVT640	Octal transceiver with bus hold; inverting (3-state)	2.7 - 3.6	TTL	-32 / 64	2.4	8	150	-40~85
74LVTH16245B	16-bit transceiver with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74LVTH2245	Octal transceiver with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	±12	3.2	8	150	-40~85
74LVTN16245B	16-bit transceiver (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	16	150	-40~85
74VHC245	Octal transceiver (3-state)	2.0 - 5.5	CMOS	±8	3.5	8	60	-40~125
74VHCT245	Octal transceiver; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	5.0	8	60	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

Type number	Description	V _{CC(A)} (V)	V _{CC(B)} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74ALVC164245	16-bit dual-supply voltage-translating transceiver (3-state)	1.5 - 5.5	1.5 - 3.6	CMOS/LVTTL	±24	2.9	50	16	-40~85
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	n.a.	CMOS	±4	3.7	15	1	-40~125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T04	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T14	Single supply voltage-translating inverter	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T17	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3.6	n.a.	CMOS	±4	3.6	15	1	-40~125
74AUP1T34	Single dual-supply translating buffer	1.1 - 3.6	1.1 - 3.6	CMOS	±4	3.9	15	1	-40~125
74AUP1T45	Single dual-supply voltage-translating transceiver (3-state)	1.1 - 3.6	1.1 - 3.6	CMOS	±4	4.5	15	1	-40~125
74AUP1T50	Single supply voltage-translating buffer	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T86	Single supply 2-input voltage-translating XOR gate	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	0
74AUP1T87	Single supply 2-input voltage-translating XNOR gate	2.3 - 3.6	n.a.	CMOS	±4	8.7	15	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	n.a.	CMOS	±4	3.8	15	1	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

Type number	Description	V _{CC(A)} (V)	V _{CC(B)} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	1.1 - 3.6	CMOS	±4	3.8	15	2	-40~125
74AVC1T1004	1-to-4 fan-out buffer	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	4.9	15	1	-40~125
74AVC1T8128	Single dual-supply translating 2-input NOR with enable	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	2.4	15	1	-40~125
74AVC1T8832	Single dual-supply translating 2-input OR with strobe	0.8 - 3.6	n.a.	CMOS/ LVTTTL	±12	2.4	15	1	-40~125
74AVC16T245	16-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	16	-40~125
74AVC1T1022	1-to-4 fan out buffer	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVC1T45	Single dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVC20T245	20-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	30	20	-40~125
74AVC2T245	2-bit dual-supply voltage-translating transceiver	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVC32T245	32-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	32	-40~125
74AVC4T245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVC4T774	4-bit dual supply translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	15	4	-40~125
74AVC4T3144	4-bit dual-supply buffer/level-translator (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	15	4	-40~125
74AVC4TD245	4-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	8	-40~125
74AVCH16T245	16-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	16	-40~125
74AVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	1	-40~125
74AVCH20T245	20-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	3.5	30	20	-40~125
74AVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	2	-40~125
74AVCH4T245	4-bit dual-supply voltage-translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS/ LVTTTL	±12	2.1	30	4	-40~125
74AVCH8T245	8-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	0.8 - 3.6	CMOS	±12	2.1	15	8	-40~125
74AXP1T125	Dual-supply buffer/line driver (3-state)	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP1T14	Dual-supply schmitt-trigger inverter	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T32	Dual-supply 2-input or gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T34	Single dual-supply voltage-translating buffer	0.7 - 2.75	1.2 - 5.5	CMOS	±12	3.4	50	1	-40~125
74AXP1T57	Schmitt-trigger inputs, Dual supply configurable multiple function gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~85
74AXP2T08	Dual-supply 2-input AND gate	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74AXP2T3407	Dual-supply single buffer and single buffer with open drain	0.7 - 2.75	1.2 - 5.5	CMOS	±12	4.8	50	1	-40~125
74HC4049	Hex inverter with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	8.0	50	6	-40~125
74HC4050	Hex buffer with 15 V-tolerant inputs	2.0 - 6.0	n.a.	CMOS	±5.2	7.0	50	6	-40~125
74LV1T00	Single supply 2-input translating NAND gate	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T02	Single supply 2-input translating NOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T04	Single supply translating inverter	1.6 - 5.5	n.a.	CMOS	±8	4.1	15	1	-40~125

Voltage translators (level-shifters)

Types in **bold** represent new products

Type number	Description	V _{CC(A)} (V)	V _{CC(B)} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74LV1T08	Single supply 2-input translating AND gate	1.6 - 5.5	n.a.	CMOS	±8	4.1	15	1	-40~125
74LV1T32	Single supply 2-input translating OR gate	1.6 - 5.5	n.a.	CMOS	±8	3.2	15	1	-40~125
74LV1T34	Single supply translating buffer	1.6 - 5.5	n.a.	CMOS	±8	3.1	15	1	-40~125
74LV1T86	Single supply 2-input translating XOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.4	15	1	-40~125
74LV1T87	Single supply 2-input translating XNOR gate	1.6 - 5.5	n.a.	CMOS	±8	3.4	15	1	-40~125
74LV1T125	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	n.a.	CMOS	±8	3.2	15	1	-40~125
74LV1T126	Single supply translating buffer / line driver (3-state)	1.6 - 5.5	n.a.	CMOS	±8	2.9	15	1	-40~125
74LVC1T45	Single dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	1	-40~125
74LVC2T45	Dual-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	2	-40~125
74LVC4245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
74LVC4245A	8-bit dual-supply voltage translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
74LVC8T245	8-bit dual-supply voltage-translating transceiver (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register; 3-state	1.1 - 5.5	1.1 - 5.5	CMOS/ LVTTTL	±24	4.1	15	8	-40~125
74LVCH1T45	Single dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	1	-40~125
74LVCH2T45	Dual-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	2.5	50	2	-40~125
74LVCH8T245	8-bit dual-supply voltage-translating transceiver with bus hold (3-state)	1.2 - 5.5	1.2 - 5.5	CMOS/ LVTTTL	±24	3.5	50	8	-40~125
HEF4104B	Quad low-to-high voltage translator (3-state)	3.0 - 15	3.0 - 15	CMOS	±2.4	3.4	50	16	-40~85

Analog Switches

Type number	Description	V _{CC} (V)	Logic switching levels	R _{ON} (Ω)	R _{ON(FLAT)} (Ω)	f _{-3dB} (MHz)	T _{HD} (%)	X _{talk} (dB)	T _{amb} (°C)
74AHC1G66	Single-pole, single-throw analog switch	2.0 - 5.5	CMOS	40	14	280	0.015		-40~125
74AHCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	40	14	280	0.015		-40~125
74HC1G66	Single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02		-40~125
74HC2G66	Dual single-pole, single-throw analog switch	2.0 - 9.0	CMOS	105	23	200	0.02	-60	-40~125
74HC4016	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4051	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4052	Dual single-pole, quad-throw analog switch	2.0 - 10	CMOS	200	20	180	0.02	-60	-40~125
74HC4053	Triple single-pole, double-throw analog switch	2.0 - 10	CMOS	200	20	170	0.02		-40~125
74HC4066	Quad single-pole, single-throw analog switch	2.0 - 10	CMOS	105	23	200	0.02	-60	-40~125
74HC4067	Single-pole, 16-throw analog switch	2.0 - 10	CMOS	200	25	100	0.02		-40~125
74HC4316	Quad single-pole, single-throw analog switch with translation	2.0 - 10	CMOS	300	80	160	0.4	-60	-40~125
74HC4351	Single-pole, octal-throw analog switch with latch	2.0 - 10	CMOS	200	20	180	0.02		-40~125
74HC4851	Single-pole, octal-throw analog switch	2.0 - 10	CMOS	220					-40~125
74HC4852	Dual single-pole, quad-throw analog switch; TTL-enabled	2.0 - 10	CMOS	220					-40~125
74HCT1G66	Single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04		-40~125
74HCT2G66	Dual single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4051	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4052	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04	-60	-40~125
74HCT4053	Triple single-pole, double-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	20	160	0.04		-40~125
74HCT4066	Quad single-pole, single-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	118	23	180	0.04	-60	-40~125
74HCT4067	Single-pole, 16-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	225	25	90	0.04		-40~125
74HCT4316	Quad single-pole, single-throw analog switch with translation; TTL-enabled	4.5 - 5.5	TTL	400	50	150	0.8	-60	-40~125
74HCT4351	Single-pole, octal-throw analog switch with latch; TTL-enabled	4.5 - 5.5	TTL	225	20	170	0.04		-40~125
74HCT4851	Single-pole, octal-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74HCT4852	Dual single-pole, quad-throw analog switch; TTL-enabled	4.5 - 5.5	TTL	240					-40~125
74LV4051	Single-pole, octal-throw analog switch	1.0 - 6.0	TTL	135	35	200	0.4	-60	-40~125
74LV4052	Dual single-pole, quad-throw analog switch	1.0 - 6.0	TTL	125	15	180	0.4	-60	-40~125
74LV4053	Triple single-pole, double-throw analog switch	1.0 - 6.0	TTL	150	30	180	0.4	-60	-40~125
74LV4066	Quad single-pole, single-throw analog switch	1.0 - 6.0	TTL	50	3.0	180	0.02	-60	-40~125
74LVC1G3157	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G384	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC1G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC1G66	Single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.001		-40~125
74LVC2G3157	Dual single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078	-54	-40~125
74LVC2G53	Single-pole, double-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	300	0.078		-40~125
74LVC2G66	Dual single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-56	-40~125
74LVC4066	Quad single-pole, single-throw analog switch	1.65 - 5.5	CMOS/ LVTTTL	15	1.5	440	0.005	-58	-40~125
74LVCV2G66	Dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 - 5.5	CMOS/ LVTTTL	15	3.0	210	0.01	-55	-40~125
HEF4016B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	350	65	90	0.04	-50	-40~85
HEF4051B	Single-pole, octal-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4052B	Dual single-pole, quad-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4053B	Triple single-pole, double-throw analog switch	3.0 - 15	CMOS	175	30	70	0.04	-50	-40~85
HEF4066B	Quad single-pole, single-throw analog switch	3.0 - 15	CMOS	175	20	90	0.04	-50	-40~85
HEF4067B	Single-pole, 16-throw analog switch	3.0 - 15	CMOS	175	20	13	0.04	-50	-40~85

Bus Switches

Type number	Description	V _{CC} (V)	V _{PASS} (V)	Logic switching levels	R _{ON} (Ω)	f _(-3dB) (MHz)	Number of bits	t _{pd} (ns)	T _{amb} (°C)
74CB3Q3253	Dual 1-of-4 FET multiplexer/ demultiplexer with charge pump	2.3 - 3.6	V _{CC}	CMOS/LVTTL	4	500	2	0.2	-40~85
74CB3Q3257	Quad 1-of-2 FET multiplexer/ demultiplexer with charge pump	2.3 - 3.6	V _{CC}	CMOS/LVTTL	4	500	4	0.2	-40~85
74CBTLV16211	24-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV1G125	Single bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	1	0.2	-40~125
74CBTLV3125	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3126	Quad bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3244	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3245	Octal bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLV3253	Dual 4:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3257	Quad 2:1 mux/demux	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	4	0.2	-40~125
74CBTLV3306	2-bit bus switch	2.3 - 3.6	5.0	CMOS/LVTTL	7	400	2	0.2	-40~125
74CBTLV3384	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLV3861	10-bit bus switch	2.3 - 3.6	3.3	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3244	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3245	Octal bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	8	0.2	-40~125
74CBTLVD3384	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
74CBTLVD3861	10-bit bus switch level translator	3.0 - 3.6	1.8	CMOS/LVTTL	7	400	10	0.2	-40~125
CBT16210	20-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	20	0.25	-40~85
CBT3125	Quad bus switch	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3244A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3245A	Octal bus switch	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3251	8:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	8	0.25	-40~85
CBT3253	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3253A	Dual 4:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3257A	Quad 2:1 mux/demux	4.5 - 5.5	3.9	TTL	7	300	4	0.25	-40~85
CBT3306	Dual bus switch	4.5 - 5.5	3.9	TTL	7	300	2	0.25	-40~85
CBT3861	10-bit bus switch	4.5 - 5.5	3.9	TTL	7	300	10	0.25	-40~85
CBTD16210	20-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	20	0.25	-40~85
CBTD3306	Dual bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	2	0.25	-40~85
CBTD3384	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85
CBTD3861	10-bit bus switch level translator	4.5 - 5.5	3.3	TTL	7	300	10	0.25	-40~85

Decoders/Demultiplexers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74AHC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 5.5	CMOS	±8	4.4	50	-40~125
74AHC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 5.5	CMOS	±8	3.9	50	-40~125
74AHCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±8	4.4	50	-40~125
74AHCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	-40~125
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 - 3.6	CMOS	±1.9	3.2	30	-40~125
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 - 3.6	CMOS	±1.9	3.0	30	-40~125
74HC137	3-to-8 line decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC138	3-to-8 line decoder/demultiplexer; inverting	2.0 - 6.0	CMOS	±5.2	12	50	-40~125
74HC139	Dual 2-to-4 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC154	4-to-16 line decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	11	50	-40~125
74HC237	3-to-8 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	18	50	-40~125
74HC238	3-to-8 decoder/demultiplexer	2.0 - 6.0	CMOS	±5.2	14	50	-40~125
74HC42	BCD to decimal decoder (1-of-10)	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HC4511	BCD to 7-segment latch/decoder/driver with lamp test input	2.0 - 6.0	CMOS	-10	28	50	-40~125
74HC4514	4-to-16 decoder/demultiplexer with address latches	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HC4515	4-to-16 decoder/demultiplexer with address latches; inverting	2.0 - 6.0	CMOS	±5.2	29	50	-40~125
74HCT138	3-to-8 line decoder/demultiplexer; inverting; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	-40~125
74HCT139	Dual 2-to-4 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	-40~125
74HCT154	4-to-16 line decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	-40~125
74HCT238	3-to-8 decoder/demultiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40~125
74HCT4511	BCD to 7-segment latch/decoder/driver with lamp test input; TTL-enabled	4.5 - 5.5	TTL	-10	28	50	-40~125
74HCT4514	4-to-16 decoder/demultiplexer with address latches; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV138	3-to-8 line decoder/demultiplexer; inverting	1.0 - 5.5	TTL	±12	12	50	-40~125
74LVC138A	3-to-8 line decoder/demultiplexer; inverting	1.2 - 3.6	CMOS/LVTTL	±24	2.7	50	-40~125
74LVC139	Dual 2-to-4 line decoder/demultiplexer	1.2 - 3.6	CMOS/LVTTL	±24	2.5	50	-40~125
74LVC1G18	1-to-2 demultiplexer (3-state)	1.65 - 5.5	CMOS/LVTTL	±32	2.3	50	-40~125
74LVC1G19	1-to-2 decoder/demultiplexer	1.65 - 5.5	CMOS/LVTTL	±32	1.8	50	-40~125
HEF4028B	1-of-10 decoder	3.0 - 15.0	CMOS	±2.4	30	50	-40~85
HEF4543B	BCD to 7-segment latch/decoder/driver with phase input	3.0 - 15.0	CMOS	±2.4	55	50	-40~85
HEF4555B	Dual 1-to-4 line decoder/demultiplexer	3.0 - 15.0	CMOS	±2.4	30	50	-40~85

Digital Multiplexers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	Output Load C _L (pF)	t _{pd} (ns)	T _{amb} (°C)
74AHC157	Quad 2-input multiplexer	2.0 - 5.5	CMOS	±8	50	3.2	-40~125
74AHC257	Quad 2-input multiplexer (3-state)	2.0 - 5.5	CMOS	±8	50	2.9	-40~125
74AHCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±8	50	3.2	-40~125
74AHCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	50	3.7	-40~125
74AUP1G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP1G158	Single 2-input multiplexer; inverting	1.1 - 3.6	CMOS	±1.9	30	3.2	-40~125
74AUP2G157	Single 2-input multiplexer	1.1 - 3.6	CMOS	±1.9	30	3.4	-40~125
74AXP1G157	Single 2-input multiplexer	0.7 - 2.75	CMOS	±4.5	5	2.7	-40~85
74HC151	8-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC153	Dual 4-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	17	-40~125
74HC157	Quad 2-input multiplexer	2.0 - 6.0	CMOS	±5.2	50	11	-40~125
74HC158	Quad 2-input multiplexer; inverting	2.0 - 6.0	CMOS	±5.2	50	12	-40~125
74HC251	8-input multiplexer (3-state)	2.0 - 6.0	CMOS	±5.2	50	18	-40~125
74HC253	Dual 4-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	17	-40~125
74HC257	Quad 2-input multiplexer (3-state)	2.0 - 6.0	CMOS	±7.8	50	11	-40~125
74HCT151	8-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT153	Dual 4-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	19	-40~125
74HCT157	Quad 2-input multiplexer; TTL-enabled	4.5 - 5.5	TTL	±4	50	13	-40~125
74HCT251	8-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±4	50	22	-40~125
74HCT253	Dual 4-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	17	-40~125
74HCT257	Quad 2-input multiplexer; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	50	13	-40~125
74LVC157A	Quad 2-input multiplexer	1.2 - 3.6	CMOS/LVTTL	±24	50	2.5	-40~125
74LVC1G157	Single 2-input multiplexer	1.65 - 5.5	CMOS/LVTTL	±32	50	2.2	-40~125
74LVC257A	Quad 2-input multiplexer (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	50	2.4	-40~125

Shift Registers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74HC194	4-bit bidirectional parallel or serial-in/parallel-out shift register	2.0 - 6.0	CMOS	+/- 5.2	14	102	4	-40~125
74AHC164	8-bit serial-in/parallel-out shift register	2.0 - 5.5	CMOS	+/- 8	4.5	115	8	-40~125
74AHCT164	8-bit serial-in/parallel-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 8	3.4	115	8	-40~125
74AHC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 5.5	CMOS	+/- 8	4.1	160	8	-40~125
74AHCT594	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled	4.5 - 5.5	TTL	+/- 8	3.8	160	8	-40~125
74AHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40~125
74AHCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 8	3.8	170	8	-40~125
74HC299	8-bit universal shift register (3-state)	2.0 - 6.0	CMOS	+/- 7.8	19	54	8	-40~125

Shift Registers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74HC164	8-bit serial-in/parallel-out shift register	2.0 - 6.0	CMOS	+/- 5.2	12	78	8	-40~125
74HCT164	8-bit serial-in/parallel-out shift register; TTL enabled	2.0 - 6.0	TTL	+/- 5.2	12	78	8	-40~125
74HC165	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	16	56	8	-40~125
74HCT165	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4	14	48	8	-40~125
74HC166	8-bit parallel or serial-in/serial-out shift register	2.0 - 6.0	CMOS	+/- 5.2	15	63	8	-40~125
74HCT166	8-bit parallel or serial-in/serial-out shift register; TTL enabled	4.5 - 5.5	TTL	+/- 4.0	23	50	8	-40~125
74HC594	8-bit serial-in/parallel-out shift register with output storage register	2.0 - 6.0	CMOS	+/- 7.8	14	109	8	-40~125
74HCT594	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled	4.5 - 5.5	TTL	+/- 6	15	100	8	-40~125
74HC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 6.0	CMOS	+/- 7.8	16	108	8	-40~125
74HCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 6	25	57	8	-40~125
74HC597	8-bit parallel or serial-in/parallel-out shift register with parallel input storage register	2.0 - 6.0	CMOS	+/- 5.2	16	108	8	-40~125
74HCT597	8-bit parallel or serial-in/parallel-out shift register with parallel input storage register; TTL enabled	4.5 - 5.5	TTL	+/- 4	20	83	8	-40~125
74HC4094	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	2.0 - 6.0	CMOS	+/- 5.2	15	95	8	-40~125
74HCT4094	8-bit serial-in/serial or parallel-out shift register with output register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 4	19	86	8	-40~125
74LV164	8-bit serial-in/parallel-out shift register	1.0 - 5.5	CMOS	+/- 12	12	78	8	-40~125
74LV165	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	18	78	8	-40~125
74LV165A	8-bit parallel or serial-in/serial-out shift register	1.0 - 5.5	CMOS	+/- 12	7.5	115	8	-40~125
74LV595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	1.0 - 3.6	CMOS	+/- 8	15	77	8	-40~125
74LV4094	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	1.0 - 3.6	CMOS	+/- 6	14	95	8	-40~125
74LVC594A	8-bit serial-in/parallel-out shift register with output storage register	1.2 - 5.5	CMOS/LVTTL	+/- 24	3.1	180	8	-40~125
74LVC595A	8-bit serial-in/parallel-out shift register with output storage register (3-state)	1.2 - 5.5	CMOS/LVTTL	+/- 24	4	180	8	-40~125
74LVC8T595	Dual supply 8-bit serial-in/serial-out or parallel-out shift register; 3-state	1.1 - 5.5	CMOS/LVTTL	±24	4.1	15	8	-40~125
74VHC595	8-bit serial-in/parallel-out shift register with output storage register (3-state)	2.0 - 5.5	CMOS	+/- 8	4	170	8	-40~125
74VHCT595	8-bit serial-in/parallel-out shift register with output storage register; TTL enabled (3-state)	4.5 - 5.5	TTL	+/- 8	3.8	170	8	-40~125
NPIC6C595	8-bit serial-in/parallel-out shift register with output storage register (3-state); open-drain	4.5 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C596	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state); open-drain	4.5 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C596A	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state); open-drain	2.3 - 5.5	CMOS	100	90	10	8	-40~125
NPIC6C4894	12-bit shift registers; open-drain	4.5 - 5.5	CMOS	100	90	10	12	-40~125
HEF4014B	8-bit shift register with synchronous parallel enable	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40~85
HEF4015B	dual 4-bit serial-in/parallel-out shift register	4.5 - 15	CMOS	+/- 2.4	40	44	2	-40~85
HEF4021B	8-bit shift register with asynchronous parallel load	4.5 - 15	CMOS	+/- 2.4	40	40	8	-40~85
HEF4094B	8-bit serial-in/serial or parallel-out shift register with output register (3-state)	4.5 - 15	CMOS	+/- 2.4	50	28	8	-40~85
HEF4557B	1-to-64 bit shift register with variable length	4.5 - 15	CMOS	+/- 2.4	65	20	64	-40~85
HEF4794B	8-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 15	CMOS	-20	45	28	8	-40~85
HEF4894B	12-bit serial-in/serial or parallel-out shift register with output register LED driver (3-state)	4.5 - 15	CMOS	-20	45	28	12	-40~85

Latches/Registered drivers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	Number of bits	T _{amb} (°C)
74AHC373	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.3	50	8	-40~125
74AHC573	Octal D-type transparent latch (3-state)	2.0 - 5.5	CMOS	±8	4.2	50	8	-40~125
74AHCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	3.9	50	8	-40~125
74ALVC162334A	16-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	16	-40~85
74ALVC162834A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162835A	18-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	18	-40~85
74ALVC162836A	20-bit registered driver with 30 Ω termination resistors (3-state)	1.65 - 3.6	TTL	±24	6.0	50	20	-40~85
74ALVC16834A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16835A	18-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	18	-40~85
74ALVC16836A	20-bit registered driver (3-state)	1.65 - 3.6	TTL	±24	4.0	50	20	-40~85
74ALVC373	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVC573	Octal D-type transparent latch (3-state)	1.65 - 3.6	TTL	±24	2.2	50	8	-40~85
74ALVCH16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	16	-40~85
74ALVCH16841	20-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.4	50	20	-40~85
74ALVCH16843	18-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	±24	2.1	50	18	-40~85
74ALVCH32973	16-bit transceiver and transparent D-type latch with 8 independent buffers	1.8 - 3.6	TTL	±24	2.5	50	16	-40~85
74ALVT16373	16-bit D-type transparent latch with bus hold (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	16	-40~85
74AUP1G373	Single D-type transparent latch (3-state)	1.1 - 3.6	CMOS	±1.9	8.5	30	1	-40~125
74AVC16334A	16-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16373	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	16	-40~85
74AVC16834A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16835A	18-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	18	-40~85
74AVC16836A	20-bit registered driver (3-state)	1.2 - 3.6	CMOS	±12	2.0	30	20	-40~85
74HC259	8-bit addressable latch	2.0 - 6.0	CMOS	±5.2	18	50	8	-40~125
74HC373	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	12	50	8	-40~125
74HC573	Octal D-type transparent latch (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	8	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HC75	Quad bistable transparent latch	2.0 - 6.0	CMOS	±5.2	11	50	4	-40~125
74HCT259	8-bit addressable latch; TTL-enabled	4.5 - 5.5	TTL	±4	20	50	8	-40~125
74HCT373	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	14	50	8	-40~125
74HCT573	Octal D-type transparent latch; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	8	-40~125
74LVC162373A	16-bit D-type transparent latch with 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±12	3.2	50	16	-40~125
74LVC16373A	16-bit D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125
74LVC373A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	8	-40~125
74LVC573A	Octal D-type transparent latch (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.4	50	8	-40~125
74LVCH162373A	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.2	50	16	-40~125
74LVCH16373A	16-bit D-type transparent latch with bus hold (3-state)	1.2 - 3.6	CMOS/LVTTL	±24	3.0	50	16	-40~125

Latches/Registered drivers

Type number	Description	V_{CC} (V)	Logic switching levels	Output drive capability (mA)	t_{pd} (ns)	Output Load C_L (pF)	Number of bits	T_{amb} (°C)
74LVT162373	16-bit D-type transparent latch with bus hold and 30 Ω termination resistors (3-state)	2.7 - 3.6	TTL	± 12	2.5	50	16	-40~85
74LVT16373A	16-bit D-type transparent latch with bus hold (3-state)	2.7 - 3.6	TTL	-32 / 64	1.9	50	16	-40~85
74LVT573	Octal D-type transparent latch (3-state)	2.7 - 3.6	TTL	-32 / 64	2.7	50	8	-40~85
HEF40373B	Octal D-type transparent latch (3-state)	3.0 - 15.0	CMOS	-50 / 62	40	50	8	-40~85
HEF4043B	Quad R/S latch with set and reset (3-state)	3.0 - 15.0	CMOS	± 2.4	25	50	4	-40~85

Flip-flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G79	Single D-type flip-flop; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.5	50	90	-40~125
74AHC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	4.2	50	165	-40~125
74AHC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	185	-40~125
74AHC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.9	50	175	-40~125
74AHC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 5.5	CMOS	±8	4.4	50	130	-40~125
74AHC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 5.5	CMOS	±8	3.7	50	170	-40~125
74AHCT1G79	Single D-type flip-flop; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	90	-40~125
74AHCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	120	-40~125
74AHCT374	Octal D-type flip-flop; positive-edge trigger (3-state)	4.5 - 5.5	TTL	±8	4.3	50	140	-40~125
74AHCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	4.0	50	140	-40~125
74AHCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±8	4.4	50	130	-40~125
74AHCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	160	-40~125
74ALVC374	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC574	Octal D-type flip-flop; positive-edge trigger (3-state)	1.65 - 3.6	TTL	±24	2.5	50	300	-40~85
74ALVC74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.65 - 3.6	TTL	±24	2.3	50	425	-40~85
74ALVCH16374	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.3	50	350	-40~85
74ALVCH16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±24	2.5	50	350	-40~85
74ALVCH16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	TTL	±24	2.1	50	350	-40~85
74ALVT162821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	±12	3.2	50	150	-40~85
74ALVT162823	18-bit buffer/line driver with bus hold and 30 Ω termination resistors (3-state)	2.3 - 3.6	TTL	±12	3.0	50	150	-40~85
74ALVT16821	20-bit D-type flip-flop; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.8	50	150	-40~85
74ALVT16823	18-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.3 - 3.6	TTL	-32 / 64	1.9	50	250	-40~85
74AUP1G175	Single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	7.4	30	70	-40~125
74AUP1G374	Single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	CMOS	±1.9	7.9	30	400	-40~125
74AUP1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.2	30	400	-40~125
74AUP1G79	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP1G80	Single D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AUP2G79	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	8.5	30	400	-40~125
74AUP2G80	Dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	CMOS	±1.9	9.1	30	400	-40~125
74AVC16374	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS	±12	1.5	30	350	-40~85
74HC107	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	78	-40~125
74HC109	Dual JK-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	75	-40~125
74HC112	Dual JK-type flip-flop with set and reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	66	-40~125
74HC173	Quad D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	17	50	88	-40~125
74HC174	Hex D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	99	-40~125
74HC175	Quad D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	17	50	83	-40~125
74HC273	Octal D-type flip-flop with reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	15	50	122	-40~125

Flip-Flops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74HC374	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	83	-40~125
74HC377	Octal D-type flip-flop with data enable; positive-edge trigger	2.0 - 6.0	CMOS	±7.8	13	50	83	-40~125
74HC574	Octal D-type flip-flop; positive-edge trigger (3-state)	2.0 - 6.0	CMOS	±7.8	14	50	133	-40~125
74HC73	Dual JK-type flip-flop with reset; negative-edge trigger	2.0 - 6.0	CMOS	±5.2	16	50	77	-40~125
74HC74	Dual D-type flip-flop with set and reset; positive-edge trigger	2.0 - 6.0	CMOS	±5.2	14	50	82	-40~125
74HCT107	Dual JK-type flip-flop with reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	73	-40~125
74HCT109	Dual JK-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	61	-40~125
74HCT112	Dual JK-type flip-flop with set and reset; negative-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	19	50	70	-40~125
74HCT173	Quad D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	17	50	88	-40~125
74HCT174	Hex D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	69	-40~125
74HCT175	Quad D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	16	50	54	-40~125
74HCT273	Octal D-type flip-flop with reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	36	-40~125
74HCT374	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	13	50	48	-40~125
74HCT377	Octal D-type flip-flop with data enable; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±6	14	50	53	-40~125
74HCT574	Octal D-type flip-flop; positive-edge trigger; TTL-enabled (3-state)	4.5 - 5.5	TTL	±6	15	50	76	-40~125
74HCT74	Dual D-type flip-flop with set and reset; positive-edge trigger; TTL-enabled	4.5 - 5.5	TTL	±4	15	50	59	-40~125
74LV74	Dual D-type flip-flop with set and reset; positive-edge trigger	1.0 - 5.5	TTL	±12	11	50	75	-40~125
74LVC16374A	16-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVC1G175	Single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.1	50	300	-40~125
74LVC1G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC1G79	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	450	-40~125
74LVC1G80	Single D-type flip-flop; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	450	-40~125
74LVC273	Octal D-type flip-flop with reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC2G74	Single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	CMOS/ LVTTTL	±32	3.5	50	280	-40~125
74LVC374A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	2.7	50	100	-40~125
74LVC377	Octal D-type flip-flop with data enable; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	6.0	50	230	-40~125
74LVC574A	Octal D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.2	50	150	-40~125
74LVC74A	Dual D-type flip-flop with set and reset; positive-edge trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	2.5	50	250	-40~125
74LVC823A	9-bit D-type flip-flop; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	5.4	50	150	-40~125
74LVCH162374A	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVCH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	1.2 - 3.6	CMOS/ LVTTTL	±24	3.8	50	150	-40~125
74LVT162374	16-bit D-type flip-flop with bus hold and 30 Ω termination resistors; positive-edge trigger (3-state)	2.7 - 3.6	TTL	±12	3.0	50	150	-40~85
74LVT16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40~85
74LVTH16374A	16-bit D-type flip-flop with bus hold; positive-edge trigger (3-state)	2.7 - 3.6	TTL	-32 / 64	3.0	50	150	-40~85
HEF4013B	Dual D-type flip-flop with set and reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	30	50	40	-40~85
HEF40175B	Quad D-type flip-flop with reset; positive-edge trigger	3.0 - 15.0	CMOS	±2.4	25	50	45	-40~85
HEF4027B	Dual JK-type flip-flop	3.0 - 15.0	CMOS	±2.4	30	50	30	-40~85

FIFO registers

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74HC40105	4-bit x 16-word FIFO register	2.0 - 6.0	CMOS	±5.2	15	50	30	-40~125

Counters/frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74AHC1G4210	10-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	17	15	125	-40~125
74AHC1G4212	12-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	20	15	125	-40~125
74AHC1G4214	14-stage divider and oscillator	2.0 - 5.5	±5.2	CMOS	23	15	125	-40~125
74HC160	Presettable synchronous BCD decade counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	18	50	55	-40~125
74HC161	Presettable synchronous 4-bit binary counter; asynchronous reset	2.0 - 6.0	±5.2	CMOS	19	50	48	-40~125
74HCT161	Presettable synchronous 4-bit binary counter; asynchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	41	-40~125
74HCT163	Presettable synchronous 4-bit binary counter; synchronous reset; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	50	-40~125
74HC191	Presettable synchronous 4-bit binary up/down counter	2.0 - 6.0	±5.2	CMOS	22	50	36	-40~125
74HC193	Presettable synchronous 4-bit binary up/down counter; separate up/down clocks	2.0 - 6.0	±5.2	CMOS	20	50	49	-40~125
74HCT193	Presettable synchronous 4-bit binary up/down counter; separate up/down clocks; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	43	-40~125
74HC390	Dual decade ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	60	-40~125
74HCT390	Dual decade ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	18	50	55	-40~125
74HC393	Dual 4-bit binary ripple counter	2.0 - 6.0	±5.2	CMOS	12	50	107	-40~125
74HCT393	Dual 4-bit binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	20	50	53	-40~125
74HC4017	Johnson decade counter with 10 decoded outputs	2.0 - 6.0	±5.2	CMOS	18	50	77	-40~125
74HCT4017	Johnson decade counter with 10 decoded outputs; TTL-enabled	4.5 - 5.5	±4.0	TTL	21	50	67	-40~125
74HC4020	14-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	11	50	52	-40~125
74HCT4020	14-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	15	50	52	-40~125
74HC4040	12-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HCT4040	12-stage binary ripple counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	16	50	79	-40~125
74HC4060	14-stage binary ripple counter with oscillator	2.0 - 6.0	±5.2	CMOS	31	50	95	-40~125
74HCT4060	14-stage binary ripple counter with oscillator; TTL-enabled	4.5 - 5.5	±4.0	TTL	31	50	88	-40~125
74HC4520	Dual 4-bit synchronous binary counter	2.0 - 6.0	±5.2	CMOS	24	50	64	-40~125
74HCT4520	Dual 4-bit synchronous binary counter; TTL-enabled	4.5 - 5.5	±4.0	TTL	24	50	64	-40~125
74HC555	Programmable delay timer with oscillator	2.0 - 6.0	-0.8	CMOS	89	50	24	-40~125
74HC6323	Programmable ripple counter with oscillator (3-state)	2.0 - 6.0	±7.8	CMOS	17	50	100	-40~125
74HCT6323	Programmable ripple counter with oscillator (3-state); TTL-enabled	4.5 - 5.5	±4.0	TTL	17	50	85	-40~125
74HC40103	8-bit synchronous binary down counter	2.0 - 6.0	±5.2	CMOS	15	50	14	-40~125
74HC4024	7-stage binary ripple counter	2.0 - 6.0	±5.2	CMOS	14	50	90	-40~125
74HC590	8-bit binary counter with output register (3-state)	2.0 - 6.0	±5.2	CMOS	19	50	61	-40~125
74LV393	Dual 4-bit binary ripple counter	1.0 - 3.6	±6	TTL	12	50	90	-40~125
74LV4020	14-stage binary ripple counter	1.0 - 5.5	±6	TTL	16	50	100	-40~125
74LV4060	14-stage binary ripple counter with oscillator	1.0 - 5.5	±6	TTL	29	50	100	-40~125

Counters/frequency dividers

Type number	Description	V _{CC} (V)	Output drive capability (mA)	Logic switching levels	t _{pd} (ns)	Output Load C _L (pF)	f _{max} (MHz)	T _{amb} (°C)
74LVC161	Presetable synchronous 4-bit binary counter; asynchronous reset	1.2 - 3.6	±24	CMOS/LVTTL	4.9	50	200	-40~125
74LVC163	Presetable synchronous 4-bit binary counter; synchronous reset	1.2 - 3.6	±24	CMOS/LVTTL	4.9	50	200	-40~125
HEF4017B	Johnson decade counter with 10 decoded outputs	3.0 - 15	±2.4	CMOS	40	50	30	-40~85
HEF4020B	14-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	35	-40~85
HEF4024B	7-stage binary ripple counter	3.0 - 15	±2.4	CMOS	30	50	35	-40~85
HEF4040B	12-stage binary ripple counter	3.0 - 15	±2.4	CMOS	35	50	50	-40~85
HEF4060B	14-stage binary ripple counter with oscillator	3.0 - 15	±2.4	CMOS	50	50	30	-40~85
HEF4518B	Dual BCD counter	3.0 - 15	±2.4	CMOS	40	50	40	-40~85
HEF4520B	Dual 4-bit synchronous binary counter	3.0 - 15	±2.4	CMOS	15	50	40	-40~85
HEF4521B	24-stage frequency divider and oscillator	3.0 - 15	±2.4	CMOS	220	50	35	-40~85
HEF4541B	Programmable timer	3.0 - 15	- 4/ 2.7	CMOS	38	50	150	-40~85

Multivibrators

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74AHC123A	Dual retriggerable monostable multivibrator with reset	2.0 - 5.5	CMOS	±8	5.1	50	-40~125
74AHCT123A	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	-40~125
74HC123	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±7.8	9.0	50	-40~125
74HCT123	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HCT221	dual non-retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	32	50	-40~125
74HC423	Dual retriggerable monostable multivibrator with reset	2.0 - 6.0	CMOS	±5.2	23	50	-40~125
74HCT423	Dual retriggerable monostable multivibrator with reset; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125
74HC4538	Dual retriggerable precision monostable multivibrator	2.0 - 6.0	CMOS	±5.2	27	50	-40~125
74HCT4538	Dual retriggerable precision monostable multivibrator; TTL-enabled	4.5 - 5.5	TTL	±4	30	50	-40~125
74LV123	Dual retriggerable monostable multivibrator with reset	1.0 - 5.5	TTL	±12	20	50	-40~125
74LVC1G123	Single retriggerable monostable multivibrator	1.65 - 5.5	CMOS/LVTTL	±32	3.5	50	-40~125
HEF4047B	Monostable/astable multivibrator	3.0 - 15	CMOS	±2.4	50	50	-40~85
HEF4528B	Dual retriggerable monostable multivibrator with reset	3.0 - 15	CMOS	±2.4	40	50	-40~85
HEF4538B	Dual retriggerable precision monostable multivibrator	3.0 - 15	CMOS	±2.4	60	50	-40~85

Phase-locked loops

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	F _{max} (MHz)	T _{amb} (°C)
74HC4046A	Phase-locked loop with VCO	3.0 - 6.0	CMOS	±5.2	18	50	21	-40~125
74HCT4046A	Phase-locked loop with VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
74HCT9046A	Phase-locked loop with bandgap controlled VCO; TTL-enabled	4.5 - 5.5	TTL	±4	23	50	19	-40~125
HEF4046B	Phase-locked loop with VCO	3.0 - 15.0	CMOS	±2.4		50	2.7	-40~125

AND Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT08	Quad 2-input AND gate	4.5 - 5.5	TTL	-15 / 20	2.4	50	100	4	-40~85
74AHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74AHC1G08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC1G09	Single 2-input AND gate; open drain	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHC2G08	Dual 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40~125
74AHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
74AHCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40~125
74ALVC08	Quad 2-input AND gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.0	50	145	4	-40~85
74AUP1G08	Single 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30	70	1	-40~125
74AUP1G09	Single 2-input AND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40~125
74AUP1G11	Single 3-input AND gate	1.1 - 3.6	CMOS	±1.9	6.9	30	70	1	-40~125
74AUP1T08	Single supply 2-input voltage-translating AND gate	2.3 - 3.6	CMOS	±4	3.6	15	70	1	-40~125
74AUP2G08	Dual 2-input AND gate	1.1 - 3.6	CMOS	±1.9	8.2	30	70	2	-40~125
74AXP1G08	Single 2-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74AXP1G09	Single 2-input AND gate with open-drain output	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74AXP1G11	Single 3-input AND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC08	Quad 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HC11	Triple 3-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	3	-40~125
74HC1G08	Single 2-input AND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	1	-40~125
74HC21	Dual 4-input AND gate	2.0 - 6.0	CMOS	±5.2	10	50	36	2	-40~125
74HC2G08	Dual 2-input AND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	4	-40~125
74HCT11	Triple 3-input AND gate	4.5 - 5.5	TTL	±4	11	50	36	3	-40~125
74HCT1G08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±2	11	50	36	1	-40~125
74HCT2G08	Dual 2-Input AND gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	2	-40~125
74LV08	Quad 2-input AND gate	1.0 - 5.5	TTL	±12	7.0	50	30	4	-40~125
74LV1T08	Single supply 2-input translating AND gate	1.6 - 5.5	CMOS	±8	13.4	15	60	1	-40~125
74LVC08A	Quad 2-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	2.1	50	150	4	-40~125
74LVC11	Triple 3-input AND gate	1.2 - 3.6	CMOS / LVTTTL	±24	3.7	50	150	3	-40~125
74LVC1G08	Single 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50	150	1	-40~125
74LVC1G11	Single 3-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.6	50	150	1	-40~125
74LVC2G08	Dual 2-input AND gate	1.65 - 5.5	CMOS / LVTTTL	±24	2.1	50	150	2	-40~125
74LVT08	Quad 2-input AND gate	2.7 - 3.6	TTL	-20 / 32	3.4	50	150	4	-40~85
74VHC08	Quad 2-input AND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74VHCT08	Quad 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
HEF4073B	Triple 3-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	3	-40~85
HEF4081B	Quad 2-input AND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
HEF4082B	Dual 4-input AND gate	3.0 - 15	CMOS	±2.4	25	50	10	2	-40~85
XC7SET08	Single 2-input AND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
XC7SH08	Single 2-input AND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

Combination Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G0832	Single 3-input AND-OR gate	1.1 - 3.6	CMOS	±1.9	6.7	30	70	1	-40~125
74AUP1G3208	Single 3-input OR-AND gate	1.1 - 3.6	CMOS	±1.9	7.4	30	70	1	-40~125
74AUP1G885	Dual function gate	1.1 - 3.6	CMOS	±1.9	7.6	30	70	1	-40~125
74AUP1Z04	Crystal driver with enable and internal resistor	1.1 - 3.6	CMOS	±1.9	5.6	30	70	1	-40~125
74AUP1Z125	Crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	CMOS	±1.9	4.7	30	70	1	-40~125
74AUP2G0604	Inverter with open drain and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40~125
74AUP2G3404	Buffer and inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	2	-40~125
74AUP2G3407	Buffer and buffer with open drain	1.1 - 3.6	CMOS	±1.9	4.1	30	70	2	-40~125
74AUP2T1326	Dual supply buffer/line driver; 3-state	1.1 - 3.6	CMOS	±4	3.8	15	70	2	-40~125
74AUP3G0434	Dual inverter and single buffer	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40~125
74AUP3G3404	Dual buffer and single inverter	1.1 - 3.6	CMOS	±1.9	4.0	30	70	3	-40~125
74LVC1GX04	Crystal driver	1.65 - 5.5	CMOS / LVTTTL	±24	2.8	50	150	1	-40~125
HEF4007UB	Dual complementary pair and inverter	3.0 - 15	CMOS	±3.4	15	50	10	2	-40~85

Configurable Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AUP1G57	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G58	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G97	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.7	30	70	1	-40~125
74AUP1G98	Configurable gate; Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	8.9	30	70	1	-40~125
74AUP1G3208	Configurable multiple function gate	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP1T57	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T58	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T97	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP1T98	Configurable gate with voltage-level translation	2.3 - 3.6	CMOS	±4	3.8	15	70	1	-40~125
74AUP2G57	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G58	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G97	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AUP2G98	Dual configurable gate; Schmitt-trigger	0.8 - 3.6	CMOS	±4	6.6	30	70	1	-40~125
74AXP1G57	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.6	5	70	1	-40~85
74AXP1G58	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G97	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74AXP1G98	Configurable gate; Schmitt-trigger	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40~85
74LVC1G57	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G58	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G97	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G98	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	6.3	50	150	1	-40~125
74LVC1G99	Configurable gate; Schmitt-trigger	1.65 - 5.5	CMOS / LVTTTL	±32	8.4	50	150	1	-40~125

EXCLUSIVE-NOR Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	T _{amb} (°C)
74AUP1T87	Single supply 2-input translating EXCLUSIVE-NOR gate	2.3 - 3.6	CMOS	±4	3.9	15	70	-40~125
74LV1T87	Single supply 2-input translating EXCLUSIVE-NOR gate	1.6 - 5.5	CMOS	±8	15.8	15	60	-40~125
HEF4077	Quad 2-input EXCLUSIVE-NOR gate	3.0 - 15	CMOS	±2.4	30	50	10	-40~85

EXCLUSIVE-OR Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC1G86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	1	-40~125
74AHC1G86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	4	-40~125
74AHC86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.4	50	60	4	-40~125
74AUP1G386	Single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	8.6	30	70	1	-40~125
74AUP1G86	Single 2-input Exclusive-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	1	-40 ~125
74AUP1T86	Single supply 2-input translating EXCLUSIVE-OR gate	2.3 - 3.6	CMOS	±1.9	3.8	15	70	1	-40 ~125
74AUP2G86	Dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	CMOS	±1.9	9.0	30	70	2	-40~125
74AXP1G86	Single 2-input Exclusive-OR gates	0.7 - 2.75	CMOS	±4.5	4.5	5	70	1	-40 ~85
74HC1G86	Single 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±2.6	9.0	50	36	1	-40~125
74HCT1G86	Single 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40~125
74HC2G86	Dual 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G86	Dual 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	11	50	36	2	-40~125
74HC86	Quad 2-input EXCLUSIVE-OR gate	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HCT86	Quad 2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	14	50	36	4	-40~125
74LV1T86	Single supply 2-input translating EXCLUSIVE-OR gate	1.6 - 5.5	CMOS	±8	13.3	15	60	1	-40~125
74LVC1G386	Single 3-Input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	4.5	50	150	1	-40~125
74LVC1G86	Single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	150	1	-40~125
74LVC2G86	Dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.3	50	150	2	-40~125
74LVC86	Quad 2-input EXCLUSIVE-OR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.0	50	150	4	-40~125
HEF4030B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~85
HEF4070B	Quad 2-input EXCLUSIVE-OR gate	3.0 - 15	CMOS	±2.4	30	50	10	4	-40~85
XC7SET86	2-input EXCLUSIVE-OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
XC7SH86	2-input EXCLUSIVE-OR gate	2.0 - 5.5	CMOS	±8	3.4	50	60	1	-40~125

NAND Gates

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT00	Quad 2-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.5	50	100	4	-40~85
74ABT20	Dual 4-input NAND gate	4.5 - 5.5	TTL	-15 / 20	2.7	50	100	2	-40~85
74AHC00	Quad 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.2	50	60	4	-40~125
74AHC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 5.5	CMOS	±8	3.3	50	60	4	-40~125
74AHC1G00	Single 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	1	-40~125
74AHC2G00	Dual 2-input NAND gate	2.0 - 5.5	CMOS	±8	3.5	50	60	2	-40~125
74AHCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	4	-40~125
74AHCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	4	-40~125

NAND Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	1	-40~125
74AHCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.6	50	60	2	-40~125
74AUP1T00	Single supply 2-input voltage-translating NAND gate	2.3 - 3.6	CMOS	±1.9	3.7	15	70	1	-40~125
74AUP2G132	Dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	2	-40~125
74AXP1G00	Single 2-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.7	5	70	1	-40~85
74AXP1G10	Single 3-input NAND gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC132	Quad 2-input NAND gate Schmitt-trigger	2.0 - 6.0	CMOS	±5.2	11	50	36	4	-40~125
74HCT132	Quad 2-input NAND gate Schmitt-trigger; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	36	4	-40~125
74LV132	Quad 2-input NAND gate Schmitt-trigger	1.0 - 5.5	TTL	±12	10	50	30	4	-40~125
74LVC132A	Quad 2-input NAND gate Schmitt-trigger	1.2 - 3.6	CMOS/ LVTTTL	±24	3.4	50	175	4	-40~125
HEF4093B	Quad 2-input NAND gate Schmitt-trigger	3.0 - 15	CMOS	±2.4	3.0	50	10	4	-40~85
74AHC30	8-input NAND gate	2.0 - 5.5	CMOS	±8	3.6	50	60	1	-40~125
74AHCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
74ALVC00	Quad 2-input NAND gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.1	50	145	4	-40~85
74AUP1G00	Single 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40~125
74AUP1G132	Single 2-input NAND gate Schmitt trigger	1.1 - 3.6	CMOS	±1.9	10	30	70	1	-40~125
74AUP1G38	Single 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	1	-40~125
74AUP2G00	Dual 2-input NAND gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40~125
74AUP2G38	Dual 2-input NAND gate; open drain	1.1 - 3.6	CMOS	1.9	8.5	30	70	2	-40~125
74HC00	Quad 2-input NAND gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HC03	Quad 2-input NAND gate; open drain	2.0 - 6.0	CMOS	5.2	8.0	50	36	4	-40~125
74HC10	Triple 3-input NAND gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	3	-40~125
74HC1G00	Single 2-input NAND gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40~125
74HC20	Dual 4-input NAND gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	2	-40~125
74HC2G00	Dual 2-input NAND gate	2.0 - 6.0	CMOS	±5.6	9.0	50	36	2	-40~125
74HC30	8-input NAND gate	2.0 - 6.0	CMOS	±5.2	12	50	36	1	-40~125
74HCT00	Quad 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT03	Quad 2-input NAND gate; TTL-enabled; open drain	4.5 - 5.5	TTL	±4	10	50	36	4	-40~125
74HCT10	Triple 3-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	3	-40~125
74HCT1G00	Single 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±2	10	50	36	1	-40~125
74HCT20	Dual 4-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	13	50	36	2	-40~125
74HCT2G00	Dual 2-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40~125
74HCT30	8-input NAND gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	1	-40~125
74LV00	Quad 2-input NAND gate	1.0 - 5.5	TTL	±12	7	50	30	4	-40~125
74LV03	Quad 2-input NAND gate; TTL-enabled; open drain	1.0 - 5.5	TTL	±12	8.0	50	30	4	-40~125
74LV1T00	Single supply 2-input translating NAND gate	1.6 - 5.5	CMOS	±8	3.1	15	60	1	-40~125
74LVC00A	Quad 2-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50	150	4	-40~125
74LVC10A	Triple 3-input NAND gate	1.2 - 3.6	CMOS/ LVTTTL	±24	3.9	50	150	3	-40~125
74LVC1G00	Single 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	1	-40~125
74LVC1G10	Single 3-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50	175	1	-40~125
74LVC1G38	Single 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.3	50	175	1	-40~125
74LVC2G00	Dual 2-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.2	50	175	2	-40~125
74LVC2G38	Dual 2-input NAND gate; open drain	1.65 - 5.5	CMOS/ LVTTTL	32	2.1	50	175	2	-40~125
74LVC30A	8-input NAND gate	1.65 - 5.5	CMOS/ LVTTTL	24	3.6	50	175	1	-40~125
HEF4011B	Quad 2-input NAND gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85

NOR Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74AHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40~125
74AHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40~125
74AHC1G02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
74ALVC02	Quad 2-input NOR gate	1.65 - 3.6	CMOS/ LVTTTL	±24	2.2	50	150	4	-40~85
74AUP1G02	Single 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	1	-40~125
74AUP1T02	Single supply 2-input voltage-translating NOR gate	2.3 - 3.6	CMOS	±1.9	3.6	15	70	1	-40~125
74AUP2G02	Dual 2-input NOR gate	1.1 - 3.6	CMOS	±1.9	8.3	30	70	2	-40~125
74AXP1G02	Single 2-input NOR gate	0.7 - 2.75	CMOS	±4.5	2.6	5	70	1	-40~85
74HC02	Quad 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	7.0	50	36	4	-40~125
74HCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	9.0	50	36	4	-40~125
74HC1G02	Single 2-input NOR gate	2.0 - 6.0	CMOS	±2.6	7.0	50	36	1	-40~125
74HCT1G02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	9.0	50	36	1	-40~125
74HC27	Triple 3-input NOR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40~125
74HCT27	Triple 3-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40~125
74HC2G02	Dual 2-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G02	Dual 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	12	50	36	2	-40~125
74HC4002	Dual 4-input NOR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT4002	Dual 4-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±4	11	50	36	2	-40~125
74LV02	Quad 2-input NOR gate	1.0 - 5.5	TTL	±12	6.0	50	30	4	-40~125
74LV1T02	Single supply 2-input translating NOR gate	1.6 - 5.5	CMOS	±8	3.2	15	60	1	-40~125
74LVC02A	Quad 2-input NOR gate	1.2 - 3.6	CMOS/ LVTTTL	±24	2.1	50	150	4	-40~125
74LVC1G02	Single 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.1	50	150	1	-40~125
74LVC1G27	Single 3-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.6	50	150	1	-40~125
74LVC2G02	Dual 2-input NOR gate	1.65 - 5.5	CMOS/ LVTTTL	±32	2.4	50	150	2	-40~125
74LVT02	Quad 2-input NOR gate	2.7 - 3.6	TTL	-20 / 32	2.8	50	150	4	-40~85
74VHC02	Quad 2-input NOR gate	2.0 - 5.5	CMOS	±8	2.9	50	60	4	-40~125
74VHCT02	Quad 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.8	50	60	4	-40~125
HEF4001B	Quad 2-input NOR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
HEF4002B	Dual 4-input NOR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~85
XC7SET02	Single 2-input NOR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.5	50	60	1	-40~125
XC7SH02	Single 2-input NOR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

OR Gates

Types in **bold** represent new products

Type number	Description	V _{CC} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (typ) (pF)	f _{max} (MHz)	Number of bits	T _{amb} (°C)
74ABT32	Quad 2-input OR gate	4.5 - 5.5	TTL	-15 / 20	2.3	50	100	4	-40~85
74AHC1G32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125
74AHCT1G32	Single 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
74AHC2G32	Dual 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	2	-40~125
74AHCT2G32	Dual 2-input OR gate	4.5 - 5.5	TTL	±8	3.3	50	60	2	-40~125
74AHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74AHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
74ALVC32	Quad 2-input OR gate	1.65 - 3.6	CMOS/LVTTL	±24	2.0	50	150	4	-40~125
74AUP1G32	Single 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	1	-40~125
74AUP1G332	Single 3-input OR gate	1.1 - 3.6	CMOS	±1.9	6.8	30	70	1	-40~125
74AUP1T32	Single supply 2-input voltage-translating OR gate	2.3 - 3.6	CMOS	±1.9	3.6	15	70	1	-40~125
74AUP2G32	Dual 2-input OR gate	1.1 - 3.6	CMOS	±1.9	7.9	30	70	2	-40~125
74AXP1G32	Single 2-input OR gate	0.7 - 2.75	CMOS	±4.5	2.5	5	70	1	-40~85
74HC1G32	Single 2-input OR gate	2.0 - 6.0	CMOS	±2.6	8.0	50	36	1	-40~125
74HCT1G32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±2.0	10	50	36	1	-40~125
74HC2G32	Dual 2-input OR gate	2.0 - 6.0	CMOS	±5.2	9.0	50	36	2	-40~125
74HCT2G32	Dual 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4.0	13	50	36	2	-40~125
74HC32	Quad 2-input OR gate	2.0 - 6.0	CMOS	±5.2	6.0	50	36	4	-40~125
74HCT32	Quad 2-input OR gate	4.5 - 5.5	TTL	±4.0	9.0	50	36	4	-40~125
74HC4075	Triple 3-input OR gate	2.0 - 6.0	CMOS	±5.2	8.0	50	36	3	-40~125
74HCT4075	Triple 3-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±4	10	50	36	3	-40~125
74LV1T32	Single supply 2-input translating OR gate	1.6 - 5.5	CMOS	±8	4.4	15	60	1	-40~125
74LVC1G32	Single 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.1	50	150	1	-40~125
74LVC1G332	Single 3-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.6	50	150	1	-40~125
74LVC2G32	Dual 2-input OR gate	1.65 - 5.5	CMOS/LVTTL	±32	2.2	50	150	2	-40~125
74LVC32A	Quad 2-input OR gate	1.2 - 3.6	CMOS/LVTTL	±24	2.1	50	150	4	-40~125
74VHC32	Quad 2-input OR gate	2.0 - 5.5	CMOS	±8	3.5	50	60	4	-40~125
74VHCT32	Quad 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	5.0	50	60	4	-40~125
HEF4071B	Quad 2-input OR gate	3.0 - 15	CMOS	±2.4	20	50	10	4	-40~125
XC7SET32	Single 2-input OR gate; TTL-enabled	4.5 - 5.5	TTL	±8	3.3	50	60	1	-40~125
XC7SH32	Single 2-input OR gate	2.0 - 5.5	CMOS	±8	3.2	50	60	1	-40~125

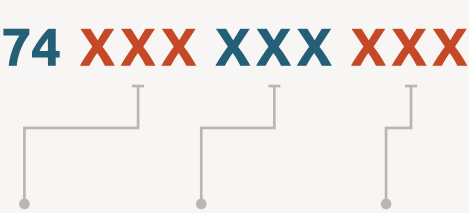
Digital comparators

Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74HC688	8-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HCT688	8-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	17	50	-40~125
74HC85	4-bit magnitude comparator	2.0 - 6.0	CMOS	±5.2	23	50	-40~125
74HCT85	4-bit magnitude comparator; TTL-enabled	4.5 - 5.5	TTL	±4	26	50	-40~125

Parity generators-checkers

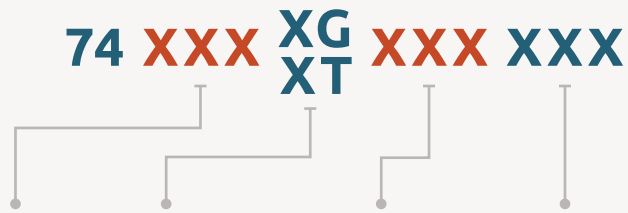
Type number	Description	V _{cc} (V)	Logic switching levels	Output drive capability (mA)	t _{pd} (ns)	Output Load C _L (pF)	T _{amb} (°C)
74HC280	9-bit odd/even parity generator/checker	2.0 - 6.0	CMOS	±5.2	17	50	-40~125
74HCT280	9-bit odd/even parity generator/checker; TTL-enabled	4.5 - 5.5	TTL	±4	18	50	-40~125

Standard logic functions



Logic family	Function number	Package type
AHC(T)		BQ DQFN
ALVC		BX DQFN
ALVT		D SO
AUP		DB SSOP
AVC(M)		DC VSSOP
CBT(D)		DG TSSOP
CBTLV(D)		DGG TSSOP
HC(T)		DL SSOP
HEF4000B		DP TSSOP
LV		FC BGA
LVC		EV BGA
LVT		GU DQFN
NPIC		P TSSOP
VHC(T)		T SO
XC7		TS SSOP
		TT TSSOP

Mini logic functions



Logic family	Gate format	Translator format	Function number	Package type
AHC(T)	1G Single-gate			DC PicoGate
AUP	2G Dual-gate			DP PicoGate
AVC(M)	3G Triple-gate			GD MicroPak
AXP				GF MicroPak
CBT(D)				GM MicroPak
CBTLV(D)				GN MicroPak
HC(T)	1T Single-translator			GS MicroPak
LVC	2T Dual-translator			GT MicroPak
XC7	3T Triple-translator			GV PicoGate
	4T Quad-translator			GW PicoGate
				GX MicroPak



- Package details and packing methods 166**
 - Package details and packing methods SMD 166
 - Package details and packing methods WLCSP.....170
 - Packing details glass diodes, single ended and through hole packages.....170
- Package cross reference 171**
 - Package cross reference list 171
 - Package cross reference matrix.....176
- Competitive cross reference - Logic.....178**
- Packing methods.....180**
 - Product orientation (tape and reel pack) 180
- Minimized outline drawings and reflow soldering footprint 183**
 - 2-pin SMD packages.....183
 - 3-pin SMD packages.....187
 - 4-pin SMD packages.....190
 - 5-pin SMD packages.....192
 - 6-pin SMD packages.....193
 - 7-pin SMD packages.....196
 - 8-pin SMD packages.....196
 - 10-pin SMD packages.....200
 - 12-pin SMD packages.....201
 - 14-pin SMD packages.....201
 - 16-pin SMD packages.....202
 - 20-pin SMD packages.....203
 - 24-pin SMD packages.....204
 - 32-pin SMD packages.....205
 - 48-pin SMD packages.....205
 - 56-pin SMD packages.....205

Package details and packing methods SMD

Package details							Packing methods																		
Pins	Package	Package size (L x w x h) (mm)	Package outer dimensions (Lxw) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
2	DSN0402-2 (SOD992)	0.4 x 0.2 x 0.1	0.4 x 0.2	0.08	0.25		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DSN0603B-2 (SOD962B)	0.6 x 0.3 x 0.2	0.6 x 0.3	0.18	0.4		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DSN0603-2 (SOD962-2)	0.6 x 0.3 x 0.3	0.6 x 0.3	0.18	0.4		2 mm pitch. 8 mm tape and reel	180 x 8													-315	-317			
	DSN0603-2 (SOD962)	0.6 x 0.3 x 0.3	0.6 x 0.3	0.18	0.4		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN0603-2 (SOD972E)	0.63 x 0.33 x 0.25	0.63 x 0.33	0.2	0.4		2 mm pitch. 8 mm tape and reel	180 x 8																	
	DSN1006-2 (SOD993)	1 x 0.6 x 0.27	1 x 0.6	0.6	0.65		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DSN1006U-2 (SOD995)	1 x 0.6 x 0.27	1 x 0.6	0.6	0.325		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN1006D-2 (SOD882D)	1 x 0.6 x 0.4	1 x 0.6	0.6	0.65		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN1006-2 (SOD882)	1.0 x 0.6 x 0.5	1 x 0.6	0.6	0.65		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	SOD523 (SC-79)	1.2 x 0.8 x 0.6	1.6 x 0.8	1.28	1.4		2 mm pitch. 8 mm tape and reel	180 x 8							-115 -699				-315	-135	-335				
	DSN1608-2 (SOD964)	1.6 x 0.8 x 0.29	1.6 x 0.8	1.28	0.6		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN1608D-2 (SOD1608)	1.6 x 0.8 x 0.37	1.6 x 0.8	1.28	0.94		2 mm pitch. 8 mm tape and reel	180 x 8											-315						
	SC-90 (SOD323F)	1.7 x 1.25 x 0.7	2.65 x 2.35	6.23	2.2		4 mm pitch. 8 mm tape and reel	180 x 8	286 x 8							-115								-145	
	SOD323	1.7 x 1.25 x 0.95	2.65 x 2.35	6.23	1.3		4 mm pitch. 8 mm tape and reel	180 x 8	286 x 8							-115					-135			-145	
	SOD123F	2.6 x 1.6 x 1.1	3.5 x 2.1	7.35	2.8		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
	CFP3 (SOD123W)	2.6 x 1.7 x 1	3.5 x 2.1	7.35	2.8		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
	SOD123	2.675 x 1.6 x 1.15	3.6 x 2.1	7.56	3.27		4 mm pitch. 8 mm tape and reel	180 x 8	330 x 8							-115					-118				
	LLDS; MiniMelf (SOD80C)	3.5 x 1.5	3.7 x 1.6	5.92			4 mm pitch. 8 mm tape and reel	180 x 8							-115						-135				
	CFP5 (SOD128)	3.8 x 2.5 x 1	4.7 x 2.5	11.75	4		4 mm pitch. 12 mm tape and reel	180 x 12								-115									
3	DFN0606 (SOT8001)	0.62 x 0.62 x 0.37	0.62 x 0.62	0.35			2 mm pitch. 8 mm tape and reel	180 x 8													-147				
	DFN1006B-3 (SOT883B)	1.0 x 0.6 x 0.37	1 x 0.6	0.6	0.35		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN1006-3 (SOT883)	1.0 x 0.6 x 0.48	1 x 0.6	0.6	0.35		2 mm pitch. 8 mm tape and reel	180 x 8													-315				
	DFN1010D-3 (SOT1215)	1.1 x 1 x 0.37	1.1 x 1	1.1	0.75		4 mm pitch. 8 mm tape and reel	180 x 8									-147								
	D2PAK (SOT404A)	11 x 10 x 4.3	15.3 x 10	153	2.54		16 mm pitch. 24 mm tape and reel	330 x 24	-118																

Package details and packing methods SMD

Package details							Packing methods																		
Pins	Package	Package size (L x w x h) (mm)	Package outer dimensions (L x w) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
3	D2PAK (SOT404)	11 x 10 x 4.3	15.3 x 10	153	2.54		16 mm pitch. 24 mm tape and reel	330 x 24	-118																
	SC-70 (SOT323)	2 x 1.25 x 0.95	2.1 x 2	4.2	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115				-135				-300	
	DFN2020-3 (SOT1061)	2 x 2 x 0.65	2 x 2	4	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115 -147				-135					
	DFN2020D-3 (SOT1061D)	2 x 2 x 0.65	2 x 2	4	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
	TO-236AB (SOT23)	2.9 x 1.3 x 1	2.3 x 1.3	2.99	1.9		4 mm pitch. 8 mm tape and reel	180 x 8								-215							-185		
									286 x 8											-235				-300	
	SOT89 (SC-62)	4.5 x 2.5 x 1.5	4.5 x 4	18	1.5		8 mm pitch. 12 mm tape and reel	180 x 12		-147							-135								
4	CFP15 (SOT1289)	5.8 x 4.3 x 0.78	6.5 x 4.3	27.95	2.13		8 mm pitch. 12 mm tape and reel	180 x 12			-146														
								330 x 12									-139								
	X2SON4 (SOT1269-2)	0.6 x 0.6 x 0.32	0.6 x 0.6	0.36	0.4		2 mm pitch. 8 mm tape and reel	180 x 8												-147					
	SOT143B	2.9 x 1.3 x 1	2.9 x 2.3	6.67	1.9		4 mm pitch. 8 mm tape and reel	180 x 8								-215									
								286 x 8												-235					
	LFPAK56E; Power-SO8 (SOT1023)	4.58 x 5.13 x 1.03	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 x 12			-115														
	LFPAK56-UL2595 (SOT1023A)	4.6 x 5.1 x 1	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 x 12			-115														
5	LFPAK56; Power-SO8 (SOT669)	4.9 x 4.45 x 1	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 x 12			-115														
	SC-73 (SOT223)	6.5 x 3.5 x 1.65	7 x 6.5	45.5	4.6		8 mm pitch. 12 mm tape and reel	180 x 12		-115															
								330 x 12								-135									
	LFPAK88 (SOT1235)	6.3 x 8 x 1.75	8 x 8	64	2		12 mm pitch. 16 mm tape and reel	330 x 16					-118												
	X2SON5 (SOT1226)	0.8 x 0.8 x 0.35	0.8 x 0.8	0.64	0.4		2 mm pitch. 8 mm tape and reel	180 x 8												-125					
	TSSOP5 (SOT353)	2 x 1.25 x 0.95	2.1 x 2	4.2	1.3		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
								286 x 8												-135					
6	TSSOP5 (SOT353-1)	2.1 x 1.25 x 0.95	2.1 x 2	4.2	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-125									
	TSOP5 (SOT753)	2.9 x 1.5 x 1	2.9 x 2.75	8	0.95		4 mm pitch. 8 mm tape and reel	180 x 8								-125									
	XSON6 (SOT1115)	0.9 x 1.0 x 0.35	0.9 x 1	0.9	0.3		4 mm pitch. 8 mm tape and reel	180 x 8									-125								
	XSON6 (SOT1202)	1 x 1 x 0.35	1 x 1	1	0.35		4 mm pitch. 8 mm tape and reel	180 x 8										-125							
	XSON6 (SOT891)	1 x 1 x 0.5	1 x 1	1	0.35		4 mm pitch. 8 mm tape and reel	180 x 8										-125							
	X2SON6 (SOT1255)	1.0 x 0.8 x 0.32	1 x 0.8	0.8	0.4		2 mm pitch. 8 mm tape and reel	180 x 8												-147					
	DFN1010B-6 (SOT1216)	1.1 x 1.0 x 0.37	1.1 x 0.8	0.88	0.75		4 mm pitch. 8 mm tape and reel	180 x 8										-147							
DFN1412-6 (SOT1268-1)	1.4 x 1.2 x 0.47	1.4 x 1.2	1.7	0.5		4 mm pitch. 8 mm tape and reel	180 x 8										-147								

Package details and packing methods SMD

Package details							Packing methods																		
Pins	Package	Package size (l x w x h) (mm)	Package outer dimensions (l x w) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
6	XSON6 (SOT886)	1.45 x 1 x 0.5	1.45 x 1	1.45	0.5		4 mm pitch. 8 mm tape and reel	180 x 8									-115 -125 -132								
	DFN1616-6 (SOT1189-1)	1.6 x 1.6 x 0.5	1.6 x 1.6	2.6	0.5		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	TSSOP6 (SOT363)	2.1 x 1.25 x 0.95	2.1 x 2	4.2	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-125				-135					
	DFN2020-6 (SOT1118)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
	DFN2020D-6 (SOT1118D)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-115									
	DFN2020MD-6 (SOT1220)	2 x 2 x 0.65	2 x 2	4	0.65		4 mm pitch. 8 mm tape and reel	180 x 8								-125									
	TSOP6 (SOT457)	2.9 x 1.5 x 1	2.9 x 2.75	7.98	0.95		4 mm pitch. 8 mm tape and reel	180 x 8								-115				-135					
7	XSON7 (SOT1358-1)	1.1 x 2.1 x 0.5	1.1 x 2.1	2.4	0.5		4 mm pitch. 8 mm tape and reel	180 x 9									-471								
8	XSON8 (SOT833-1)	1 x 1.95 x 0.5	1.95 x 1	1.95	0.5		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	XSON8 (SOT1116)	1.2 x 1 x 0.35	1.2 x 1	1.2	0.3		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	X2SON8 (SOT1233)	1.35 x 0.8 x 0.35	1.35 x 0.8	1.1	0.5		2 mm pitch. 8 mm tape and reel	180 x 8											-115						
	XSON8 (SOT1203)	1.35 x 1 x 0.35	1.35 x 1	1.35	0.35		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	XSON8 (SOT1089)	1.35 x 1 x 0.5	1.35 x 1	1.35	0.55		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	XQFN8 (SOT902-2)	1.6 x 1.6 x 0.5	1.6 x 1.6	2.6	0.5		4 mm pitch. 8 mm tape and reel	180 x 8									-125								
	DFN1714-8 (SOT972-2)	1.7 x 1.35 x 0.5	1.7 x 1.35	2.3	0.4		4 mm pitch. 8 mm tape and reel	180 x 8									-132								
	VSSOP8 (SOT765-1)	2 x 2.3 x 1	2 x 3.1	6.2	0.5		4 mm pitch. 8 mm tape and reel	180 x 8								-125									
	LFPK33 (SOT1210)	2.7 x 3.4 x 0.9	3.3 x 3.3	10.9	0.65		8 mm pitch. 12 mm tape and reel	180 x 12			-115														
	XSON8 (SOT996-2)	3 x 2 x 0.5	3 x 2	6	0.5		4 mm pitch. 8 mm tape and reel	180 x 8								-125									
	TSSOP8 (SOT505-2)	3.0 x 3.0 x 1.1	3 x 4	12	0.65		4 mm pitch. 12 mm tape and reel	180 x 12								-125									
	LFPK56D (SOT1205)	4.7 x 5.3 x 1.05	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 x 8			-115														
	SO8 (SOT96-1)	4.9 x 3.9 x 1.75	5 x 6	30	1.27		8 mm pitch. 12 mm tape and reel	180 x 12		-115		-112		-118											

Package details and packing methods SMD

Package details							Packing methods																		
Pins	Package	Package size (L x w x h) (mm)	Package outer dimensions (Lxw) (mm)	Footprint area (mm²)	Lead pitch (mm)	Package	Packing method and tape dimension	Reel dimension (d x w) (mm)	Packing quantity and ordering code (12NC ending)																
									800	1000	1500	2000	2400	2500	3000	4000	5000	6000	8000	9000	10000	15000	20000	30000	50000
10	XQFN10 (SOT1160-1)	1.4 x 1.8 x 0.5	1.4 x 1.8	2.6	0.4		4 mm pitch. 8 mm tape and reel	180 x 8									-115								
	X2QFN10 (SOT1430-1)	1.6 x 1.3 x 0.33	1.6 x 1.3	2.1	0.4		4 mm pitch. 8 mm tape and reel	180 x 8										-471							
	DFN2510-10 (SOT1165-1)	2.5 x 1 x 0.5	2.5 x 1	2.5	0.5		4 mm pitch. 8 mm tape and reel	180 x 8											-115						
	DFN2510A-10 (SOT1176-1)	2.5 x 1 x 0.5	2.5 x 1	2.5	0.5		4 mm pitch. 8 mm tape and reel	180 x 8												-471					
	TSSOP10 (SOT552-1)	3 x 3 x 1.1	3 x 4.9	14.7	0.5		8 mm pitch. 12 mm tape and reel	330 x 12						-118											
12	XQFN12 (SOT1174-1)	2 x 1.7 x 0.5	2 x 1.7	3.4	0.4		4 mm pitch. 8 mm tape and reel	180 x 8										-115							
14	DHVQFN14 (SOT762-1)	3.0 x 2.5 x 1	3 x 2.5	7.5	0.5		4 mm pitch. 12 mm tape and reel	180 x 12									-115								
	TSSOP14 (SOT402-1)	5 x 4.4 x 1.1	6.4 x 5	32	0.65		8 mm pitch. 12 mm tape and reel	330 x 12						-112	-118										
	SO14 (SOT108-1)	8.65 x 3.9 x 1.75	8.65 x 6	51.9	1.27		8 mm pitch. 16 mm tape and reel	330 x 16							-118										
16	XQFN16 (SOT1161-1)	2.6 x 1.8 x 0.5	2.6 x 1.8	4.7	0.4		4 mm pitch. 8 mm tape and reel	180 x 8										-115							
	DFN3314-16 (SOT974-2)	3.3 x 1.35 x 0.5	3.3 x 1.35	4.5	0.4		4 mm pitch. 12 mm tape and reel	180 x 12											-132						
	DHVQFN16 (SOT763-1)	3.5 x 2.5 x 1.0	3.5 x 2.5	8.8	0.5		4 mm pitch. 12 mm tape and reel	180 x 12									-115								
	TSSOP16 (SOT403-1)	5 x 4.4 x 1.1	5 x 6.4	32	0.65		8 mm pitch. 12 mm tape and reel	330 x 12						-112	-118										
	SO16 (SOT109-1)	9.9 x 3.9 x 1.35	9.9 x 6	59.4	1.27		8 mm pitch. 16 mm tape and reel	330 x 16			-652				-139										
20	SO20 (SOT163-1)	12.8 x 7.5 x 2.65	12.8 x 10.3	131.8	1.27		12 mm pitch. 24 mm tape and reel	330 x 24					-652												
	DHVQFN20 (SOT764-1)	4.5 x 2.5 x 1.0	4.5 x 2.5	11.3	0.5		4 mm pitch. 12 mm tape and reel	180 x 12									-115								
	TSSOP20 (SOT360-1)	6.5 x 4.4 x 1.1	6.5 x 6.4	41.6	0.65		8 mm pitch. 16 mm tape and reel	330 x 16					-112		-118		-134								
24	SO24 (SOT137-1)	15.4 x 7.5 x 2.65	15.4 x 10.3	158.6	1.27		12 mm pitch. 24 mm tape and reel	330 x 16			-118	-112													
	DHVQFN24 (SOT815-1)	5.5 x 3.5 x 1	5.5 x 3.5	19.3	0.5		8 mm pitch. 12 mm tape and reel	330 x 12									-118								
	TSSOP24 (SOT355-1)	7.8 x 4.4 x 1.1	7.8 x 6.4	49.9	0.65		8 mm pitch. 16 mm tape and reel	330 x 16						-112		-118									
32	HVQFN32 (SOT617-3)	5 x 5 x 0.85	5 x 5	25	0.5		8 mm pitch. 12 mm tape and reel	330 x 12.4										-118							
48	TSSOP48 (SOT362-1)	12.8 x 6.1 x 1.2	12.5 x 8.1	101.2	0.5		12 mm pitch. 24 mm tape and reel	330 x 24			-112		-118												
	TVSOP48 (SOT480-1)	9.7 x 4.4 x 1.1	9.7 x 6.4	62.1	0.4		8 mm pitch. 16 mm tape and reel	330 x 16				-112			-118										
56	TSSOP56 (SOT364-1)	14 x 6.1 x 1.2	14 x 8.1	113.4	0.5		12 mm pitch. 24 mm tape and reel	330 x 24			-112		-518												

Package details and packing methods WLCSP

Basic Type	Length x width x height	# of balls	Pitch	Package	Package name
IP4369CX4	0.76 x 0.76 x 0.5	4	0.4		WLCSP4
PMCM440VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VNE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM440VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PMCM4401VPE	0.78 x 0.78 x 0.35	4	0.4		WLCSP4
PCMF1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
PESD1USB3S	1.17 x 0.77 x 0.57	5	0.4		WLCSP5
SOT1454-1	0.65 x 0.44 x 0.27	6	0.23		WLCSP6
PCMF2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PESD2USB3S	1.17 x 1.57 x 0.57	10	0.4		WLCSP10
PCMF3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
PESD3USB3S	1.17 x 2.37 x 0.57	15	0.4		WLCSP15
IP3319CX6	1.34 x 0.95 x 0.57	6	0.4		WLCSP6
IP4340CX15	1.56 x 1.56 x 0.47	15	0.4		WLCSP15

Packing details glass diodes, single ended and through hole packages

Pins/leads	Package	Packing method and tape/reel/tube dimensions	Package	Ordering code (12 NC ending)	Packing quantity
2	SOD27	26 mm tape ammo pack, axial		-143	5000 pcs
		52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD66	52 mm tape ammo pack, axial		-133	10000 pcs
		52 mm reel pack, axial		-113	10000 pcs
	SOD68	26 mm tape ammo pack, axial		-143	5000 pcs
		52 mm reel pack, axial		-113	10000 pcs
		52 mm tape ammo pack, axial		-133	10000 pcs
3	SOT78 (TO-220)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs
	I2PAK (SOT226)	Rail packing, 50 pcs/tube, tube length = 520 mm		-127	1000 pcs

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
μ8FL	OnSemi	LFPK33 (SOT1210)	8
μQFN-10L	ST	DFN2510A-10 (SOT1176)	10
μQFN-2L	ST	DFN1006-2 (SOD882)	2
6 Lead DFN	ON Semi	DFN2020-6 (SOT1118)	6
CL2	Toshiba	DSN0402-2 (SOD992)	2
CLP0603	Vishay	DSN0603-2 (SOD962)	2
CMAK/ CMPAK	Renesas	SOT323	3
CMPAK/ CMAK	Renesas	SOT323	3
CMPAK-5(T)	Renesas	SOT353	5
CMPAK-6	Renesas	SOT363	6
CP4	Toshiba	SOT143B	4
CS6	Toshiba	DFN1010-6 (SOT891)	6
CST3	Toshiba	DFN1006-3 (SOT883)	3
CST3	Toshiba	DFN1006B-3 (SOT883B)	3
CTS2 (fsc)	Toshiba	DFN1006-2 (SOD882)	2
CTS2 (fsc)	Toshiba	DFN1006D-2 (SOD882D)	2
D2PAK	Infineon	D2PAK (SOT404)	3
D2PAK	ON Semi	D2PAK (SOT404)	3
D2PAK	ST	D2PAK (SOT404)	3
D2PAK	Toshiba	D2PAK (SOT404)	3
D2PAK	Vishay	D2PAK (SOT404)	3
D2PAK 3	ON Semi	D2PAK (SOT404)	3
D2PAK*	Diodes Inc.	D2PAK (SOT404)	3
D2PAK-3	OnSemi	D2PAK (SOT404)	3
DFN1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1006H4-3	Diodes Inc.	DFN1006-3 (SOT883)	3
DFN1411*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
DFN2	ST	DSN0603-2 (SOD962)	2
DFN-5	OnSemi	LFPK56 (SOT669)	4
DFN-8	OnSemi	LFPK56D (SOT1205)	8
DSN2, 0.4 x 0.2	ON Semi	DSN0402-2 (SOD992)	2
DSN2, 0.6 x 0.3	ON Semi	DSN0603-2 (SOD962)	2
DSN2, 1.0 x 0.6	ON Semi	DSN1006-2 (SOD993)	2
DSN2, 1.0 x 0.6	ON Semi	DFN1006D-2 (SOD882D)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
DSN2, 1.6 x 0.8	ON Semi	DFN1608D-2 (SOD1608)	2
EMD2	Rohm	SOD523	2
EMD3/EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3	Rohm	DFN1006-3 (SOT883)	3
EMT3/EMD3	Rohm	DFN1006-3 (SOT883)	3
EMT3F*	Rohm	DFN1006-3 (SOT883)	3
ESC/TESC	Toshiba	SOD523	2
ESM	Toshiba	DFN1006-3 (SOT883)	3
FM8	Toshiba	SOT96	8
FS6*	Toshiba	DFN1010B-6 (SOT1216)	6
GMD2	Rohm	DSN0603-2 (SOD962)	2
H2PAK-2	ST	D2PAK (SOT404)	3
HSMT8	Rohm	LFPK33 (SOT1210)	8

Type	Competitor	Nexperia	Pins/ Leads
HSO8-8	Renesas	LFPK56 (SOT669)	4
HSO8-8 Dual	Renesas	LFPK56D (SOT1205)	8
HSOP8 (Dual)	Rohm	LFPK56D (SOT1205)	8
HSOP8 (Single)	Rohm	LFPK56 (SOT669)	4
HSOP8 (Single)	Rohm	LFPK56E (SOT1023)	4
HUML2020L8 (Dual)	Rohm	DFN2020-6 (SOT1118)	6
HUML2020L8 (Single)	Rohm	DFN2020MD-6 (SOT1220)	6
I2PAK	OnSemi	I2PAK (SOT226)	3
I2PAK	ST	I2PAK (SOT226)	3
KMD2	Rohm	DFN1608D-2 (SOD1608)	2
LDPK(S)-(1)	Renesas	D2PAK (SOT404)	3
LFPK	Renesas	LFPK56 (SOT669)	5
LFPK56, HSON-8	Renesas	LFPK56E (SOT1023)	4
LG A 1.0 x 0.6mm	Texas Instruments	DFN1006B-3 (SOT883B)	3
LLD	Renesas	SOD80C	2
LLDS	Rohm	SOD80C	2
LLP1006-2L	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2L	Vishay	DFN1006D-2 (SOD882D)	2
LLP1006-2M	Vishay	DFN1006-2 (SOD882)	2
LLP1006-2M	Vishay	DFN1006D-2 (SOD882D)	2
LLP75-7L	Vishay	DFN1616-6 (SOT1189)	6
LPDS/LPTS	Rohm	D2PAK (SOT404)	3
LPTS	Rohm	D2PAK (SOT404)	3
LPTS/LPDS	Rohm	D2PAK (SOT404)	3
M-Flat	Toshiba	SOD128	2
Micro 3	Int. Rectifier	SOT23	3
Micro 6	Int. Rectifier	SOT457	6
Micro FOOT 0.8 x 0.8*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1.2*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1 x 1.5*	Vishay	DFN1010D-3 (SOT1215)	3
Micro FOOT 1.6 x 1.6*	Vishay	DFN2020MD-6 (SOT1220)	6
MICRO FOOT*	Vishay	DFN2020MD-6 (SOT1220)	6
MicroFET	Fairchild	DFN2020MD-6 (SOT1220)	6
MicroFET 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
MiniMelf	Diodes Inc.	SOD80C	2
MiniMelf	ST	SOD80C	2
MiniMelf	Vishay	SOD80C	2
MP-25(K)	Renesas	TO-220 (SOT78)	3
MP-25SK	Renesas	I2PAK (SOT226)	3
MP-25ZT	Renesas	D2PAK (SOT404)	3
MP6	Renesas	DSN0603-2 (SOD962)	2
MPAK	Renesas	SOT23	3
MPAK	Renesas	SOT23	3
MPAK-4R	Renesas	SOT143B	4
MPT3	Rohm	SOT89	3
PG-TD SON-8	Infineon	LFPK56 (SOT669)	5
PG-TD- SON-8	Infineon	LFPK56E (SOT1023)	4

Types with * show footprint compatibility only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
PG-TDSON-8	Infineon	LFPAK56D (SOT1205)	8
PG-TDSON-8	Infineon	LFPAK56 (SOT669)	4
PG-TO220-3	Infineon	TO-220 (SOT78)	3
PG-TO262-3	Infineon	I2PAK (SOT226)	3
PG-TO263-3	Infineon	D2PAK (SOT404)	3
PG-TSDSON-8	Infineon	LFPAK33 (SOT1210)	8
PMDT	Rohm	SOD128	2
PMDU	Rohm	SOD123W	2
Power DI3333-8	Diodes Inc.	LFPAK33 (SOT1210)	8
Power DI5060-8	Diodes Inc.	LFPAK56D (SOT1205)	8
Power DI5060-8	Diodes Inc.	LFPAK56 (SOT669)	4
Power- DI5060-8	Diodes Inc	LFPAK56E (SOT1023)	4
Power- FLAT (6x5)	ST	LFPAK56E (SOT1023)	4
Power FLAT 3.3 x 3.3	ST	LFPAK33 (SOT1210)	8
Power FLAT 5x6 Dual	ST	LFPAK56D (SOT1205)	8
Power FLAT 5x6 Dual	ST	LFPAK56 (SOT669)	4
PowerDI123	Diodes Inc.	SOD123F	2
PowerDI123	Diodes Inc.	SOD123W	2
PowerDI323	Diodes Inc.	SOD323F	2
PowerDi5	Diodes Inc.	CFP15 (SOT1289)	3
PowerFLAT (6 x 5)	ST	LFPAK56 (SOT669)	5
PowerFLAT (6 x 5)	ST	LFPAK56D (SOT1205)	5
PowerPAK 1212-8	Vishay	LFPAK33 (SOT1210)	8
PowerPAK 8x8L	Vishay	LFPAK88 (SOT1235)	4
PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-70	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SC706L	Vishay	DFN2020-3 (SOT1061)	3
PowerPak SC-70-6L	Vishay	DFN2020-6 (SOT1118)	6
PowerPAK SC-75*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPak SC-75-6L*	Vishay	DFN2020MD-6 (SOT1220)	6
PowerPAK SO-8	Vishay	LFPAK56 (SOT669)	5
PowerPAK SO-8(L)	Vishay	LFPAK56 (SOT669)	4
PowerPAK SO-8(L)	Vishay	LFPAK56E (SOT1023)	4
PowerPAK SO-8L Dual	Vishay	LFPAK56D (SOT1205)	8
PW-Mini	Toshiba	SOT89	3
S08	Vishay	SOT96	8
SC2	Toshiba	DSN0603-2 (SOD962)	2
SC59	Diodes Inc.	SOT23	3
SC70	ON Semi	SOT323	3
SC-70	ON Semi	SOT323	3
SC-70, 3 leads	Vishay	SOT323	3
SC70-3	AOS	SOT323	3
SC70-3	Vishay	SOT323	3
SC70-5L	Semtech	SOT353	5
SC70-6	AOS	SOT363	6
SC70-6	Fairchild	SOT363	6
SC70-6	Vishay	SOT363	6
SC70-6L	Semtech	SOT363	6

Type	Competitor	Nexperia	Pins/ Leads
SC74 TSOP6	Infineon	SOT457	6
SC-74 TSOP-6	ON Semi	SOT457	6
SC75	Infineon	DFN1006-3 (SOT883)	3
SC75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	ON Semi	DFN1006-3 (SOT883)	3
SC-75	Semtech	DFN1006-3 (SOT883)	3
SC75A	Vishay	DFN1006-3 (SOT883)	3
SC-75A	Vishay	DFN1006-3 (SOT883)	3
SC79	Infineon	SOD523	2
SC-88	ON Semi	SOT363	6
SC88/SC 7 0-6/SOT 363 6 LEAD	ON Semi	SOT363	6
SC-88A	ON Semi	SOT353	5
SC89-3	Fairchild	DFN1006-3 (SOT883)	3
SC89-3	ON Semi	DFN1006-3 (SOT883)	3
SC89-3	Vishay	DFN1006-3 (SOT883)	3
S-Flat	Toshiba	SOD123F	2
S-Flat	Toshiba	SOD123W	2
SGP0603P2X3	Semtech	DFN0603-2 (SOD972E)	2
SL2	Toshiba	DFN0603-2 (SOD972E)	2
SLP0402P2X3	Semtech	DSN0402-2 (SOD992)	2
SLP1006P2	Semtech	DFN1006-2 (SOD882)	2
SLP1006P2T	Semtech	DFN1006D-2 (SOD882D)	2
SLP1006P3	Semtech	DFN1006-3 (SOT883)	3
SLP1006P3T	Semtech	DFN1006B-3 (SOT883B)	3
SLP1510N6	Semtech	DFN1410-6 (SOT886)	6
SLP1610N2	Semtech	DFN1608D-2 (SOD1608)	2
SLP1610P4	Semtech	DFN2510A-10 (SOT1176)	10
SLP1616P6	Semtech	DFN1616-6 (SOT1189)	6
SLP1713P8	Semtech	DFN1714-8 (SOT1166)	8
SLP1713P8	Semtech	DFN1714U-8 (SOT983)	8
SLP2513P12	Semtech	DFN2514-12 (SOT1167)	12
SLP3313P16	Semtech	DFN3314-16 (SOT1168)	16
SM6 VS-6	Toshiba	SOT457	6
SMA flat	ST	SOD128	2
SMD TO-263	Renesas	D2PAK (SOT404)	3
SMD0402	Rohm	DSN0402-2 (SOD992)	2
SMD6/SMT6	Rohm	SOT457	6
SMD6/SMZ6	Rohm	SOT457	6
S-Mini	Toshiba	SOT23	3
S-Mini TSM	Toshiba	SOT23	3
SMPAK	Renesas	DFN1006-3 (SOT883)	3
SMPC TO-277A	Vishay	CFP15 (SOT1289)	3
SMT3	Rohm	SOT23	3
SMT5*	Rohm	SOT457	6
SMT6	Rohm	SOT457	6
SMZ6/SMD6	Rohm	SOT457	6
SO-8 FL	ON Semi	LFPAK56 (SOT669)	5

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
SO-8 FL, DFN-5	ON Semi	LFPAK56E (SOT1023)	4
SO-8FL Dual	OnSemi	LFPAK56D (SOT1205)	8
SO-8FL Dual	OnSemi	LFPAK56 (SOT669)	4
SOD-123	ST	SOD123F	2
SOD-123-FL	ON Semi	SOD123F	2
SOD-123-FL	ON Semi	SOD123W	2
SOD323	Infineon	SOD323	2
SOD323	Semtech	SOD323	2
SOD323	Vishay	SOD323	2
SOD-323	Diodes Inc.	SOD323	2
SOD-323	ON Semi	SOD323	2
SOD-323	ST	SOD323	2
SOD523	Diodes Inc.	SOD523	2
SOD523	Semtech	SOD523	2
SOD523	Vishay	SOD523	2
SOD-523	ON Semi	SOD523	2
SOD-523	ST	SOD523	2
SOD882	ST	DFN1006-2 (SOD882)	2
SOD882T	ST	DFN1006D-2 (SOD882D)	2
SOD923-2*	ON Semi	DFN1006-2 (SOD882)	2
SOIC-8 NB	ON Semi	SOT96	8
SON 2x2	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SON 3x3*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
SOP / DSOP Advance	Toshiba	LFPAK56E (SOT1023)	4
SOP / DSOP Advance	Toshiba	LFPAK56 (SOT669)	4
SOP8	Rohm	SOT96	8
SOP-8	Renesas	SOT96	8
SOT 143	Infineon	SOT143B	4
SOT063*	ON Semi	DFN1010B-6 (SOT1216)	6
SOT-143	Diodes Inc.	SOT143B	4
SOT-143	Semtech	SOT143B	4
SOT223	Diodes Inc.	SOT223	4
SOT223	Fairchild	SOT223	4
SOT223	Infineon	SOT223	4
SOT223	ON Semi	SOT223	4
SOT223	Vishay	SOT223	4
SOT-223	Diodes Inc.	SOT223	4
SOT-223	Infineon	SOT223	4
SOT-223	ON Semi	SOT223	4
SOT-223	OnSemi	SOT223	4
SOT-223	ST	SOT223	4
SOT23	AOS	SOT23	3
SOT23	Diodes Inc.	SOT23	3
SOT23	Infineon	SOT23	3
SOT23	ON Semi	SOT23	3
SOT23	Semtech	SOT23	3
SOT23	ST	SOT23	3
SOT23	Vishay	SOT23	3

Type	Competitor	Nexperia	Pins/ Leads
SOT-23	Diodes Inc.	SOT23	3
SOT-23	ON Semi	SOT23	3
SOT23-3	AOS	SOT23	3
SOT23-3	Diodes Inc.	SOT23	3
SOT23-3	ON Semi	SOT23	3
SOT23-5	AOS	SOT457	6
SOT23-5	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	Diodes Inc.	SOT457	6
SOT23-6	ST	SOT457	6
SOT23-6L	Semtech	SOT457	6
SOT23F	Diodes Inc.	SOT23	3
SOT23F	Toshiba	SOT23	3
SOT26	Diodes Inc.	SOT457	6
SOT323	Diodes Inc.	SOT323	3
SOT323	Fairchild	SOT323	3
SOT323	Infineon	SOT323	3
SOT-323	Diodes Inc.	SOT323	3
SOT-323	ST	SOT323	3
SOT353	Diodes Inc.	SOT353	5
SOT353	Diodes Inc.	SOT363	6
SOT353	Vishay	SOT353	5
SOT363	Diodes Inc.	SOT363	6
SOT363	Infineon	SOT363	6
SOT-363	Diodes Inc.	SOT363	6
SOT523	Diodes Inc.	DFN1006-3 (SOT883)	3
SOT523F	Fairchild	DFN1006-3 (SOT883)	3
SOT723*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT723-3*	ON Semi	DFN1010D-3 (SOT1215)	3
SOT89	Diodes Inc.	SOT89	3
SOT89	Infineon	SOT89	3
SOT-89	ON Semi	SOT89	3
SOT89-3L	Diodes Inc.	SOT89	3
SOT963	ON Semi	DFN1010-6 (SOT891)	6
SOT963*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
SRP-F	Renesas	SOD123W	2
SS CSP2	Toshiba	DFN1006-3 (SOT883)	3
SSD3/SS3	Rohm	SOT23	3
SSM	Toshiba	DFN1006-3 (SOT883)	3
SSOT3	Fairchild	SOT23	3
SSOT6	Fairchild	SOT457	6
SSOT6 FLMP	Fairchild	SOT457	6
SST3	Rohm	SOT23	3
SST3/SSD3	Rohm	SOT23	3
ST01005	STM	DSN0402-2 (SOD992)	2
Stmite flat	ST	SOD123W	2
T0263	Diodes Inc.	D2PAK(SOT404)	3
T0263-3	Infineon	D2PAK (SOT404)	3

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
Thin PowerPAK SC70	Vishay	DFN2020MD-6 (SOT1220)	6
Thin PowerPAK SC-70	Vishay	DFN2020-6 (SOT1118)	6
Thin PowerPAK SC75*	Vishay	DFN2020MD-6 (SOT1220)	6
TO220	Infineon	TO-220 (SOT78)	3
TO-220	ST	TO-220 (SOT78)	3
TO-220	Toshiba	TO-220 (SOT78)	3
TO-220	Vishay	TO-220 (SOT78)	3
TO220-3	Diodes Inc.	TO-220 (SOT78)	3
TO-220-3	OnSemi	TO-220 (SOT78)	3
TO-220-3L	OnSemi	TO-220 (SOT78)	3
TO-220AB	Vishay	TO-220 (SOT78)	3
TO-220F-3FS	OnSemi	TO-220 (SOT78)	3
TO-220FM	Rohm	TO-220 (SOT78)	3
TO-220S	Renesas	D2PAK (SOT404)	3
TO-220SM	Toshiba	D2PAK (SOT404)	3
TO262	Infineon	I2PAK (SOT226)	3
TO-262	Renesas	I2PAK (SOT226)	3
TO-262	Vishay	I2PAK (SOT226)	3
TO-262-2L	OnSemi	I2PAK (SOT226)	3
TO-262-3L	OnSemi	I2PAK (SOT226)	3
TO263	Diodes Inc.	D2PAK (SOT404)	3
TO-263	Renesas	D2PAK-7 (SOT427)	7
TO-263	Renesas	D2PAK (SOT404)	3
TO-263	Vishay	D2PAK (SOT404)	3
TO-263 3-lead	Vishay	D2PAK (SOT404)	3
TO-263-2L	OnSemi	D2PAK (SOT404)	3
TO-263AB	Vishay	D2PAK (SOT404)	3
To-LL	Infineon	LFPK88 (SOT1235)	4
To-LL	ON Semi	LFPK88 (SOT1235)	4
TSLP-2-1	Infineon	DFN1006-2 (SOD882)	2
TSLP-2-7/-17	Infineon	DFN1006D-2 (SOD882D)	2
TSLP-3-1, -15	Infineon	DFN1006B-3 (SOT883B)	3
TSLP-3-4	Infineon	DFN1006-3 (SOT883)	3
TSLP-9-1	Infineon	DFN2510A-10 (SOT 1176)	10
TSMT5*	Rohm	SOT457	6
TSMT6	Rohm	SOT457	6
TSNP-2-2	Infineon	DFN1608D-2 (SOD 1608)	2
TSON Advance	Toshiba	LFPK33 (SOT1210)	8
TSOP6	AOS	SOT457	6
TSOP6	ON Semi	SOT457	6
TSOP6	Vishay	SOT457	6
TSOP-6	Renesas	SOT457	6
TSOP-6/ TSOP6	Vishay	SOT457	6
TSSLP-2-1	Infineon	DSN0603-2 (SOD962)	2
TSST8*	Rohm	DFN2020MD-6 (SOT1220)	6
TUMT3	Rohm	SOT323	3
TUMT5*	Rohm	DFN2020-6 (SOT1118)	6
TUMT6*	Rohm	DFN2020-6 (SOT1118)	6

Type	Competitor	Nexperia	Pins/ Leads
UDFN 1.6 x 1.6	ON Semi	DFN1616-6 (SOT1189)	6
UDFN 1.7 x 1.35, 0.4P	ON Semi	DFN1714U-8 (SOT983)	8
UDFN10 2.5 x 1, 0.5P	ON Semi	DFN2510A-10 (SOT1176)	10
UDFN12 2.5 x 1.35, 0.4P	ON Semi	DFN2514-12 (SOT1167)	12
U-DFN2020-3 Type B 2.0 x 2.0 x 0.6	Diodes Inc.	DFN2020-3 (SOT1061)	3
U-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN2020-6 Type B	Diodes Inc.	DFN2020-6 (SOT1118)	6
UDFN2020-6 Type E	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
U-DFN2523-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
UDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6	Toshiba	DFN2020-6 (SOT1118)	6
UDFN-6 WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
UDFN6B	Toshiba	DFN2020MD-6 (SOT1220)	6
UF6	Toshiba	SOT363	6
UF6/ USV/ US6	Toshiba	SOT363	6
UFP	Renesas	SOD523	2
UMD2	Rohm	SOD323F	2
UMD3/UMT3	Rohm	SOT323	3
UMD5/UMT5	Rohm	SOT353	5
UMD6/ UMT6	Rohm	SOT363	6
UMLP 1.6 x 1.6*	Fairchild	DFN2020MD-6 (SOT1220)	6
UMT3	Rohm	SOT323	3
UMT3F*	Rohm	SOT323	3
UMT5/ UMD5	Rohm	SOT353	5
UMT6	Rohm	SOT363	6
UMT6/ UMD6	Rohm	SOT363	6
UPAK (SOT89)	Renesas	SOT89	3
URP	Renesas	SOD323	2
US6	Toshiba	SOT363	6
US6/ UF6/ USV	Toshiba	SOT363	6
use	Toshiba	SOD323	2
US-Flat	Toshiba	SOD323F	2
USM	Toshiba	SOT323	3
USV	Toshiba	SOT353	5
USV	Toshiba	SOT363	6
USV/ US6/ UF6/	Toshiba	SOT363	6
VESM*	Toshiba	DFN1010D-3 (SOT1215)	3
VML0806*	Rohm	DFN1006B-3 (SOT883B)	3
VML1006	Rohm	DFN1006-3 (SOT883)	3
VMN2*	Rohm	DFN1006-2 (SOD882)	2
VMN2*	Rohm	DFN1006D-2 (SOD882D)	2
VMN3*	Rohm	DFN1006-3 (SOT883)	3
VMT3*	Rohm	DFN1010D-3 (SOT1215)	3
VMT6*	Rohm	DFN1010B-6 (SOT1216)	6
VS6	Toshiba	SOT457	6
WDFN3	ON Semi	DFN2020-3 (SOT1061)	3
W-DFN3020-8*	Diodes Inc.	DFN2020-6 (SOT1118)	6

Types with * show footprint compability only

Package cross reference list

Type	Competitor	Nexperia	Pins/ Leads
WDFN6	ON Semi	DFN2020-6 (SOT1118)	6
WDFN6	ON Semi	DFN2020MD-6 (SOT1220)	6
WDFN-8	OnSemi	LFPK33 (SOT1210)	8
WLCSP 1 x 1*	Fairchild	WLCSP4	3
WLCSP1.6 x 1.6*	AOS	WLCSP6	6
WLCSP2	ON Semi	DSN0603-2 (SOD962)	2
WLCSP-4*	Fairchild	WLCSP4	3
WLCSP-4*	ON Semi	WLCSP4	3
WLL-2-2	Infineon	DSN0402-2 (SOD992)	2
WLL-2-2	Infineon	DSN0402B-2 (SOD992B)	2
WLP1.5x 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
WLPI.Ox 1.0*	Texas Instruments	DFN1010D-3 (SOT1215)	3
WLPI.Ox 1.5*	Texas Instruments	DFN2020MD-6 (SOT1220)	6
X1-DFN 1006-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X1-DFN1212-3*	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X1-DFN1616-6*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN0806-3	Diodes Inc.	DFN1006-3 (SOT883)	3
X2-DFN1006-2	Diodes Inc.	DFN1006D-2 (SOD882D)	2
X2-DFN1006-3	Diodes Inc.	DFN1006B-3 (SOT883B)	3
X2-DFN1010-3	Diodes Inc.	DFN1010D-3 (SOT1215)	3
X2-DFN1310-6*	Diodes Inc.	DFN1010B-6 (SOT1216)	6
X2-DFN2015-3*	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X2-DFN2020-6	Diodes Inc.	DFN2020MD-6 (SOT1220)	6
X3-DFN0603-2	Diodes Inc.	DFN0603-2 (SOD972E)	2
X3-DFN0603-2	Diodes Inc.	DSN0603-2 (SOD962)	2
X3DFN2	ON Semi	DFN0603-2 (SOD972E)	2
X3DFN-2	ON Semi	DSN0603-2 (SOD962)	2
XDFN3	ON Semi	DFN1006-3 (SOT883)	3
XI-DFN1006-2	Diodes Inc.	DFN1006-2 (SOD882)	2

Types with * show footprint compability only

Package cross reference matrix

Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
2	DSN0402-2 (SOD992)		0.4 x 0.2 x 0.12			SMD0402	CL2	DSN2 0.4 x 0.2				ST01005		SLP- 0402P2X3
	DSN0402B-2 (SOD992B)		0.43 x 0.23 x 0.12											
	DFN0603-2 (SOD972E)		0.63 x 0.33 x 0.25				SL2	X3DFN2			X3- DFN0603-2			SGP- 0603P2X3
	DSN1006-2 (SOD993)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DSN1006U-2 (SOD995)		1.0 x 0.6 x 0.3					DSN2 1.0 x 0.6						
	DFN1006-2 (SOD882)		1.0 x 0.6 x 0.48	250		(VMN2)	CTS2 (fSC)	(SOD923-2)		TSLP-2-1	XI-DFN1006-2	SOD 882 uQFN-2L	LLP1006-2M LLP1006-2L	SLP1006P2
	DFN1006D-2 (SOD882D)		1.0 x 0.6 x 0.37	250		(VMN2)	CTS2 (fSC)	DSN2 1.0 x 0.6		TSLP-2-7/ -17	X2- DFN1006-2	SOD882T	LLP1006-2L LLP1006-2M	SLP1006P2T
	DFN1608D-2 (SOD1608)		1.6 x 0.8 x 0.37	780		KMD2		DSN2 1.6 x 0.8		TSNP-2-2				SLP1610N2
	DSN0603-2 (SOD962)		0.6 x 0.3 x 0.3	525		GMD2	SC2	DSN2, X3DFN-2 WLCSP2	MP6	TSSLP-2-1	X3- DFN0603-2	DFN2	CLP0603	SLP- 0603P2X3
	SOD80C	Mini- Melf	3.5 x 1.5 x 1.5	300		LLDS			LLD		MiniMelf	MiniMelf	MiniMelf	
	SOD123F		2.6 x 1.6 x 1.1	830			S-Flat	SOD-123-FL			PowerDI123	SOD-123		
	SOD123W		2.6 x 1.7 x 1.0	900		PMDU	S-Flat	SOD-123-FL	SRP-F		PowerDI123	Stmite flat		
	SOD128		3.8 x 2.5 x 1.0	1000		PMDT	M-Flat					SMA flat		
	SOD323	SC-76	1.7 x 1.25 x 0.95	400			USC	SOD-323	URP	SOD323	SOD-323	SOD-323	SOD323	SOD323
	SOD323F	SC-90	1.7 x 1.25 x 0.7	830		UMD2	US-Flat				PowerDI323			
	SOD523	SC-79	1.2 x 0.8 x 0.6	500		EMD2	ESC/ TESC	SOD-523	UFP	SC79	SOD523	SOD-523	SOD523	SOD523
3	CFP15 (SOT1289)		5.8 x 4.3 x 0.78	1200							PowerDi5		SMPC TO-277A	
	DFN1006-3 (SOT883)	SC-101	1.0 x 0.6 x 0.48	250		VML1006	SS CSP2	XDFN3		TSLP-3-4	X1 -DFN 1006-3			SLP1006P3
	DFN1006B-3 (SOT883B)		1.0 x 0.6 x 0.37	250		VML1006	CST3	XDFN3		TSLP-3-1, -15	X2- DFN1006-3			SLP1006P3T
	DFN1010D-3 (SOT1215)		1.1 x 1.0 x 0.37	325		(VMT3)	(VESM)	(SOT723)			X2- DFN1010-3			
	DFN2020-3 (SOT1061)	HUSON3	2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	DFN2020D-3 (SOT1061D)		2.0 x 2.0 x 0.62	1300				WDFN3			U-DFN2020-3 Type B 2.0 x 2.0 x 0.6		PowerPAK SC706L	
	D2PAK (SOT404)		11.0 x 11.0 x 4.3			LPDS/ LPTS	TO- 220SM D2PAK	D2PAK D2PAK 3 TO-263-2L	TO-220S / SMD TO-263 LDPAK(S)-(1) MP-25Z	D2PAK, PG- T0263-3	T0263 (D2PAK)	D2PAK, H2PAK-2	TO-263 3-lead TO-263AB / D2PAK TO-263	
	SOT23		2.9 x 1.3 x 1.0	250		SSD3/ SST3	S-Mini TSM	SOT-23	MPAK	SOT23	SOT-23	SOT23	SOT23	SOT23
	SOT89	SC-62	4.5 x 2.5 x 1.5	1300		MPT3	PW-Mini	SOT-89	UPAK (SOT89)	SOT89	SOT89			
	SOT323	SC-70	2.0 x 1.25 x 0.95	200		UMD3/ UMT3 TUMT3	USM	SC-70	CMAK/ CMPAK	SOT323	SOT-323	SOT-323	SC-70 3 leads	SOT-323

Types in brackets (...) show footprint compatibility only

Package cross reference matrix

Pins/ leads	Nexperia	Industry standard names	Size (L x W x H) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
3	TO-220 (SOT78)		15.6 x 10 x 4.4			TO-220FM	TO-220	TO-220-3L, TO-220F-3FS, TO-220-3	MP-25(K)	PG- TO220-3, TO220	TO220-3	TO-220	TO-220, TO- 220AB	
	I2PAK (SOT226)		11 x 10 x 4.3					I2PAK, TO-262-2L, TO-262-3L	MP-25SK, TO-262	PG- TO262-3, TO262		I2PAK	TO-262	
4	LFPAK56 (SOT669)	Power- S08	4.9 x 4.45 x 1.0	3950		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSOP-8	PG-TD- SON-8	Power- Di5060-8	Power- FLAT (6x5)	PowerPAK SO-8(L)	
	SOT143B		2.9 x 1.3 x 1.0	250			CP4		MPAK-4R	SOT143	SOT-143			SOT-143
	LFPAK56E (SOT1023)		6.2 x 5.3 x 1.1	500W		HSOP8 (Single)	SOP / DSOP Advance	SO-8 FL, DFN-5	LFPAK56, HSOP-8	PG-TD- SON-8	Power- Di5060-8	Power- FLAT (6x5)	PowerPAK SO-8(L)	
	SOT223	SC-73	6.5 x 3.5 x 1.65	1700				SOT-223		SOT223	SOT-223		SOT223	
	LFPAK88 (SOT1235)		8 x 8 x 1.6					To-LL		To-LL			PowerPAK 8x8L	
5	SOT353	SC-88 A	2.0 x 1.25 x 0.95	300		UMD5/ UMT5	USV	SC-88 A	CMPAK- 5C0		SOT353		SOT353	SC70-5L
6	DFN1010-6 (SOT891)	XSON6	1.0 x 1.0 x 0.48				CS6	SOT963						
	DFN1010B-6 (SOT1216)		1.1 x 1.0 x 0.37	350		(VMT6)	(FS6)	(SOT063)			(SOT963)			
	DFN1410-6 (SOT886)	XSON6	1.45 x 1.0 x 0.48	250										SLP1510N6
	DFN1616-6 (SOT1189)	HXSON6	1.6 x 1.6 x 0.48					UDFN 1.6 x 1.6					LLP75-/L	SLP1616P6
	DFN2020-6 (SOT1118)		2.0 x 2.0 x 0.62	1300		HU- ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020- 6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN2020D-6 (SOT1118D)		2.0 x 2.0 x 0.62	1300		HU- ML2020L8 (Dual)	UDFN6	6 Lead DFN WDFN6			UDFN2020- 6 Type B		PowerPAK SC-70 Thin PowerPAK SC-70	
	DFN- 2020MD-6 (SOT1220)		2.0 x 2.0 x 0.62	1250		HU- ML2020L8 (Single)	UDFN6B	UDFN-6 WDFN6			UDFN2020- 6 Type E		PowerPAK SC-70 Thin PowerPAK SC-70	
	SOT363	SC-88	2.0 x 1.25 x 0.95	300		UMD6/ UMT6	US6 UF6 USV	SC-88	CMPAK-6	SOT363	SOT-363		SC70-6	SC70-6L
	SOT457	SC-74	2.9 x 1.5 x 1.0	750		SMD6/ SMT6	SM6 VS-6	SC-74 TSOP-6	TSOP-6	SC74 TSOP6	SOT23-6 SOT26		TSOP6 TSOP-6	SOT23-6L
8	LFPAK33 (SOT1210)		3.3 x 3.3 x 0.85	790		HSMT8	TSON Advance	µ8FL, WDFN-8		PG-TSD- SON-8	Power Di3333-8	Power FLAT 3.3 x 3.3	PowerPAK 1212-8	
	LFPAK56D (SOT1205)		4.9 x 4.45 x 1.0	680		HSOP8 (Dual)		SO-8FL Dual, DFN-8	HSOP-8 dual	PG-TD- SON-8	Power Di5060-8	Power FLAT 5x6 Dual	PowerPAK SO-8L Dual	
	SOT96	S08	4.9 x 3.9 x 1.75	1500		SOP8	FM8	SOIC-8 NB	SOP-8				S08	
	DFN1714-8 (SOT 1166)	HUSON8	1.7 x 1.35 x 0.52											SLP1713P8
	DFN1714U-8 (SOT983)	HXSON8	1.7 x 1.35 x 0.48					UDFN 1.7 x 1.35, 0.4P						SLP1713P8
10	DFN2510-10 (SOT 1165)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DF- N2510A-10 (SOT1176)	XSON10	2.5 x 1.0 x 0.48					UDFN10 2.5 x 1, 0.5P		TSLP-9-1		pQFN-10L		SLP1610P4
	DFN2626-10 (SOT 1197)		2.6 x 2.6 x 0.48					UDFN10 2.6 x 2.6, 0.5P						SLP2626P10

Types in brackets (...) show footprint compatibility only

Package cross reference

Package cross reference matrix

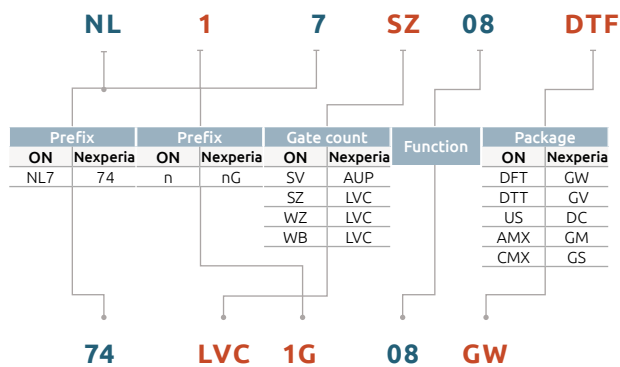
Pins/ leads	Nexperia	Industry standard names	Size (l x w x h) (mm)	P _{tot} (mW)	Package	Competitor synonyms								
						Rohm	Toshiba	ON Semi	Renesas	Infineon	Diodes Inc	ST	Vishay	Semtech
12	DFN2512-12 (SOT 1158)	HXSON12	2.5 x 1.2 x 0.48					UDFN12, 2.5 x 1.2, 0.4P						
	DFN2514-12 (SOT 1167)	HUSON12	2.5 x 1.35 x 0.53					UDFN12, 2.5 x 1.35, 0.4P						SLP2513P12
16	DFN3312-16 (SOT 1159)	HXSON16	3.3 x 1.2 x 0.48					UDFN 16, 3.5 x 1.2, 0.4P						
	DFN3314-16 (SOT 1168)	HUSON16	3.3 x 1.35 x 0.53											SLP3313P16

Types in brackets (...) show footprint compatibility only

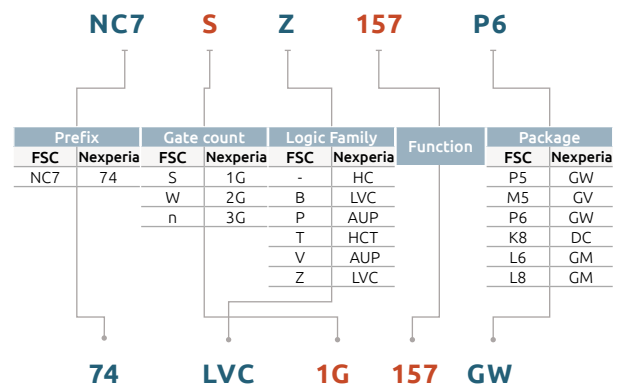
Competitive cross reference - Logic

This cross reference allows you to match a competitor's part number to a Nexperia part number. Once you have the equivalent part number, check the Nexperia website www.nexperia.com/logic to confirm that the particular configuration is released.

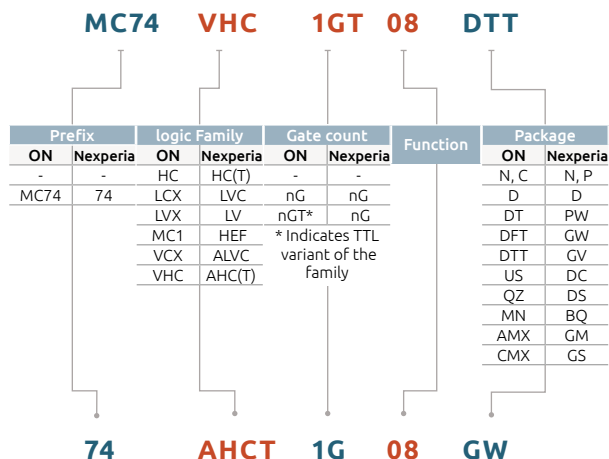
On semiconductor low pin count logic



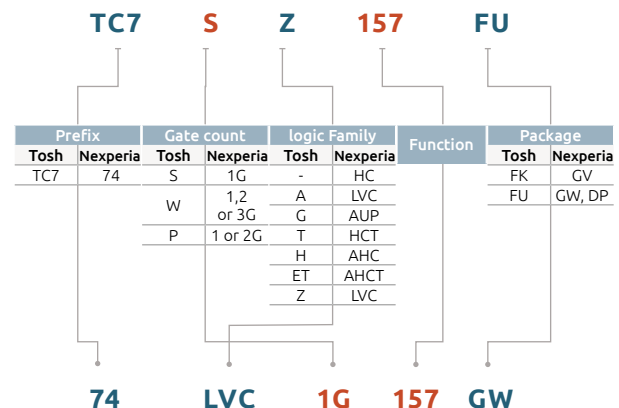
Fairchild semiconductor tiny logic



On semiconductors logic



Toshiba one gate



Fairchild semiconductor standard logic

Prefix		logic Family		Function	Package	
FSC	Nexperia	FSC	Nexperia		FSC	Nexperia
MM74	74	ABT	ABT	74	N	N
74	74	F	F		M, SC	D
		HC(T)	HC(T)		MSA	DB
		LCX	LVC		MEA	DL
		LVX	LV		MTC	PW
		VCX	ALVC		MTD	DGG
		VHC(T)	AHC(T)		BQ	BQ
		LVT	LVT			
				157		
				PW		

Toshiba standard logic

Prefix		logic Family		Function	Package	
Tosh	Nexperia	Tosh	Nexperia		Tosh	Nexperia
-	-	HC(T)	HC(T)	74	P	N
TC74	74	LCX	LVC		FW	D
		LVX	LV		FN	D
		TC	HEF		FT	PW
		VCX	ALVC		FS	DB
		VHC(T)	VHC(T)			
				125		
				PW		

Texas instruments logic

Prefix		Logic Family		Gate count	Function	Package	
TI	Nexperia	TI	Nexperia			TI	Nexperia
-	-	ABT	ABT	-	74	E	P
SN74	74	AHC(T)	AHC(T)	nG		M	T
SN54	74	ALVC	ALVC	nT		D	D
		ALVT	ALVT			PW	PW, TT
		AUP	AUP			DB	DB
		AVC	AVC			DL	DL
		CBT	CBT			DGG	DGG
		CBT LV	CBT LV			DGV	DGV
		CD	HEF			GKE	EV
		F	F			ZKE	EC
		HC(T)	HC(T)		1G	DCK	GW
		LV	LV			DBV	GV
		LVC	LVC			DCU	DC
		LVT	LVT			DCT	DP
		TPIC6C	NPIC6C			DRY	GM
						YZP	GM
					08		
					GW		

IDT logic

Prefix		logic Family		Function	Package	
Tosh	Nexperia	IDT	Nexperia		IDT	Nexperia
TC7	74	ALVC	ALVC	74	BF	EC
54	74	CBTLV	CBTLV		CD	N
		FCT	ABT		DC, PS	D
		LVC	LVC		DJ, PF	DGV
		QS	CBT		PA	DGG
					PC	DS, DK
					PG	PW
					PV	DL
				244	PY	DB

Diodes Inc. logic

Prefix		logic Family		Gate count	Function	Packages	
Diodes	Nexperia	Diodes	Nexperia			Diodes	Nexperia
74	74	AHC(T)	AHC(T)	-	74	T14	PW
		LVC	LVC	nG		S14	D
						SE	GW
						DW	GW
						W5	GV
						FZ4	GM
						FW4	GF
					1G		
					08		
					GW		

Renesas logic

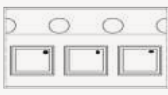
Prefix		logic Family		Gate count	Function	package	
Ren.	Nexperia	Ren.	Nexperia			Ren.	Nexperia
HD74	74	ALVC	ALVC	-	74	CM	GW
		BC, LS	ABT	nG		FP	DC
		CBT	CBT			P	N
		HC(T)	HC(T)			T	PW
		LV	LV			US	DC
		LVC	LVC				
		LVT	LVT				
					1G		
					08		
					GW		

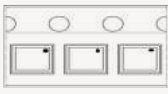
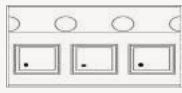
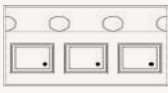
Product orientation (tape and reel pack)

2 pin packages	Orientation in tape	Package	Packing 12NC ending
		DFN1006-2 (SOD882)	315
		DFN1006D-2 (SOD882D)	315
		DFN1608D-2 (SOD1608)	315
		DSN0603-2 (SOD962)	315
		DFN0603-2 (SOD972E)	317
		DSN0402-2 (SOD992)	315
		DSN0402B-2 (SOD992B)	315
		DSN1006-2 (SOD993)	315
		DSN1006U-2 (SOD995)	315
		DSN1608-2 (SOD963&964)	315
		SOD80	115, 135
		SOD123F	115
		CFP3 (SOD123W)	115
		SOD123	115,118
		CFP5 (SOD128)	115
		SOD323	115, 135
		SOD323F	115
		SOD523	115, 135, 315, 335

3 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		SOT89	146			DFN1010D-3 (SOT1215)	147
						DFN2020-3 (SOT1061)	115, 135
						DFN2020D-3 (SOT1061D)	115,135
						SOT89	115,135
						SOT89	115, 135
						D2PAK (SOT404)	118
		DFN1006-3 (SOT883)	315			SOT89	147
		DFN1006B-3 (SOT883B)	315			CFP15 (SOT1289)	139, 146
		SOT23	185, 215, 235				
		SOT323	115, 135				
		SOT416	115, 135				

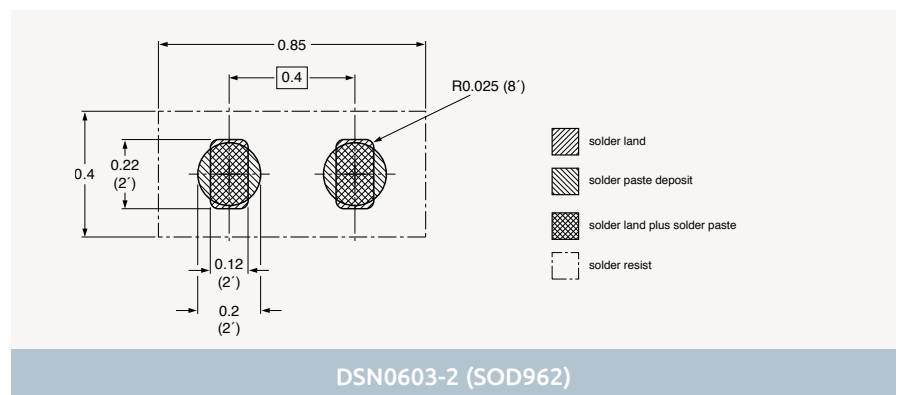
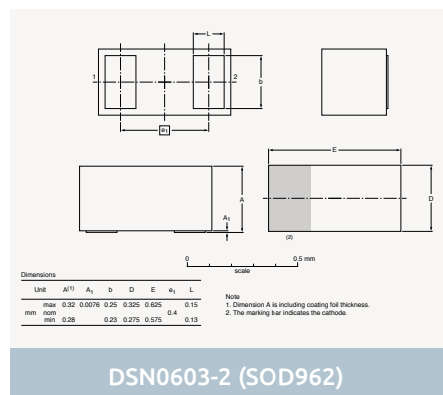
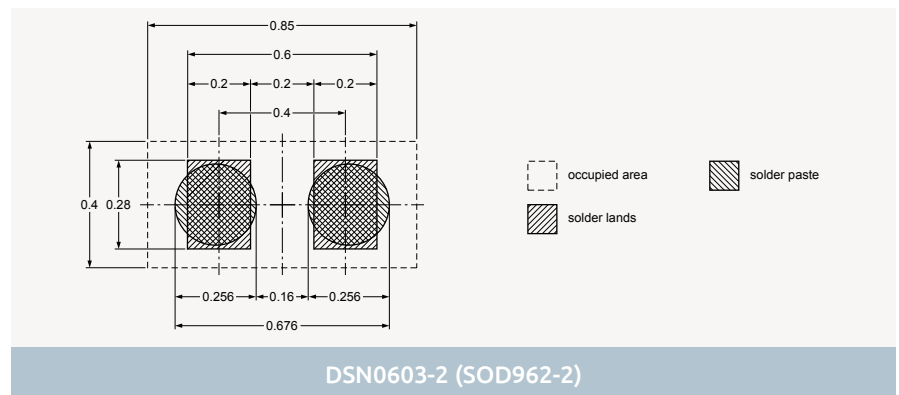
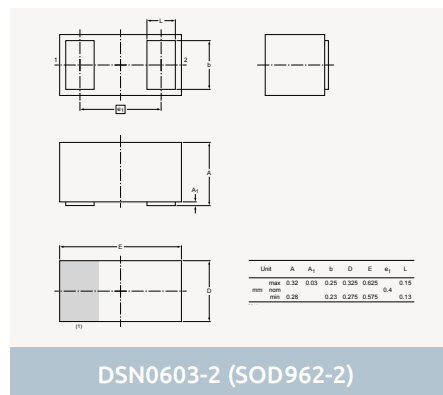
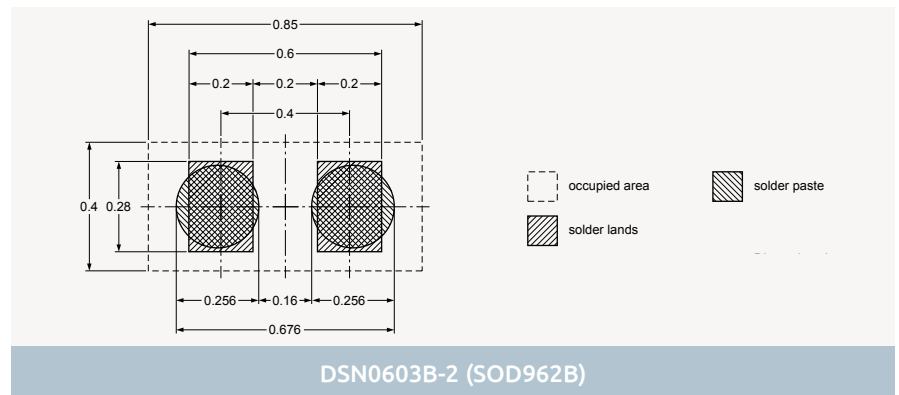
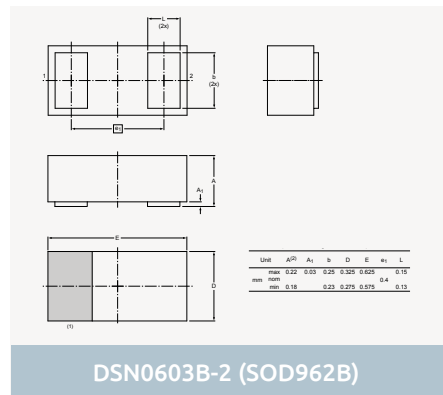
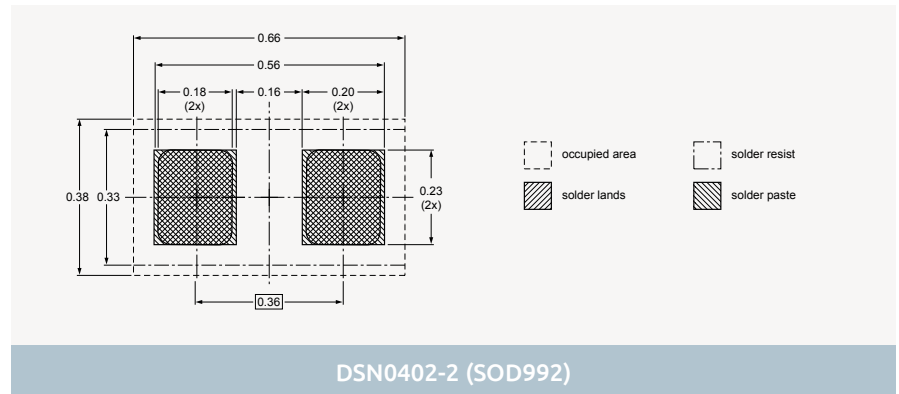
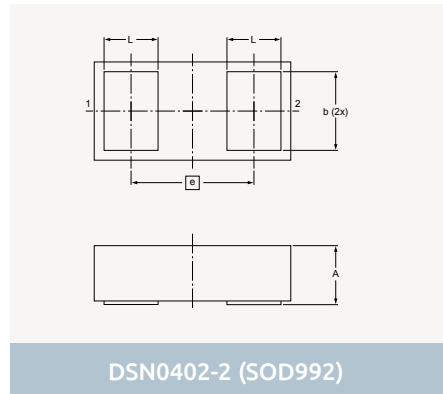
4 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		WLCSP4 (0808)	084				
		LFPK56 (SOT669)	115				
		LFPK56E (SOT1023)	115				
		LFPK56-UL2595 (SOT1023A)	115				
		LFPK88 (SOT1235)	118				
		SOT143B	215, 235				
		SOT223	115, 135				
		DFN1010-4 (SOT1194)	115				

5 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		WLCSP5 (1208)	087			SOT353	115, 135
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		SOT753	125				
		X2SON5 (SOT1226)	125				
		UMTS (SOT353-1)	125				
		SOS (SOT753)	125				

6 pin packages	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN1410-6 (SOT886)	115			DFN1412-6 (SOT1268)	147
		DFN1616-6 (SOT1189)	115			DFN2020-6 (SOT1118)	115
		DFN2020MD-6 (SOT1220)	184			DFN2020D-6 (SOT1118D)	115
		LFPK33 (SOT1210)	115			DFN2020MD-6 (SOT1220)	115
		LFPK56D (SOT1205)	115			SOT363	115, 135
		WLCSP6 (1510)	023			SOT457	115, 135
		XSON6 (SOT1202)	125			X2SON6 (SOT1255)	147
		XSON6 (SOT886)	125			DFN0606B-6	147
	Orientation in tape	Package	Packing 12NC ending		Orientation in tape	Package	Packing 12NC ending
		DFN1010-6 (SOT891)	132			DFN0606 (SOT8001)	147
		DFN1010E-6 (SOT1202)	132				
		DFN1410-6 (SOT886)	132				
		DFN2020MD-6 (SOT1220)	125				
		SOT363	125, 165				
		SOT457	125, 165				
		XSON6 (SOT891)	125				
		SC-88 (SOT363)	125				
		SC-74 (SOT457)	125				

multi I/O pin packages	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending
		DFN2110-9 (SOT1178)	115		DFN0606 (SOT8001)	147
		DFN2111-7 (SOT1358)	471			
		DFN2510A-10 (SOT1176)	115			
		DFN2520-9 (SOT1333)				
		DFN2520-9 (SOT1333)				
		DFN2520-9 (SOT1333)				
		DFN2520-9 (SOT1333)				
		DFN5050-32 (SOT617-3)				
		XSON8 (SOT1116)	115			
		X2SON8 (SOT1233)	115			
		XSON8 (SOT1203)	115			
		XSON8 (SOT1089)	115			
		XSON8 (SOT833-1)	115			
		SO8 (SOT96-1)	118			
		X2QFN10 (SOT1430-1)	471			
		XQFN10 (SOT1337-1)	115			
		TSSOP10 (SOT552-1)	118			
		XQFN10 (SOT1160-1)	115			
		XQFN12 (SOT1174-1)	115			
		DHVQFN14 (SOT762-1)	115			
		TSSOP14 (SOT402-1)	118			
		SSOP16 (SOT519-1)	118			
		TSSOP16 (SOT403-1)	118			
		SO16 (SOT109-1)	118			
		TSSOP20 (SOT360-1)	118			
		SO20 (SOT163-1)	118			
		DHXQFN20 (SOT1045-2)	115			
		DHVQFN20 (SOT764-1)	115			
		SO24 (SOT137-1)	118			
		DHVQFN24 (SOT815-1)	118			
		TSSOP24 (SOT355-1)	118			
		TSSOP48 (SOT362-1)	118			
		TSSOP48 (SOT480-1)	118			
		TSSOP56 (SOT364-1)	118			
	Orientation in tape	Package	Packing 12NC ending	Orientation in tape	Package	Packing 12NC ending
		XQFN8 (SOT902-2)	125			
		VSSOP8 (SOT765-1)	125			
		TSSOP8 (SOT505-2)	125			

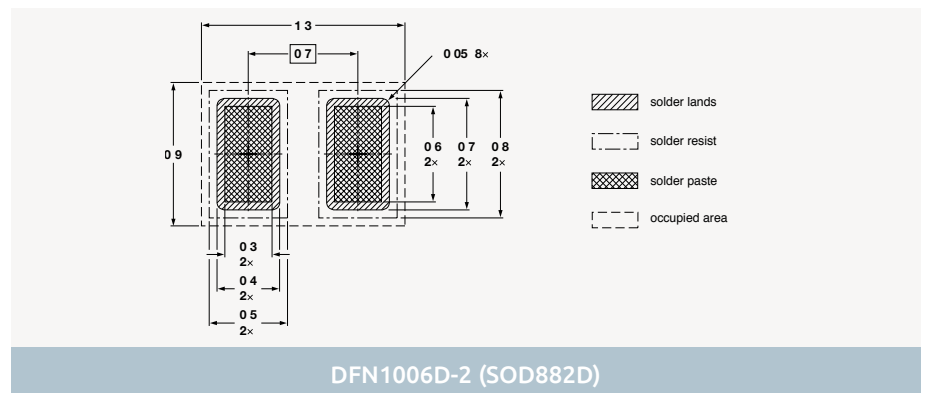
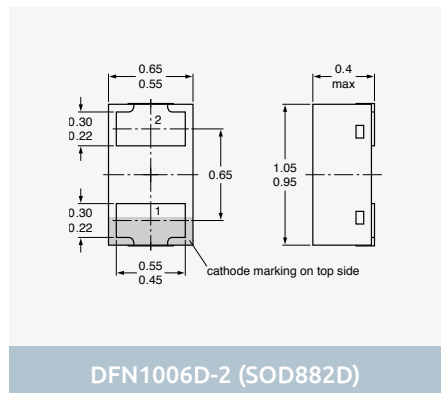
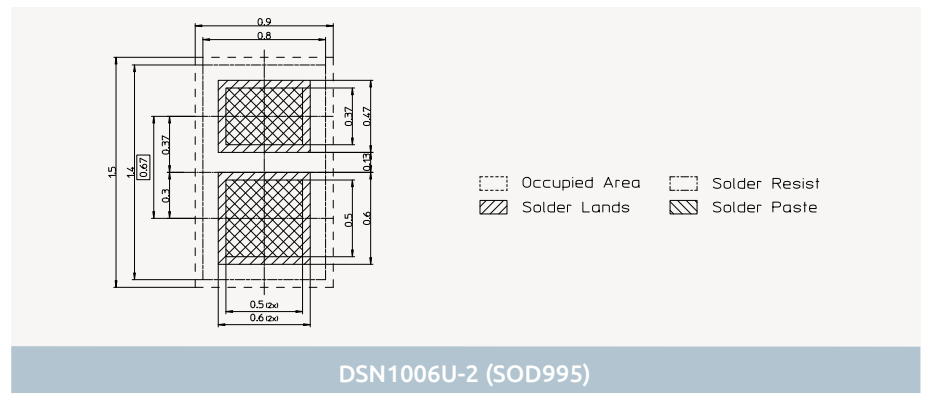
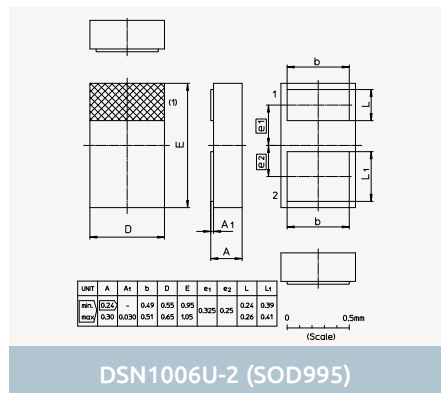
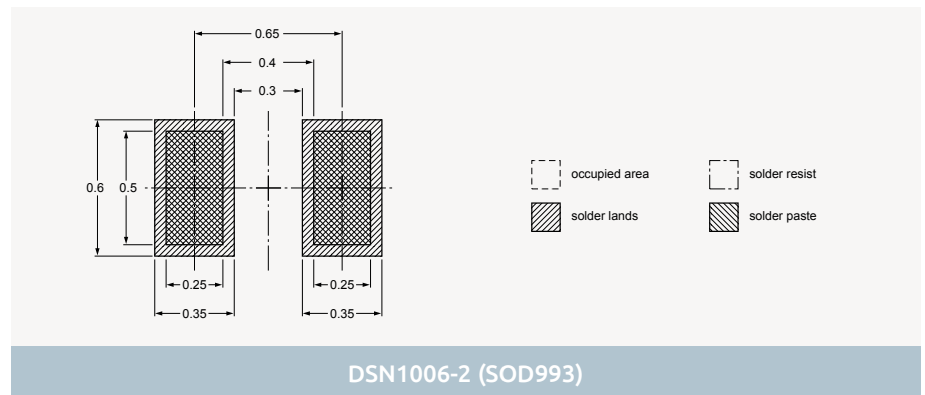
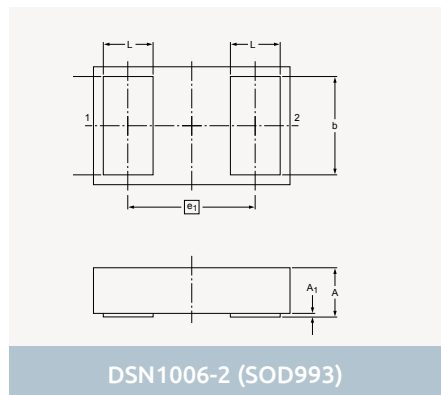
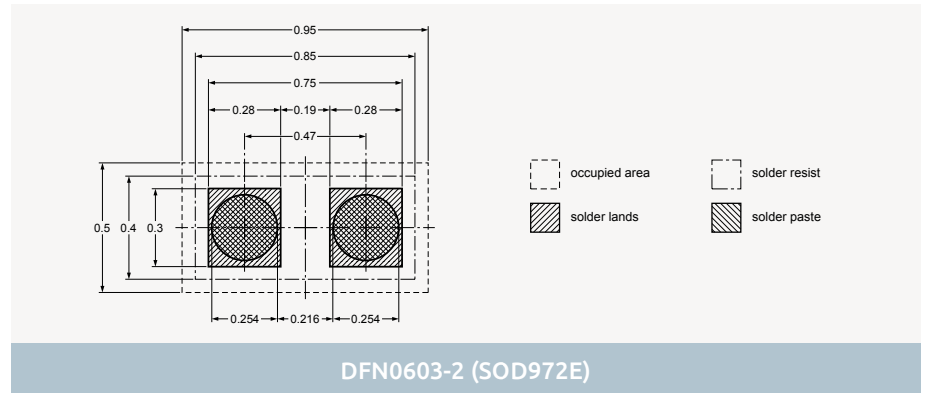
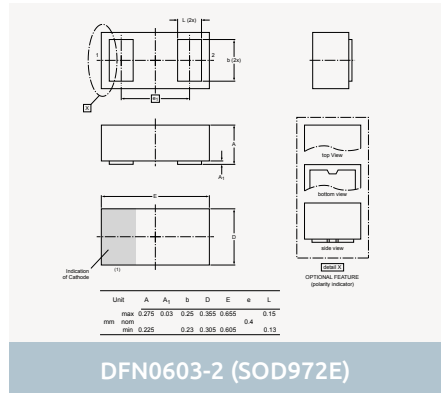
2-pin SMD packages



Dimensions in mm

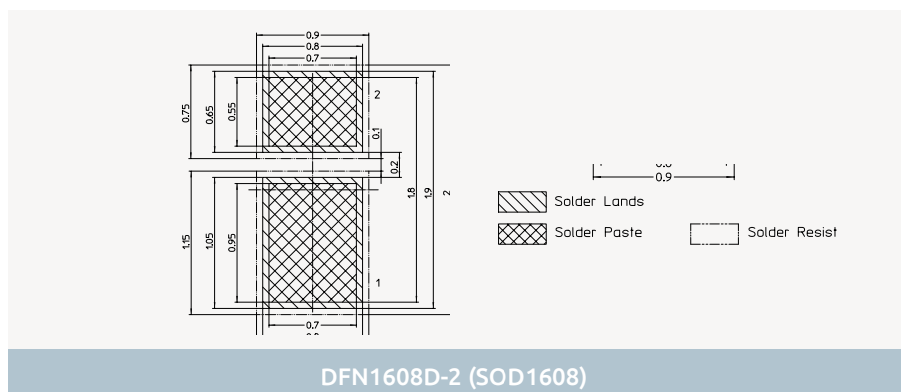
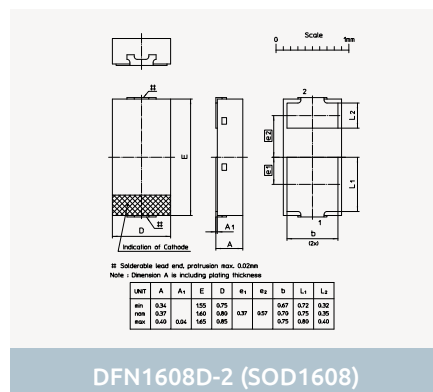
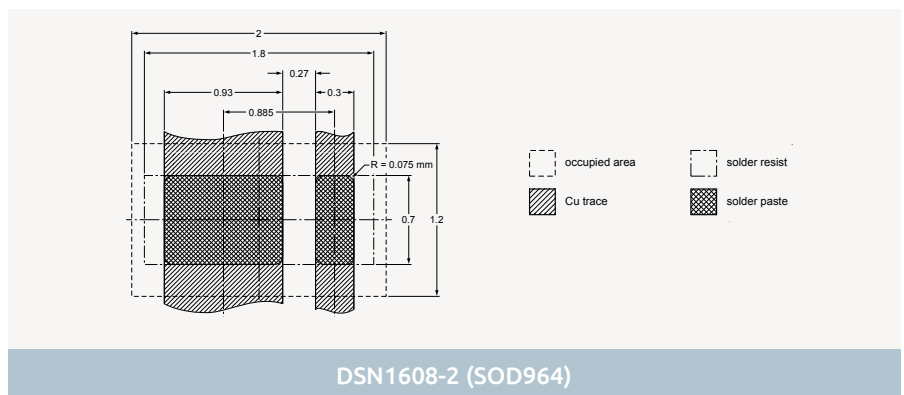
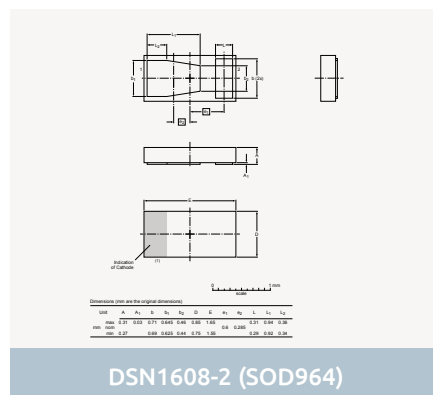
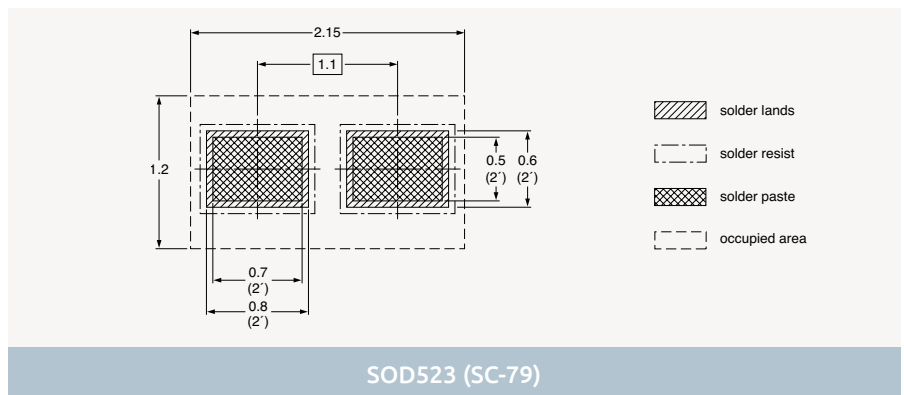
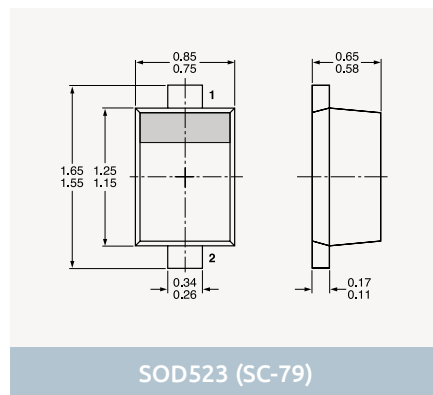
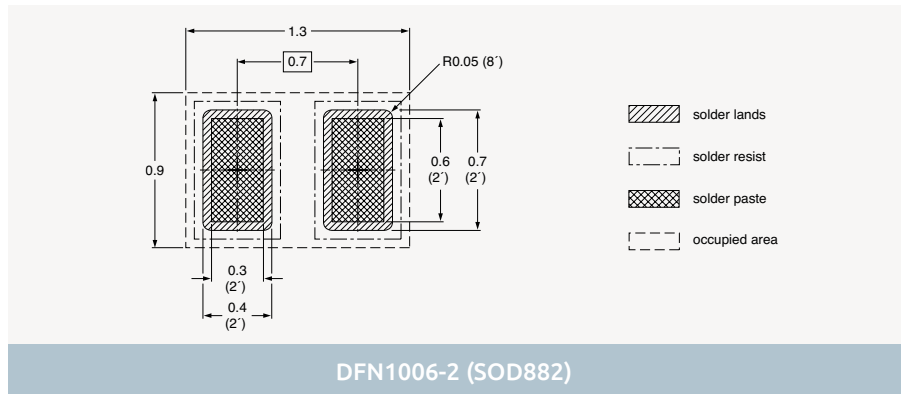
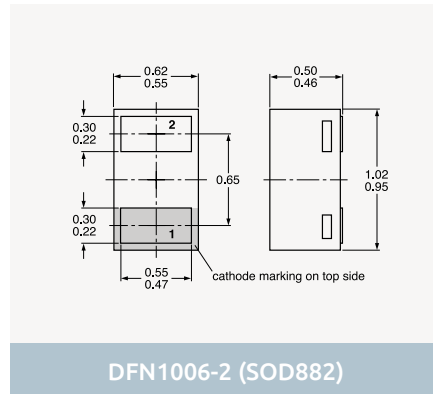
Images are for reference only, for detailed drawings please visit nexperia.com/packages

2-pin SMD packages



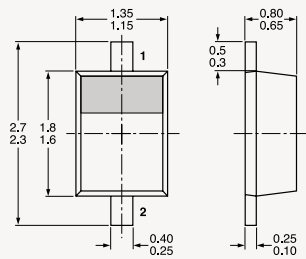
Dimensions in mm

2-pin SMD packages

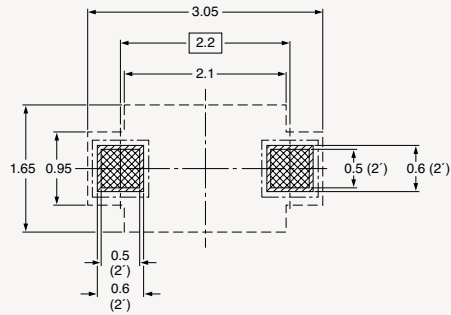


Dimensions in mm

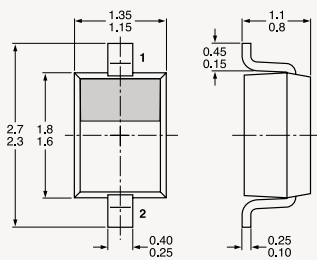
2-pin SMD packages



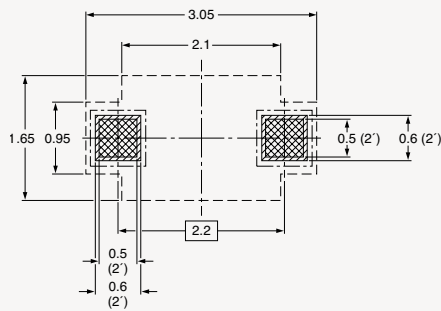
SC-90 (SOD323F)



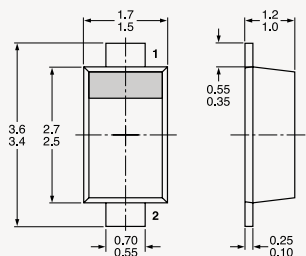
SC-90 (SOD323F)



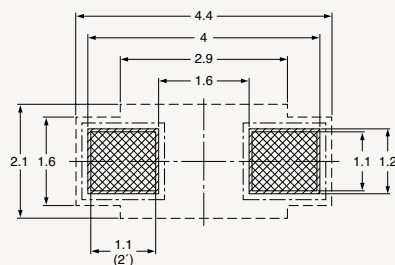
SOD323



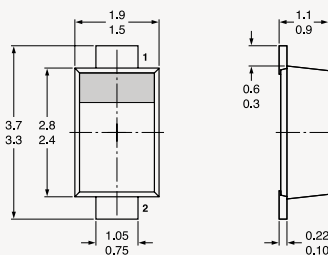
SOD323



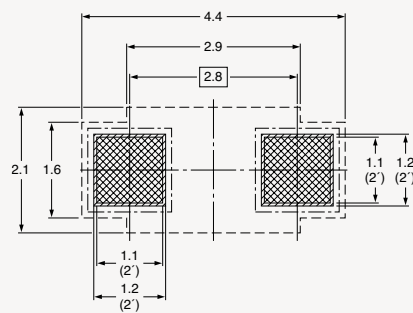
SOD123F



SOD123F



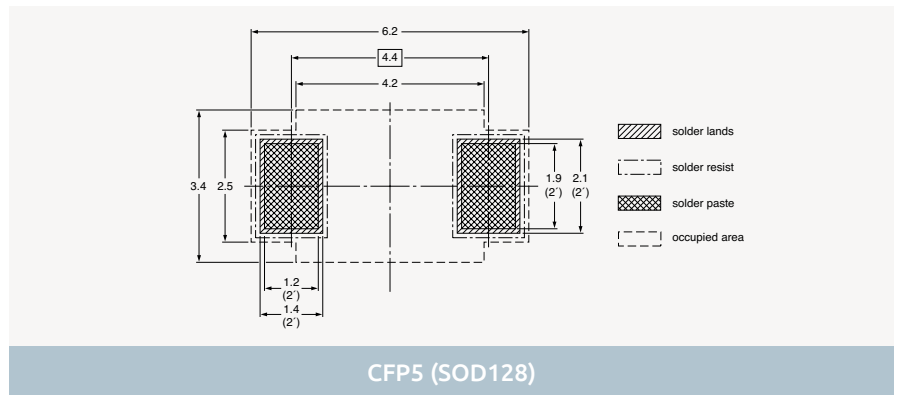
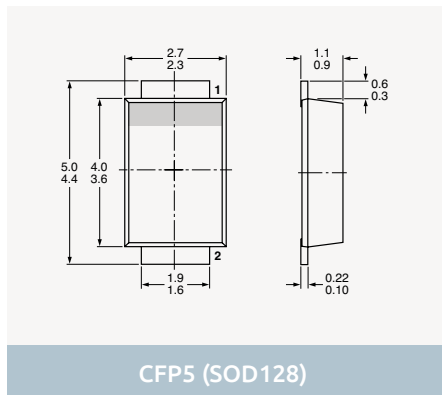
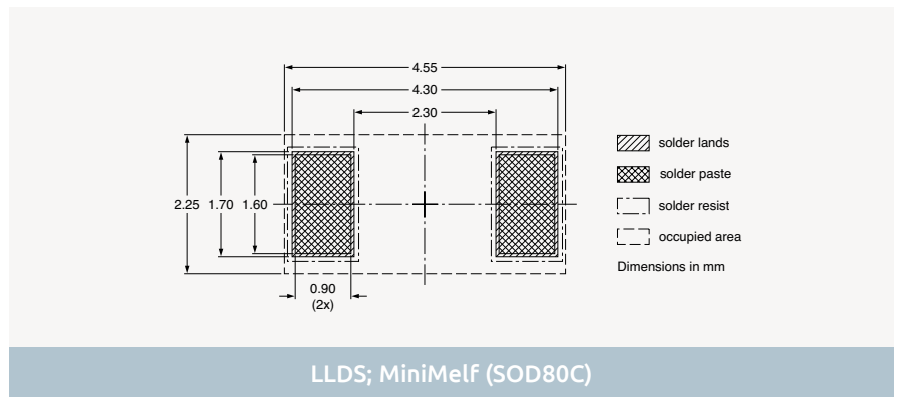
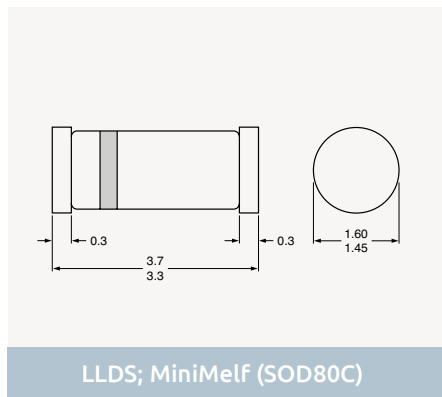
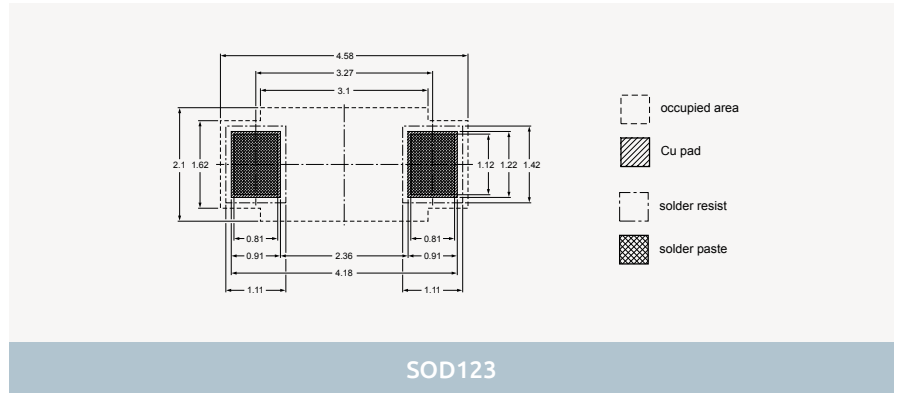
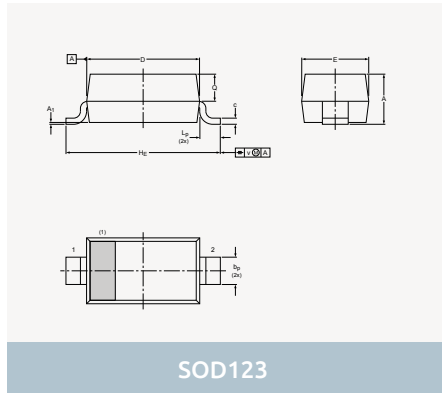
CFP3 (SOD123W)



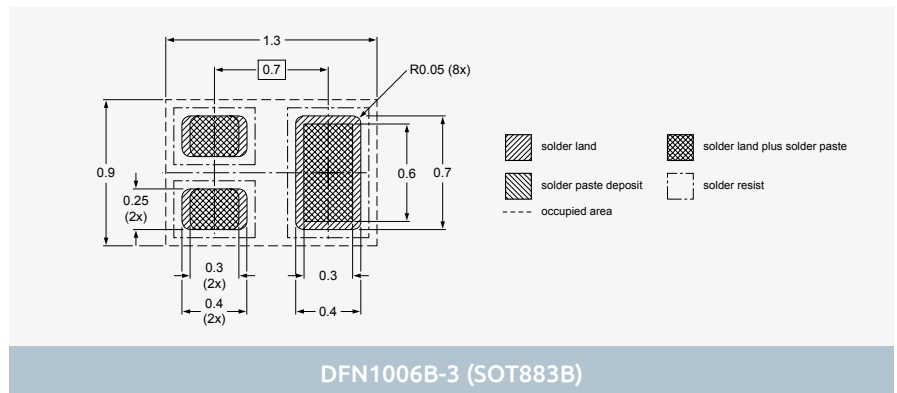
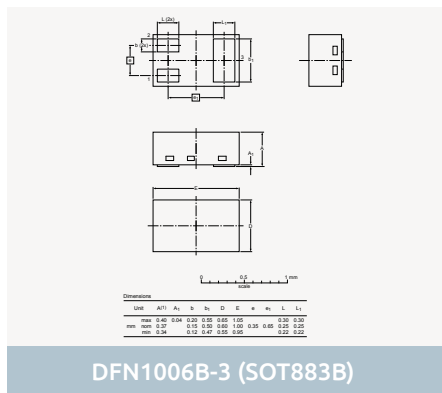
CFP3 (SOD123W)

Dimensions in mm

2-pin SMD packages



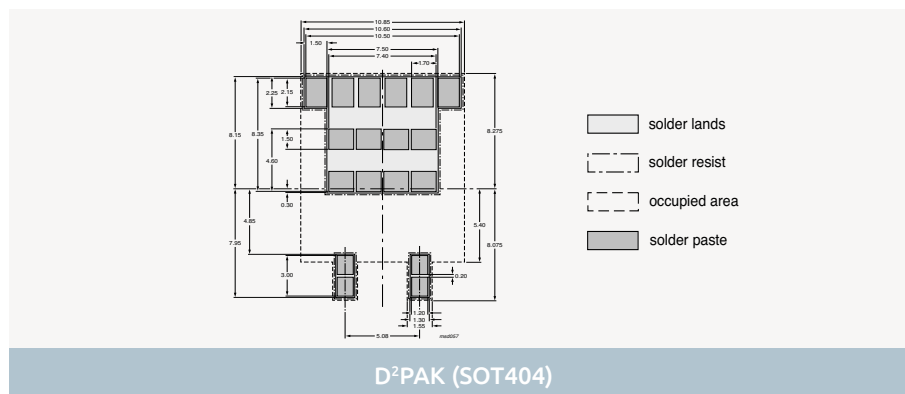
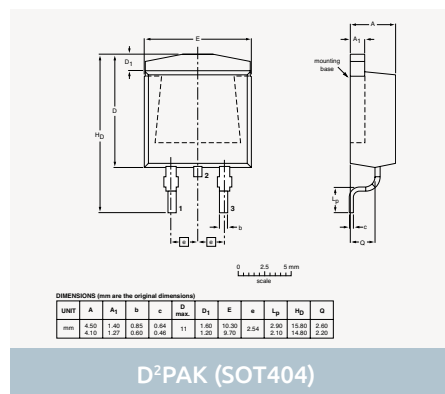
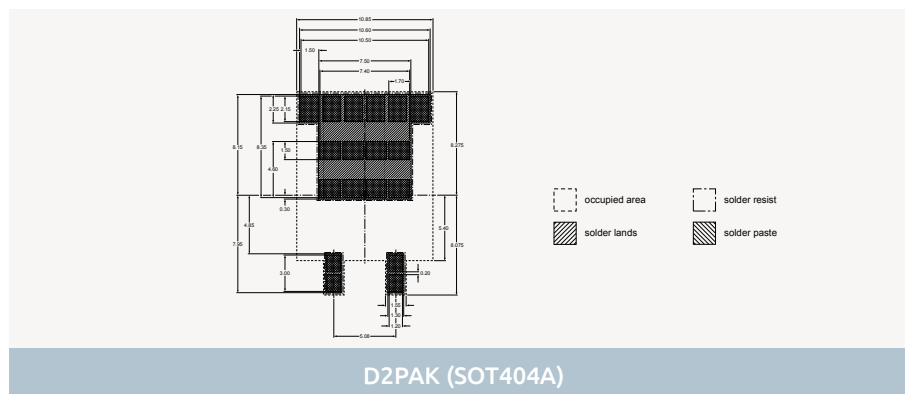
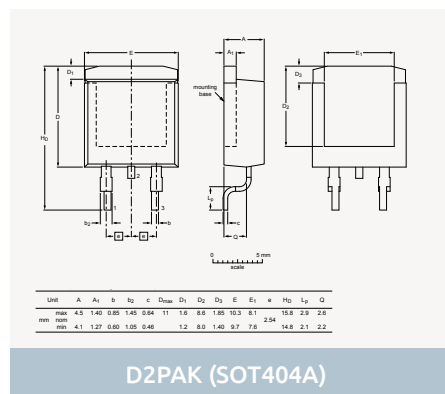
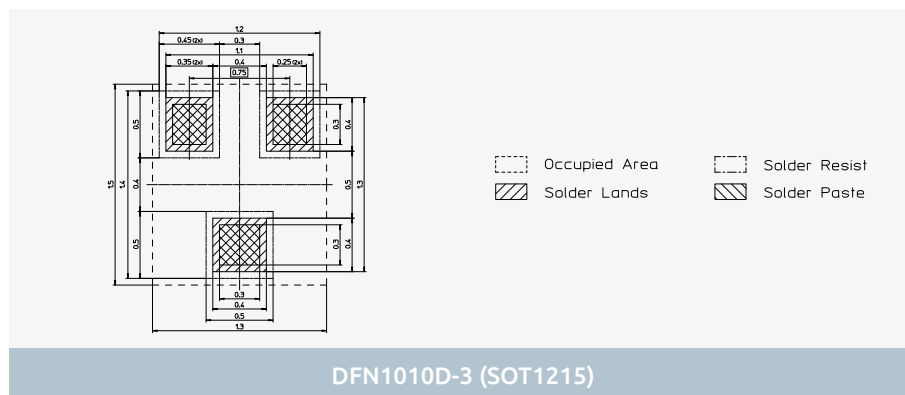
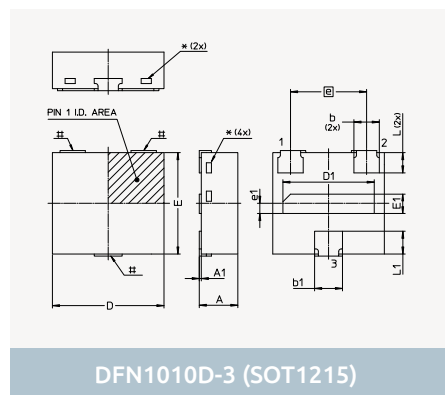
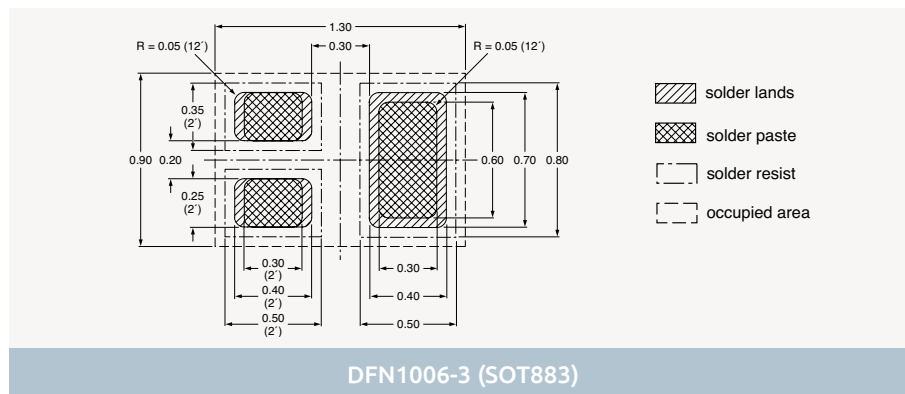
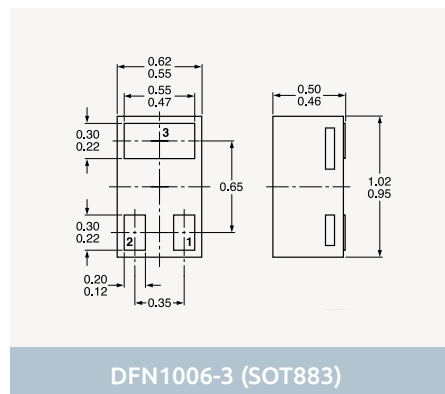
3-pin SMD packages



Dimensions in mm

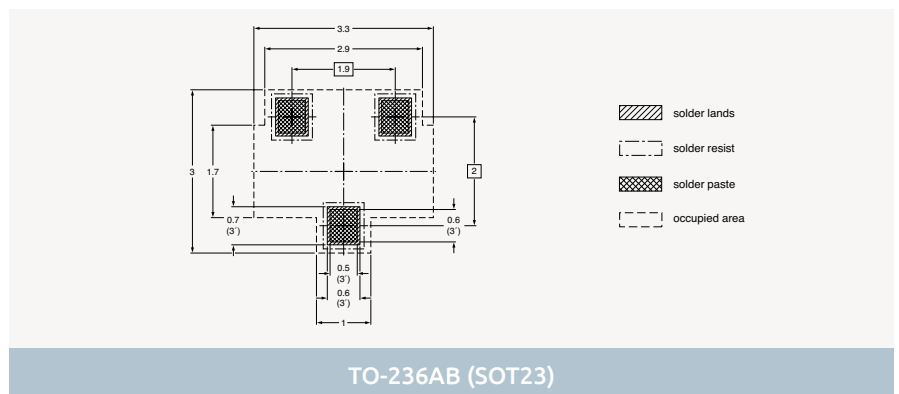
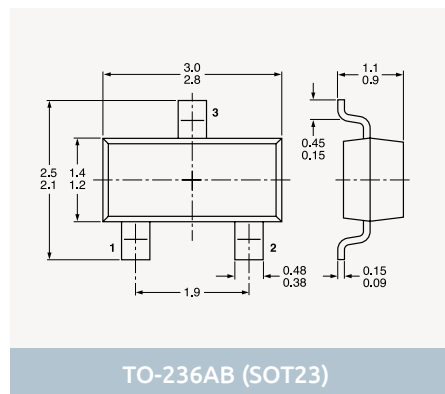
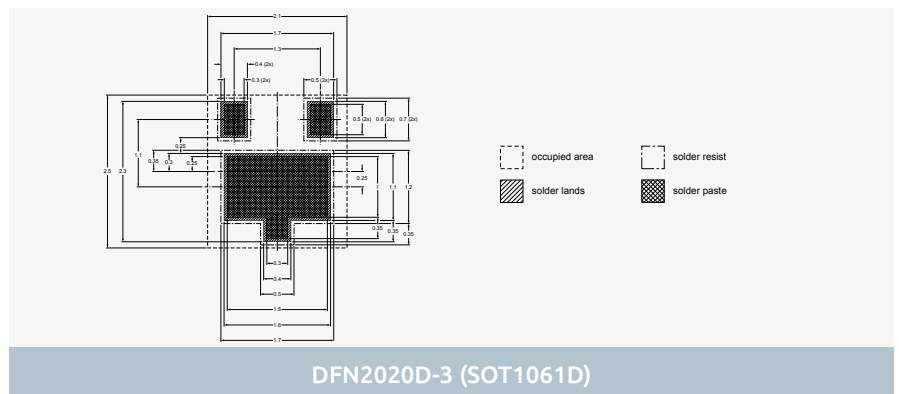
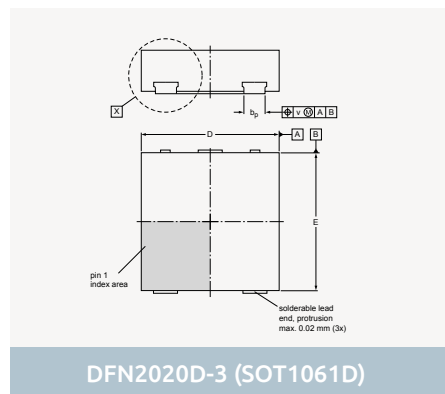
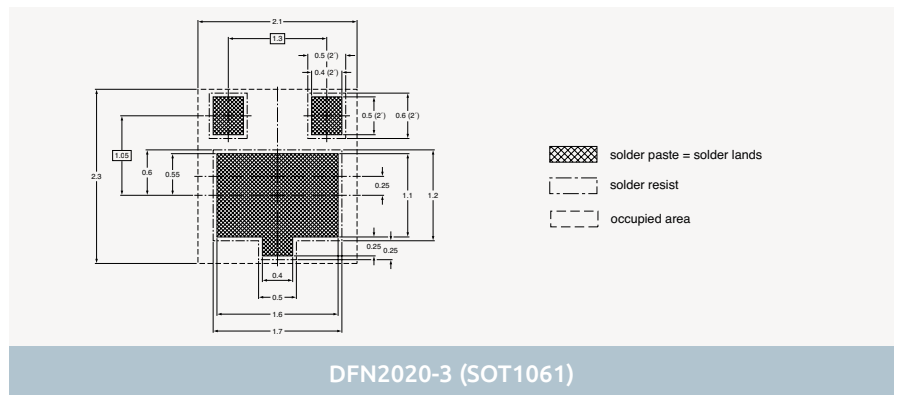
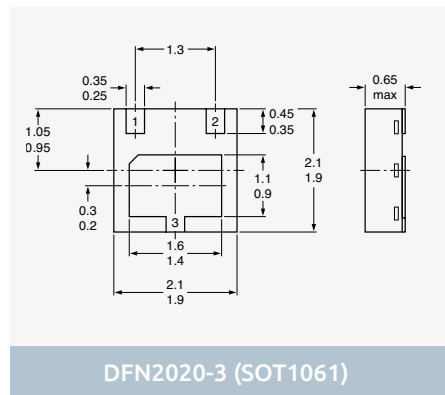
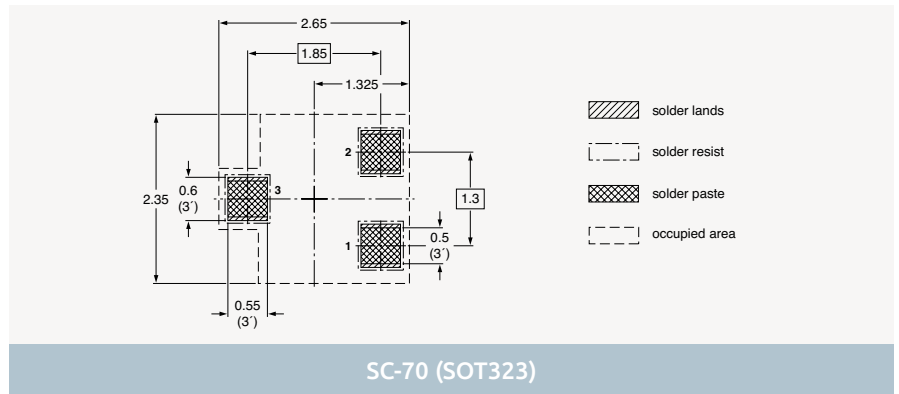
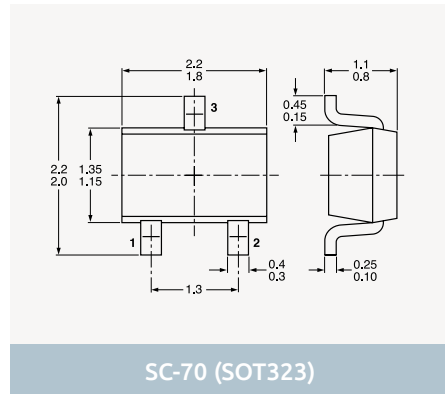
Images are for reference only, for detailed drawings please visit nexperia.com/packages

3-pin SMD packages



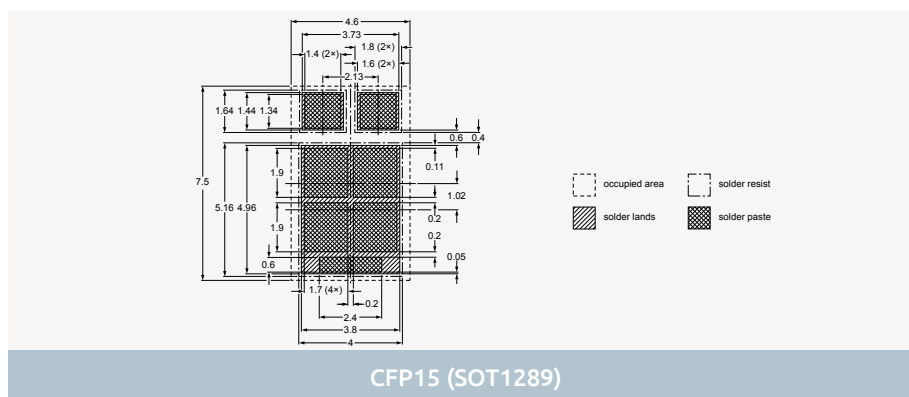
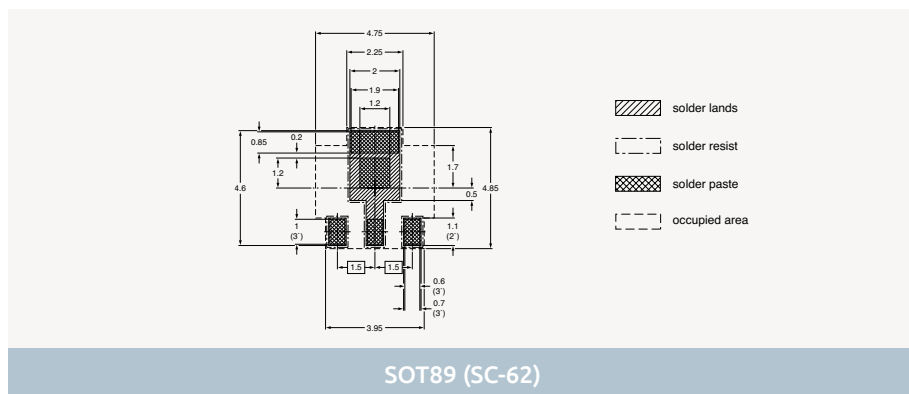
Dimensions in mm

3-pin SMD packages

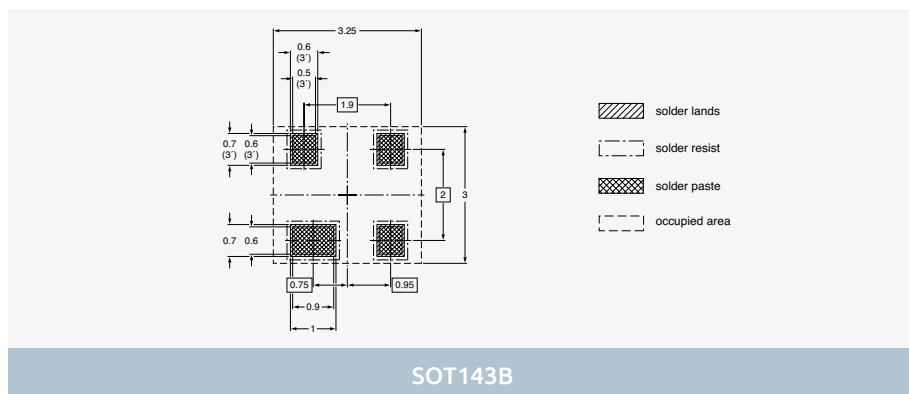
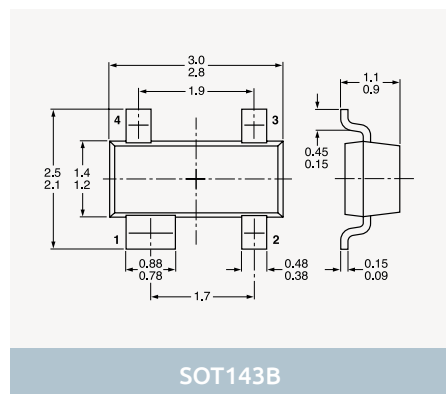
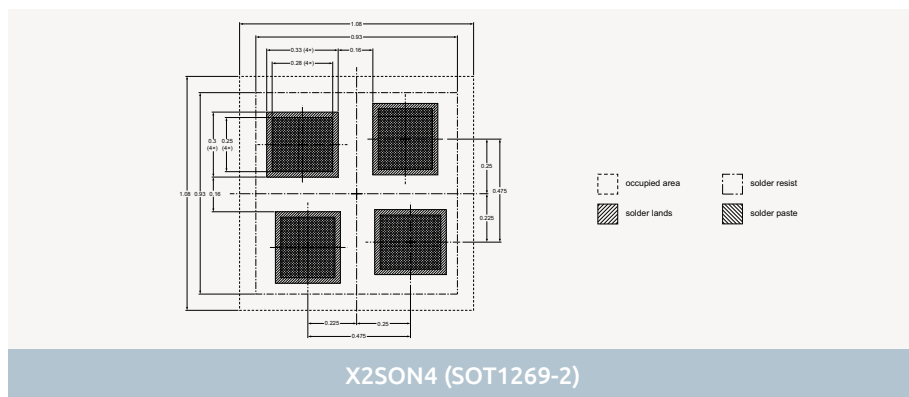


Dimensions in mm

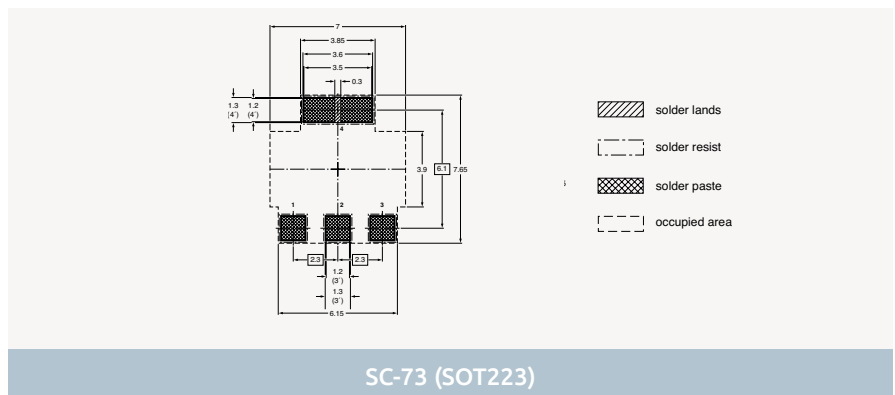
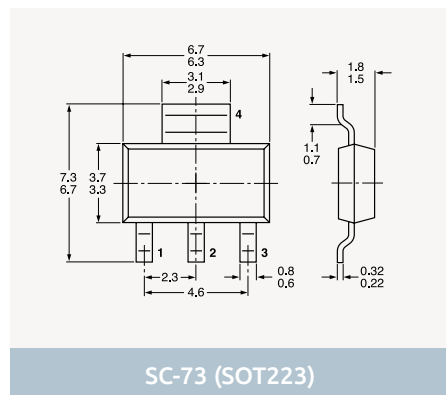
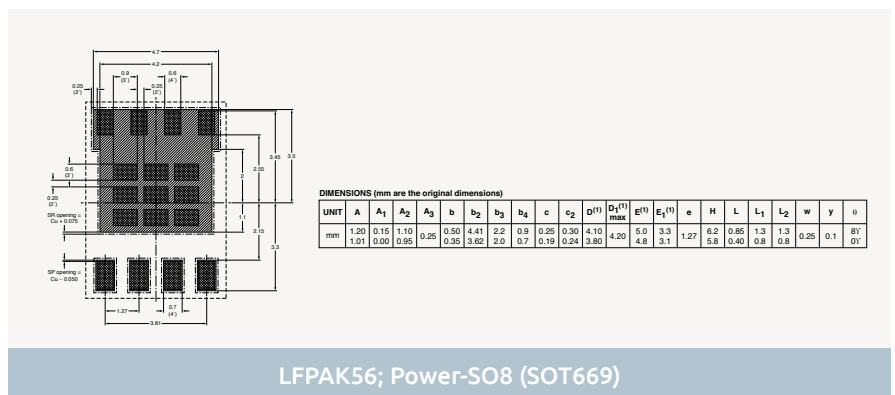
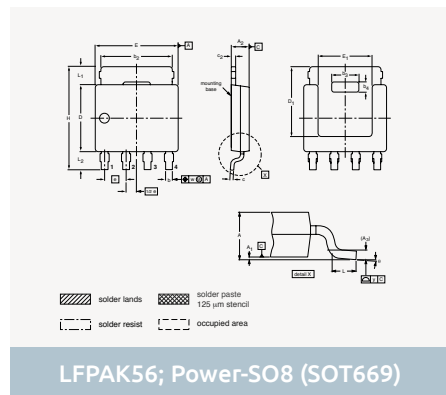
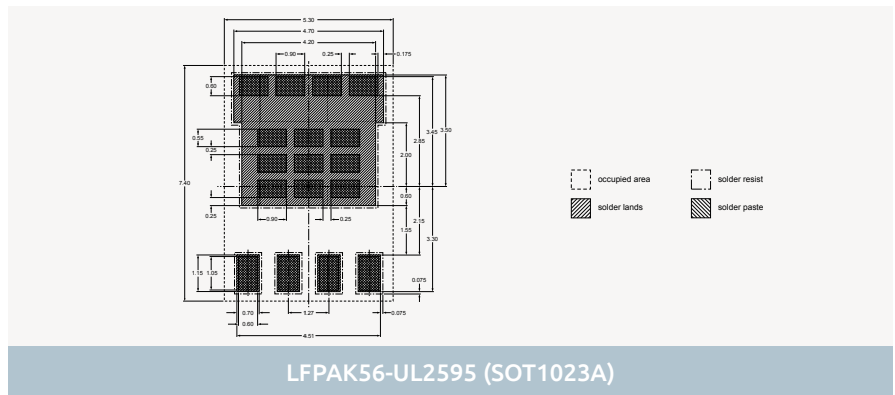
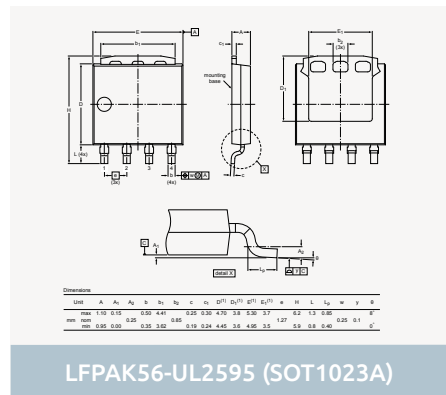
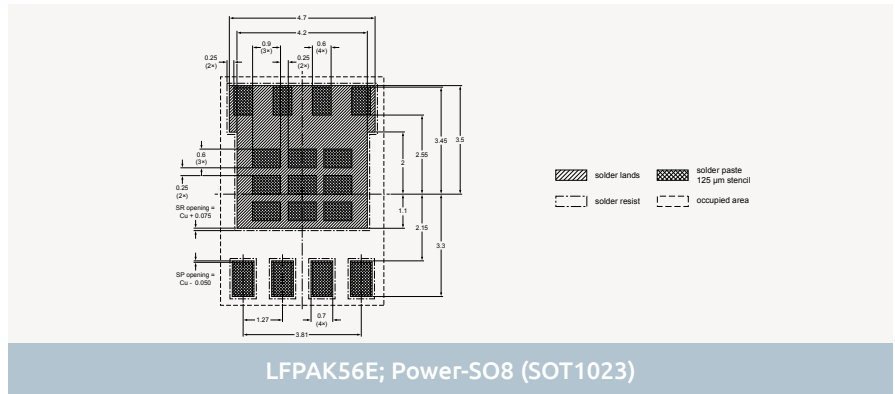
Images are for reference only, for detailed drawings please visit nexperia.com/packages



The drawing shows the mechanical specifications of the X2SON4 package. The top view is a square with a side length of 0.6 mm. It is divided into four quadrants labeled 1, 2, 3, and 4. Quadrant 1 (bottom-left) contains a large, irregular cutout. Quadrant 2 (top-left) contains a smaller, rectangular cutout. Quadrant 3 (top-right) contains a rectangular cutout with rounded corners. Quadrant 4 (bottom-right) contains a rectangular cutout. The side view shows the package's profile with a total height of 0.32 mm. It features a central rectangular notch and two smaller notches on the sides, one near the top and one near the bottom.



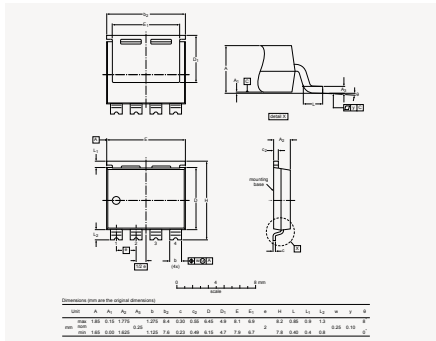
190 Nexperia selection guide 2019

[illegible]

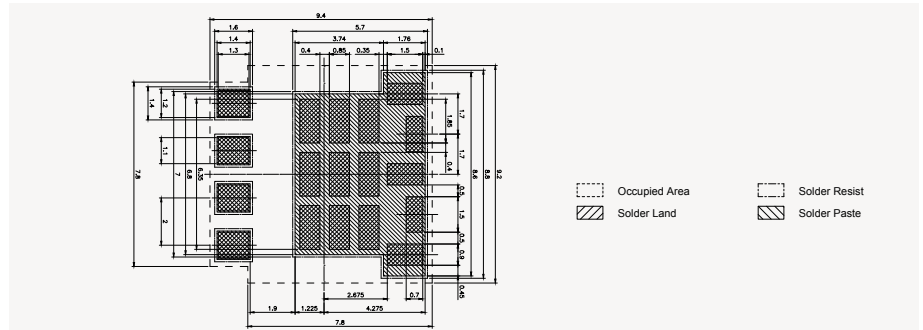
Images are for reference only, for detailed drawings please visit nexperia.com/packages

Minimized outline drawings and reflow soldering footprint

4-pin SMD packages

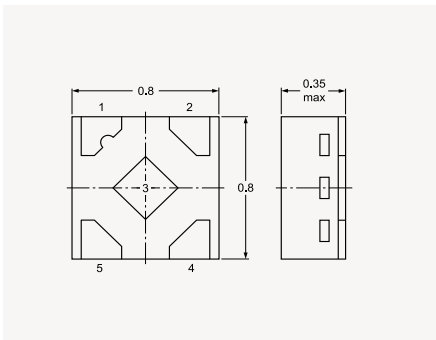


LPAK88 (SOT1235)

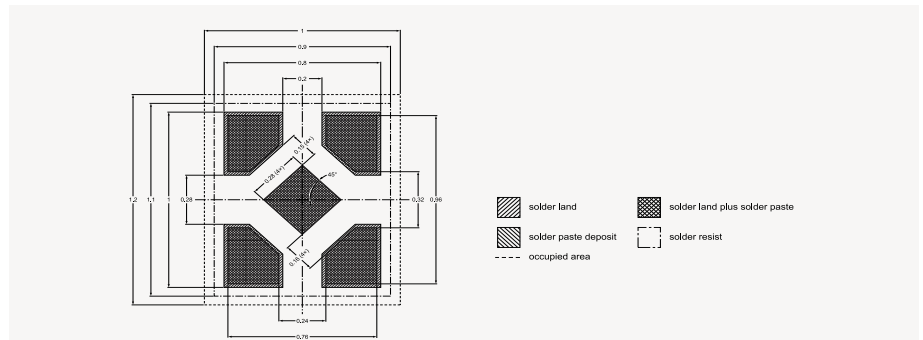


LPAK88 (SOT1235)

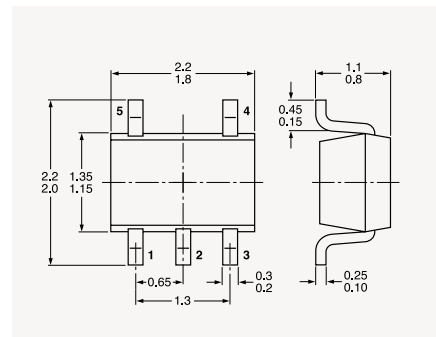
5-pin SMD packages



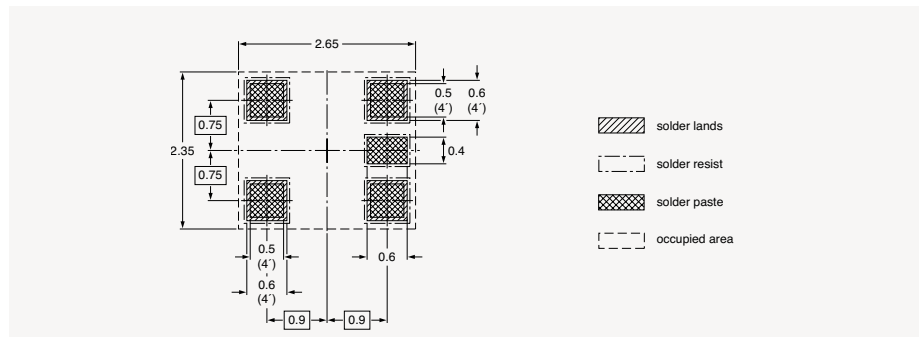
X2SON5 (SOT1226)



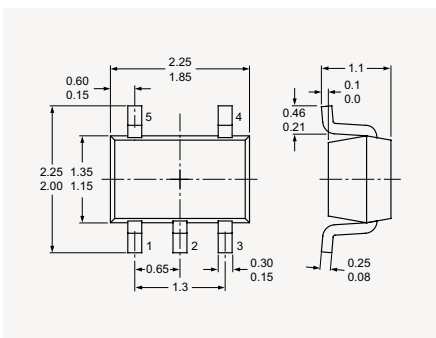
X2SON5 (SOT1226)



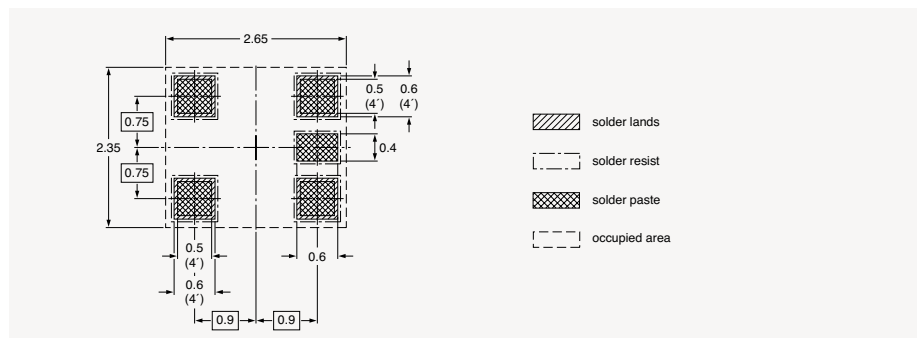
TSSOP5 (SOT353)



TSSOP5 (SOT353)



TSSOP5 (SOT353-1)

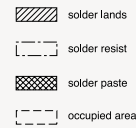


TSSOP5 (SOT353-1)

Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

The drawing shows the mechanical specifications for a TSOP5 (SOT753) package. The top view (left) indicates a total width of 3.1 mm and a pin pitch of 2.7 mm. The pin dimensions are: Pin 1 (width 0.95 mm), Pin 2 (width 0.40 mm), Pin 3 (width 0.25 mm), Pin 4 (width 0.26 mm), and Pin 5 (width 0.10 mm). The side view (right) shows a maximum height of 1.1 mm, a base thickness of 0.6 mm, and a standoff height of 0.2 mm. The overall height from the base to the top of the package is 3.0 mm, and the height from the base to the top of the pins is 2.5 mm.

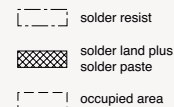
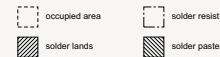


The drawing shows the mechanical specifications for the XSON6 (SOT1115) package. The top view (left) shows a rectangular package with six pins (1-6) and the following dimensions:

- Overall width: 1.05
- Pin pitch (center-to-center): 0.95
- Pin 1 offset from left edge: 0.55
- Pin 1 width: 0.40
- Pin 1 offset from bottom edge: 0.32
- Pin 2 width: 0.35
- Pin 2 offset from bottom edge: 0.27
- Pin 3 width: 0.35
- Pin 3 offset from bottom edge: 0.20
- Pin 4 width: 0.35
- Pin 4 offset from bottom edge: 0.12
- Pin 5 width: 0.35
- Pin 5 offset from bottom edge: 0.12
- Pin 6 width: 0.35
- Pin 6 offset from bottom edge: 0.12
- Pin 1 offset from top edge: 0.85
- Pin 2 offset from top edge: 0.95
- Pin 3 offset from top edge: 0.35
- Pin 4 offset from top edge: 0.35
- Pin 5 offset from top edge: 0.35
- Pin 6 offset from top edge: 0.35

The side view (right) shows the package height and pin thickness:

- Package height: 0.35 max
- Pin thickness: 0.04 max

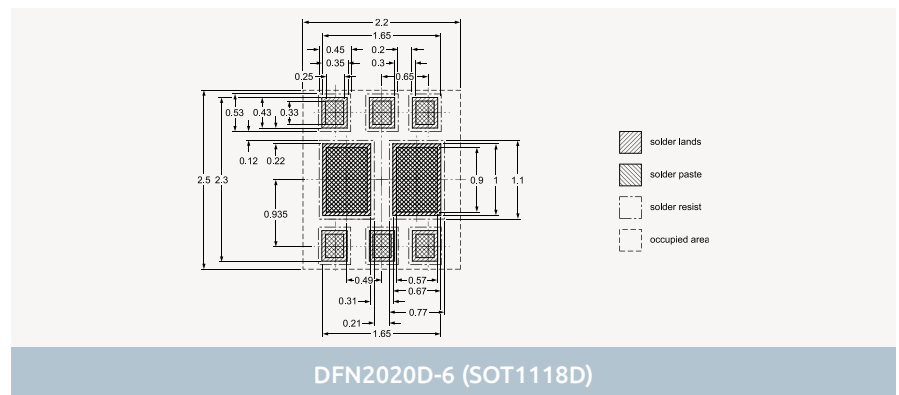
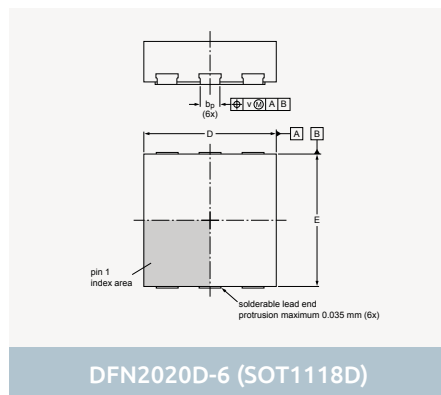
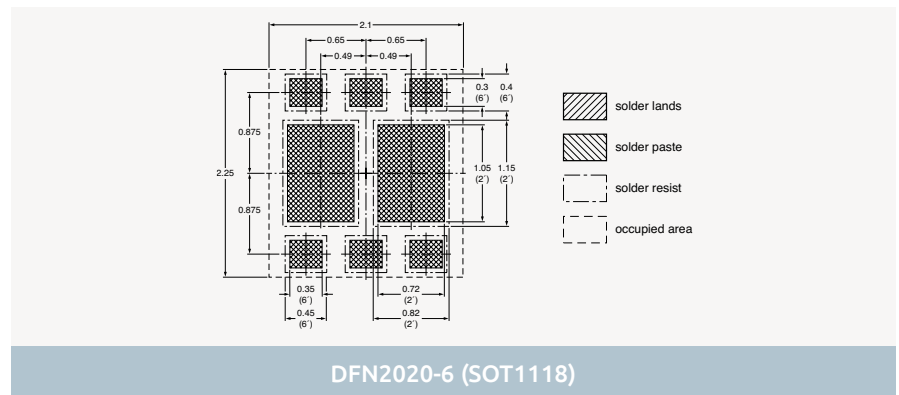
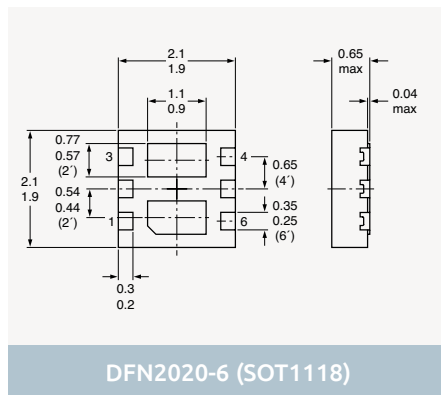
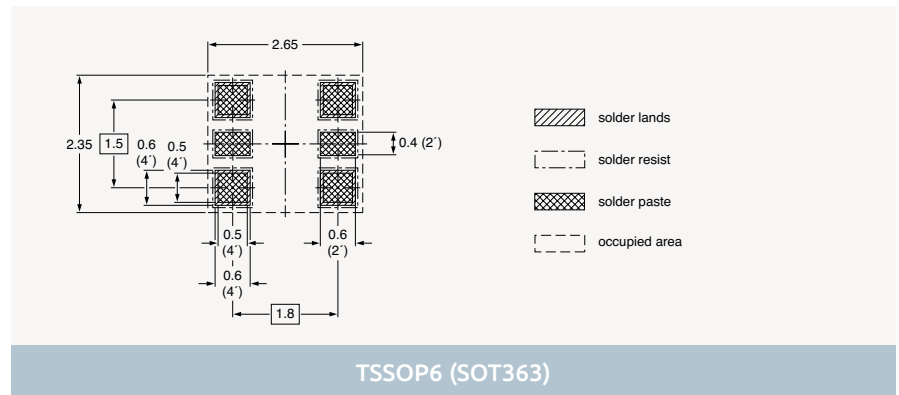
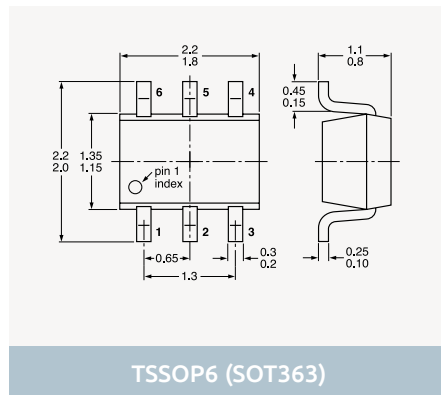
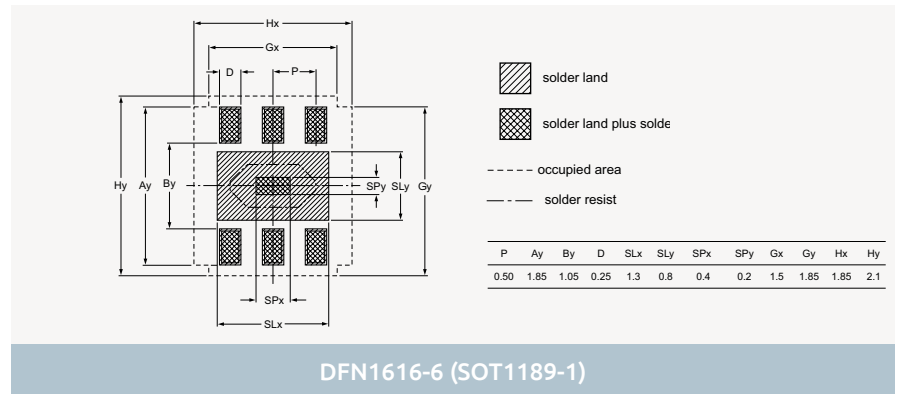
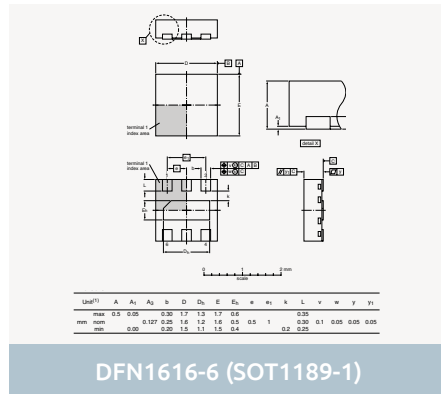


Images are for reference only, for detailed drawings please visit nexperia.com/packages



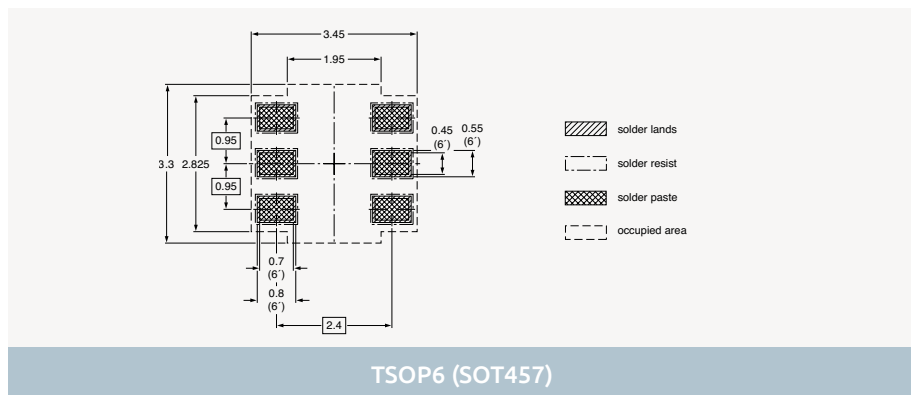
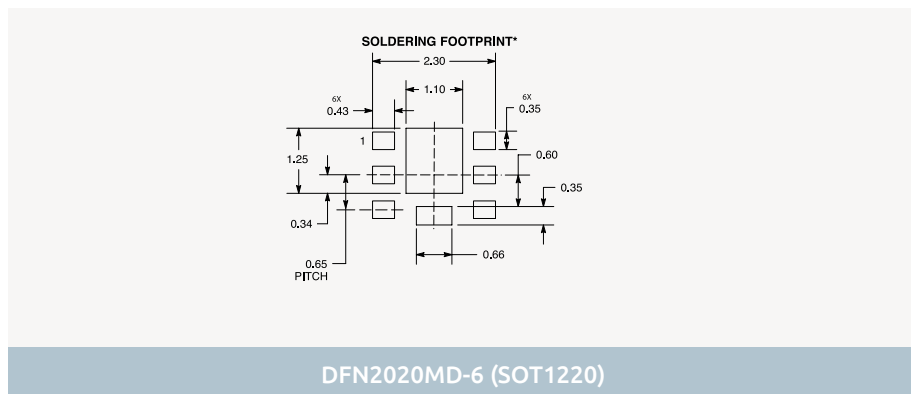
Images are for reference only, for detailed drawings please visit nexperia.com/packages

6-pin SMD packages

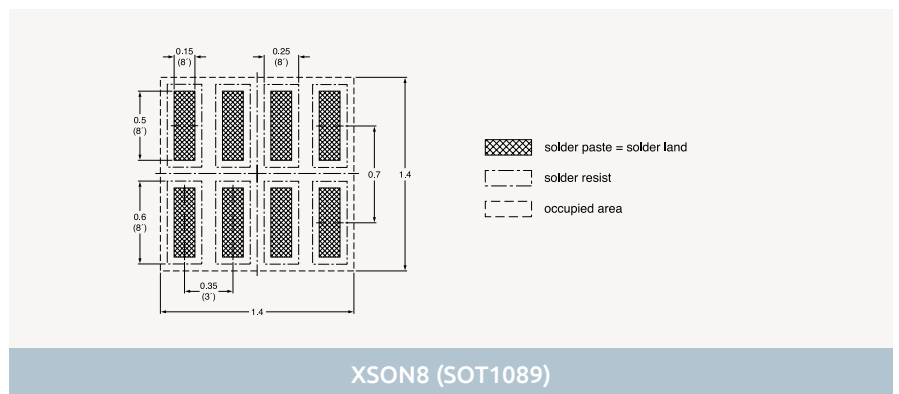
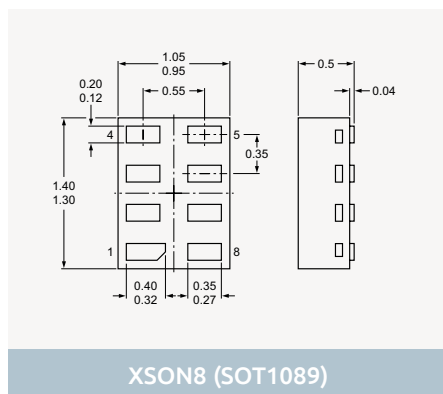
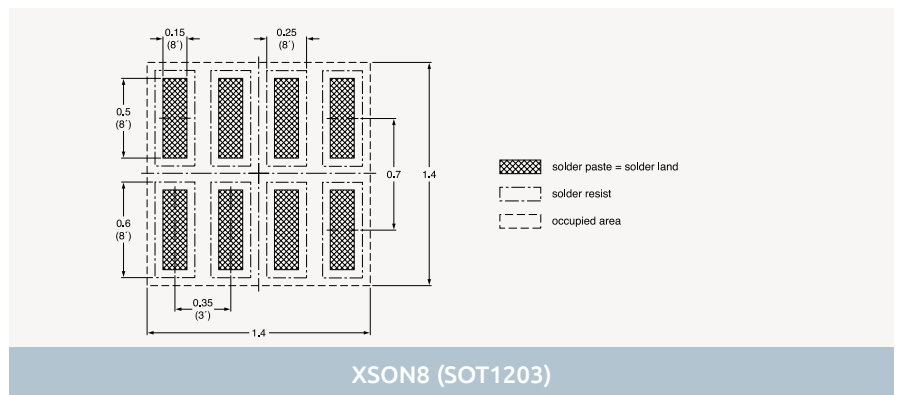
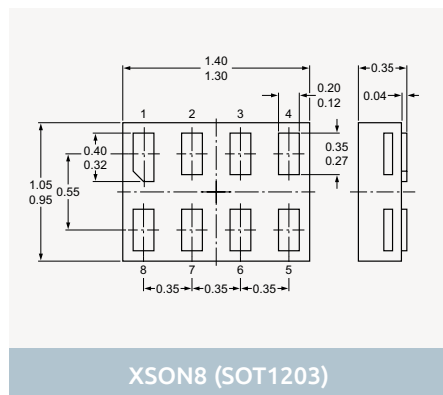
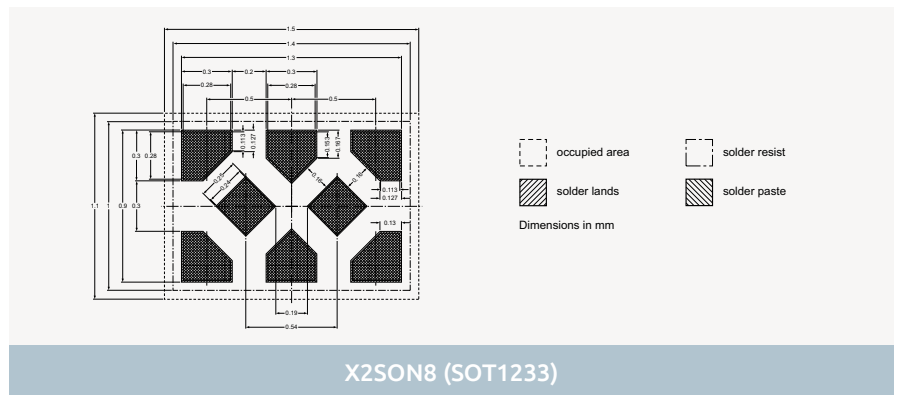
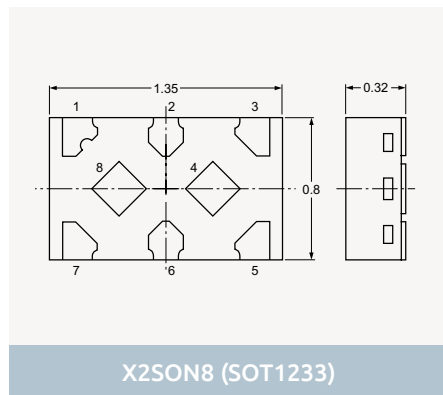
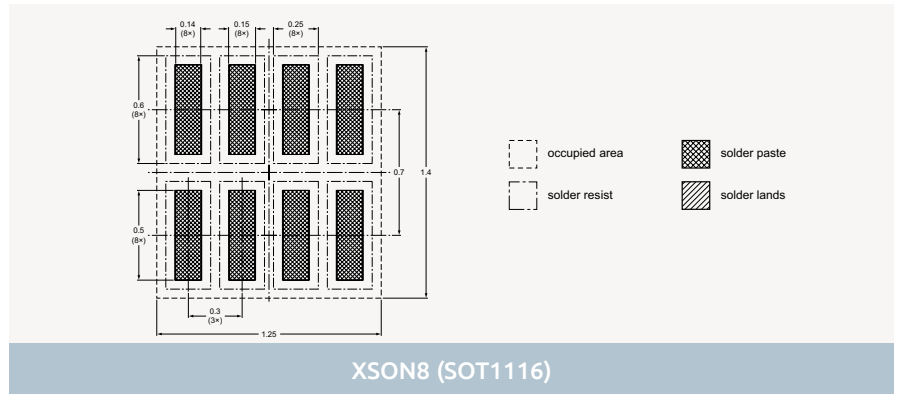
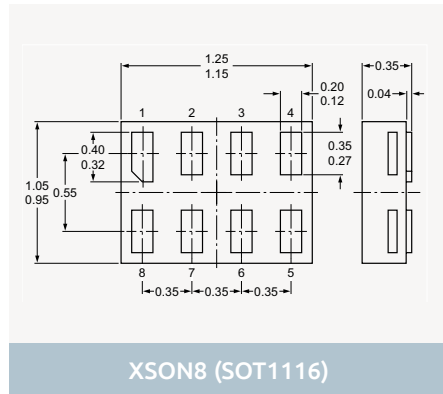


Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages



8-pin SMD packages



Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

The drawing illustrates the mechanical specifications of the XQFN8 (SOT902-2) package. The top view shows a square package with a central square pad and eight rectangular pads arranged in a 3x3 grid. Dimensions include a total width of 1.65 mm, a central pad width of 0.25 mm, and a pitch of 0.5 mm between pads. The side view shows a maximum height of 0.5 mm, and the end view shows a maximum thickness of 0.05 mm. A detailed view of the central pad shows a square shape with a 0.35 mm side length and a 0.25 mm width.

[illegible]

Technical drawing of the DFN1714-8 (SOT972-2) package. The drawing includes a top view, a side view, and a detail view of the terminal connection.

Top View: Shows the package footprint with dimensions D (total width), E (total height), and terminal pitch P. A shaded area indicates the terminal 1 index area.

Side View: Shows the package profile with dimensions A (maximum height), A₁ (height to the top of the terminal), and C (height to the bottom of the terminal).

Detail X: A detailed view of the terminal connection showing the terminal 1 index area, the terminal pitch P, and the terminal width W.

Dimensions:

Dimension	A	A ₁	B	C	D	D ₀	E	E ₀	E ₁	e	e ₁	k	L	v	w	y	y ₁
max	0.5	0.05	0.25	1.8	1.3	1.45	0.45	0.30									
nom	0.20	0.127	1.7	1.2	1.35	0.40	0.4	1.2	0.25	0.51	0.05	0.05	0.05				
min	0.00	0.15	1.6	1.1	1.25	0.35		0.2	0.20								

Legend:

- [Pattern] solder land
- [Pattern] solder paste deposit
- [Pattern] solder land plus solder paste
- - - - - occupied area
- - - - - solder resist

P	Ay	By	D	Sly	SLx	SPx tot	SPx tot	SPx tot	Gx	Gy	Hx	Hy	nSPx	nSPy
0.400	1.780	0.760	0.220	1.400	0.400	0.500	0.300	0.500	0.300	1.630	1.700	1.910	1.590	1

The drawing shows the mechanical specifications for the VSSOP8 (SOT765-1) package. The top view shows a rectangular package with a central square area containing a circle. Dimensions include a total width of 2.1 mm, a pin pitch of 1.9 mm, and a central square area of 2.4 mm by 2.2 mm. Pin dimensions are 0.5 mm wide and 0.27 mm high. The side view shows a maximum height of 1.0 mm, a pin thickness of 0.15 mm, and a pin width of 0.40 mm. The package is shown with a leaded wire bond connection.



The diagram shows the VSSOP8 (SOT765-1) package layout. It is a rectangular package with eight pins. The dimensions are as follows:

- Overall width: 3.75
- Overall height: 1.75
- Pin pitch (center-to-center): 0.5
- Pin width: 0.3
- Pin length: 0.4
- Distance from pin center to package edge: 0.1
- Distance between the two rows of pins: 0.75
- Distance from the top row of pins to the top edge: 0.125
- Distance from the bottom row of pins to the bottom edge: 0.125
- Distance from the left edge to the first pin: 0.125
- Distance from the last pin to the right edge: 0.125
- Distance between the two rows of pins (internal): 0.75
- Distance from the top row of pins to the top edge (internal): 0.125
- Distance from the bottom row of pins to the bottom edge (internal): 0.125
- Distance from the left edge to the first pin (internal): 0.125
- Distance from the last pin to the right edge (internal): 0.125

The package is shown with a top view. The pins are labeled 1 through 8. The package is shown with a top view. The pins are labeled 1 through 8. The package is shown with a top view. The pins are labeled 1 through 8.

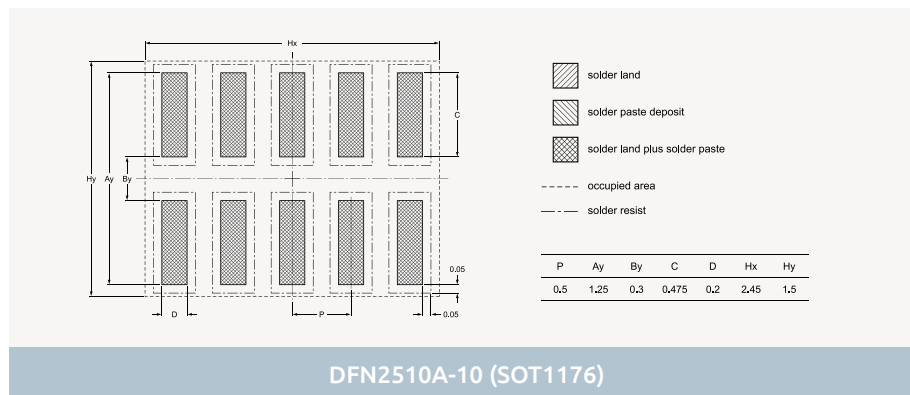
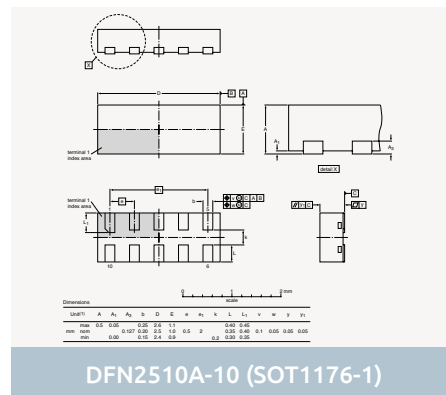
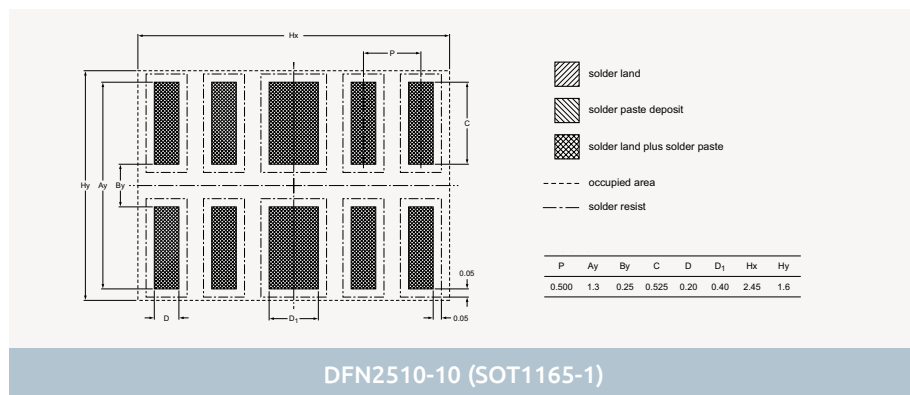
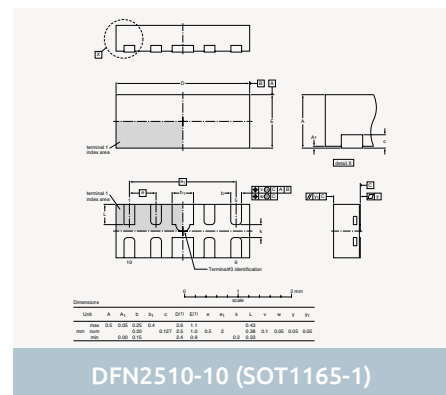
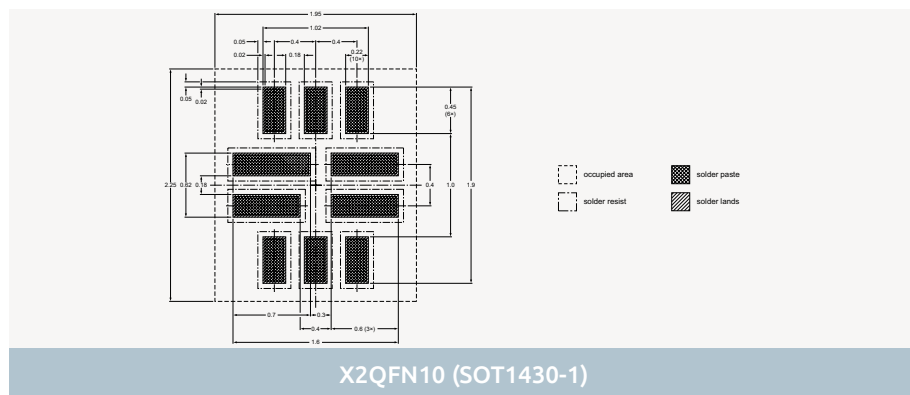
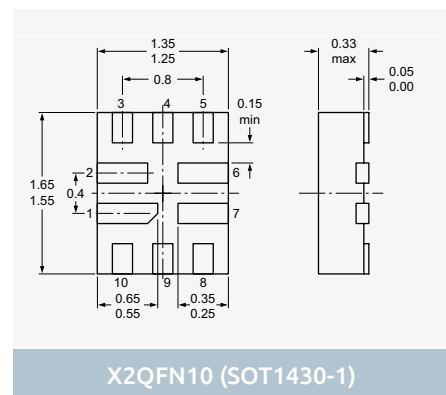
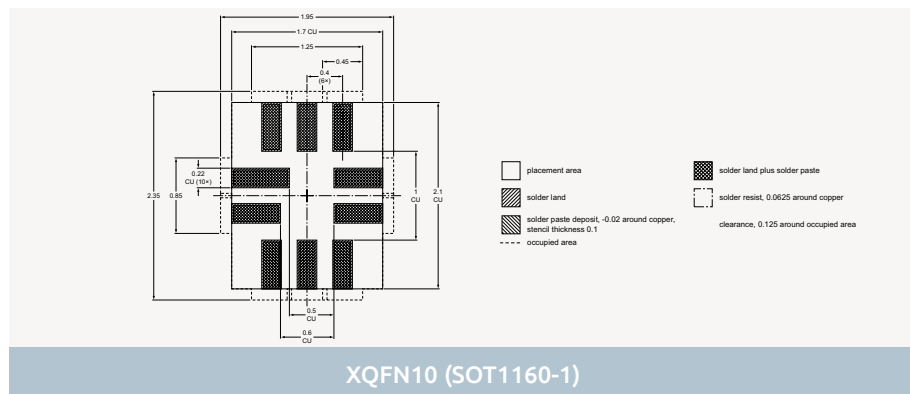
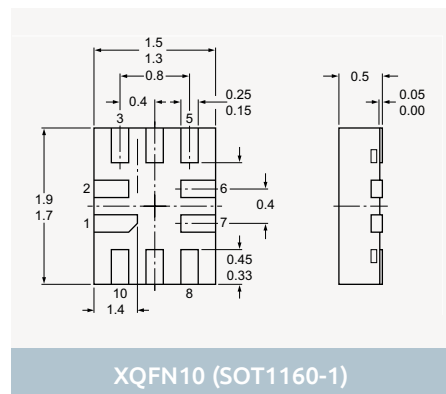
The diagram illustrates the mechanical specifications of the LPAK33 (SOT1210) package. The top view shows a rectangular package with dimensions E (total width), L (total height), D (height of the main body), and A (width of the top flange). The top flange features three mounting holes with diameter $\phi 1$ and a center-to-center distance of B_1 . The bottom of the package has four leads with a width of a and a pitch of b . The side view shows the package's profile with a total height of H , a top flange thickness of C_1 , and a mounting base. A detail view (X) shows the lead profile, which is a gull-wing shape with a thickness of 0.15 mm.

The drawing illustrates the mechanical dimensions and solder land layout for the LPAK33 (SOT1210) package. The package is shown in a top-down view with a central rectangular body and four rectangular solder lands (one on each side). The dimensions are as follows:

- Overall Dimensions:**
 - Width: 2,35
 - Height: 3,9
- Internal Dimensions:**
 - Width of central body: 2,25
 - Width of solder lands: 0,635 and 0,617
 - Distance between solder lands: 0,05 (all around)
 - Distance from top edge to top of solder lands: 0,75
 - Distance from top edge to bottom of solder lands: 0,62
 - Distance from bottom edge to bottom of solder lands: 0,51
 - Distance from bottom edge to top of solder lands: 1,05
 - Distance from bottom edge to top of central body: 1,91
 - Distance from bottom edge to top of solder lands: 0,51
 - Distance from bottom edge to top of central body: 0,6
 - Distance from bottom edge to top of solder lands: 0,83
- Solder Land Dimensions:**
 - Width: 0,4 (x8)
 - Height: 0,3 (x8)
 - Distance between solder lands: 0,65 (x6)
 - Distance between solder lands: 0,25 (x6)
- Legend:**
 - solder land
 - solder paste aperture
 - occupied area
 - solder resist

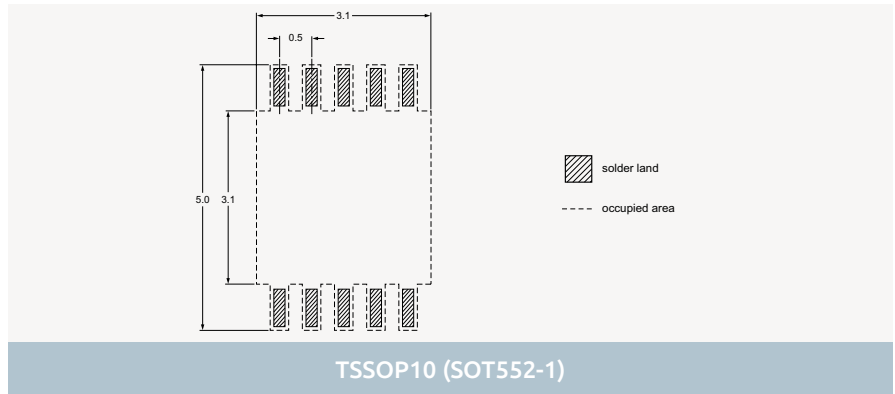
Dimensions in mm

10-pin SMD packages



Dimensions in mm

The drawing illustrates the mechanical specifications of the TSSOP10 (SOT552-1) package. The top view shows a rectangular body with a central square area labeled 'pin 1 index' containing a circle. Ten pins are arranged in two rows of five. Dimensions include a total width of 3.1 mm, a pin pitch of 0.5 mm, and a body width of 1.9 mm. The side view shows a maximum height of 1.1 mm, a body thickness of 0.7 mm, and a lead thickness of 0.4 mm. The end view shows a lead width of 0.23 mm and a lead thickness of 0.15 mm.



The drawing shows the mechanical specifications of the XQFN12 (SOT1174-1) package. The top view (left) indicates a square package with a width of 1.7 mm and a height of 2.0 mm. It features 12 pins arranged in two columns of six. The pin pitch is 0.5 mm, with a maximum offset of 0.5 mm from the centerline. The pin height is 1.1 mm. The side view (right) shows the package profile with a maximum height of 0.5 mm.

Dimensions in mm

1.7

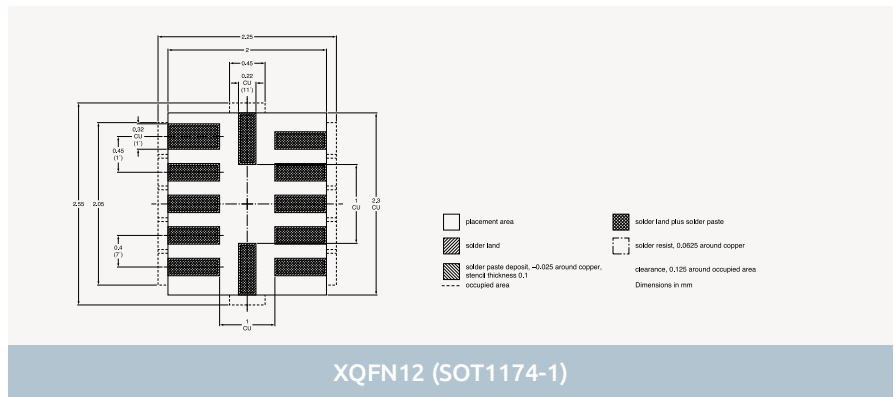
2.0

1.1

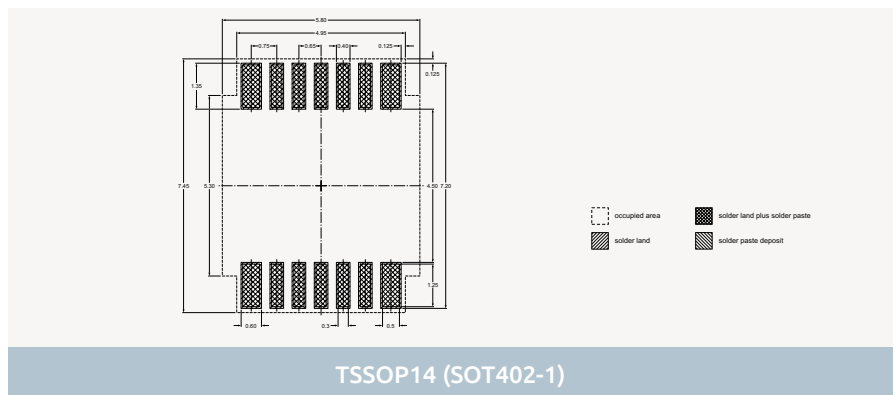
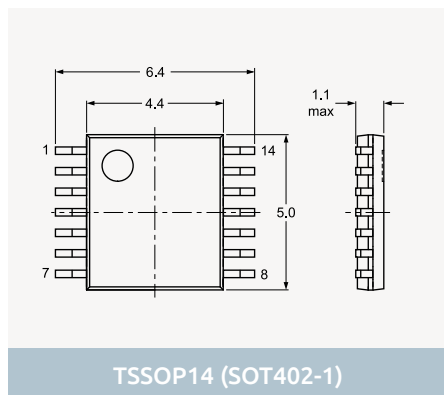
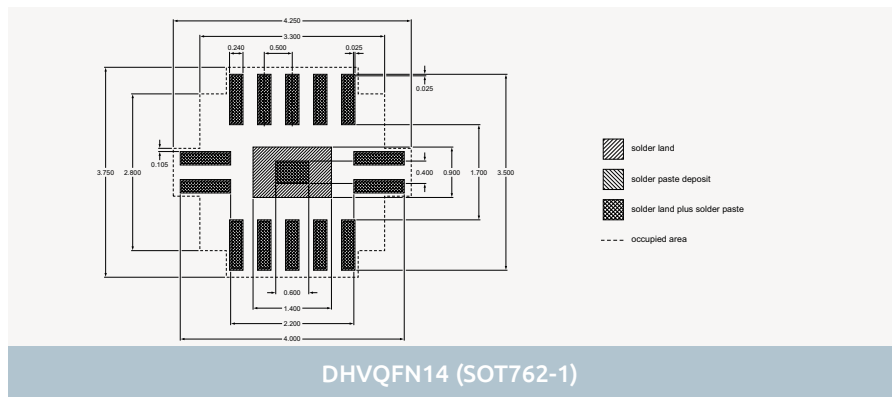
0.5 max

12

XQFN12 (SOT1174-1)

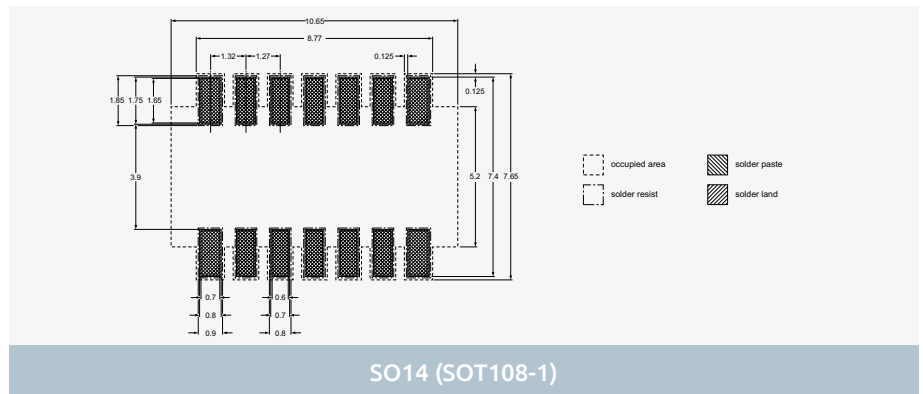
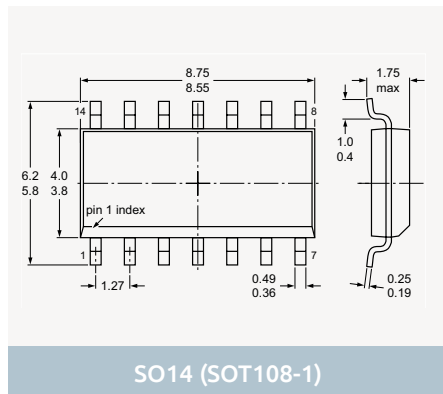


The drawing illustrates the DHVQFN14 (SOT762-1) package. The top view shows a square body with 14 pins (7 on each long side). Key dimensions include a total width of 3.1 mm, a pin pitch of 0.5 mm, and a pin width of 0.30 mm. The side view shows a maximum height of 1.0 mm and a standoff height of 0.05 mm. The detail view shows a pin thickness of 0.18 mm and a minimum pin length of 0.2 mm.

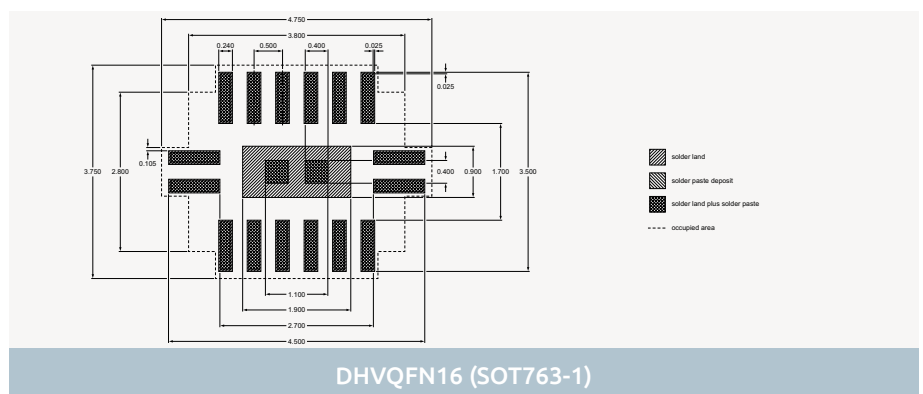
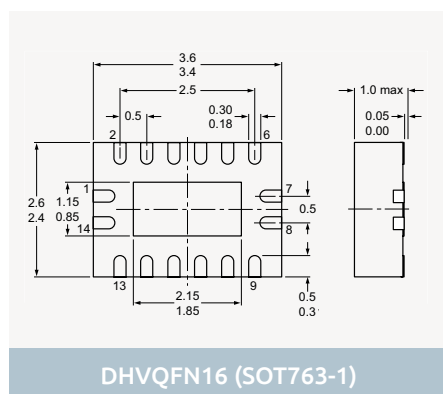
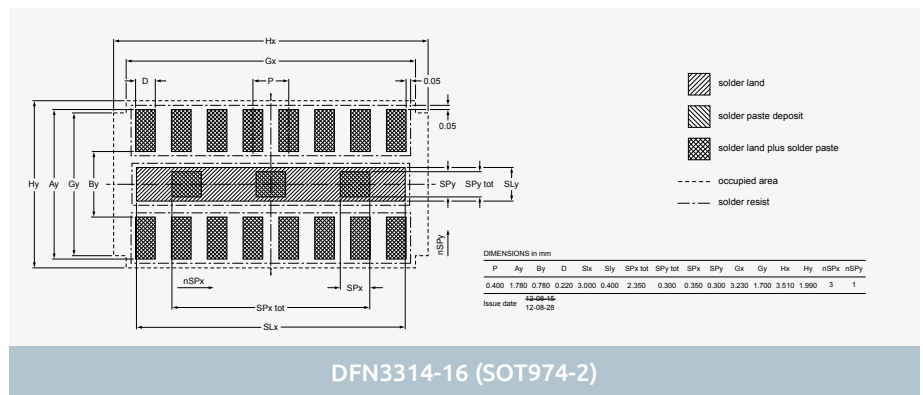
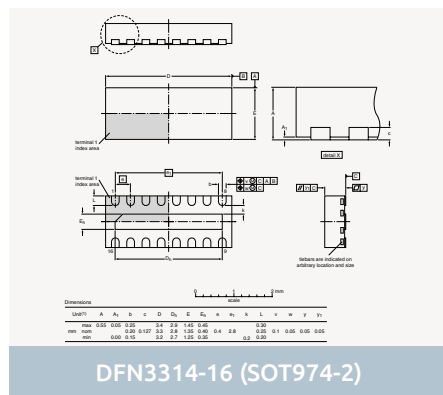
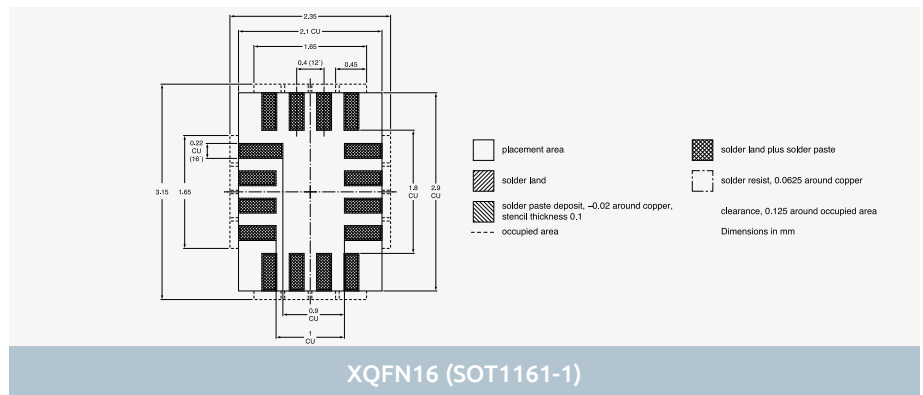
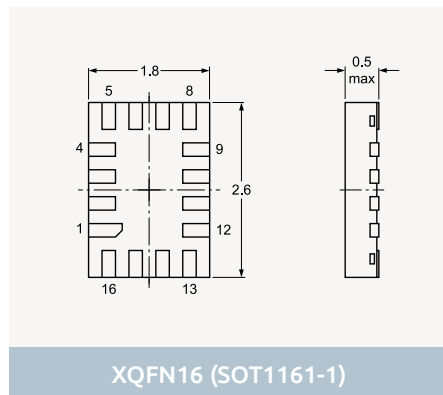


Images are for reference only, for detailed drawings please visit nexperia.com/packages

14-pin SMD packages



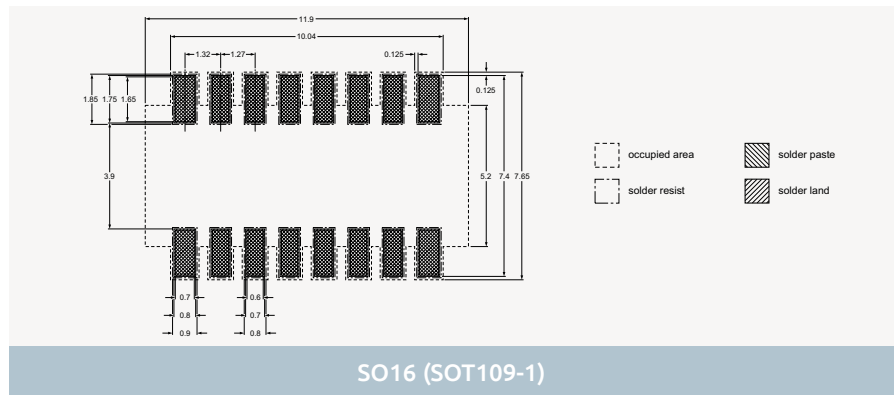
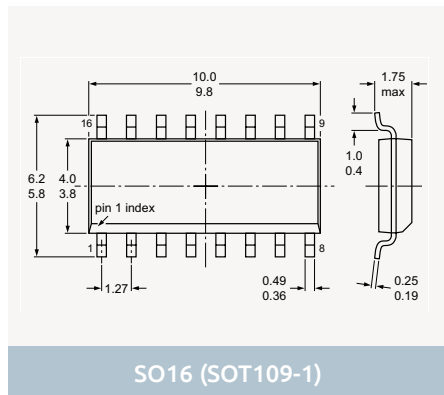
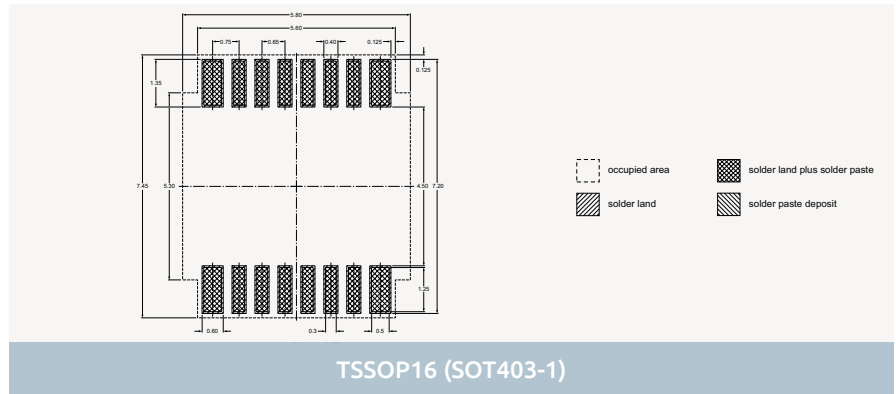
16-pin SMD packages



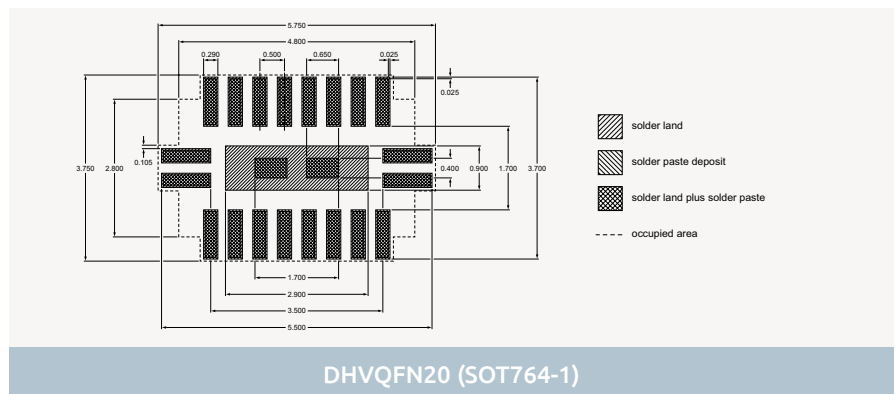
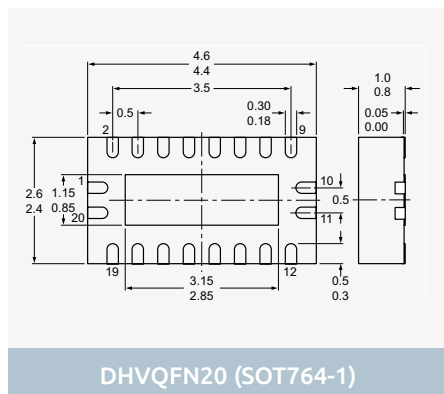
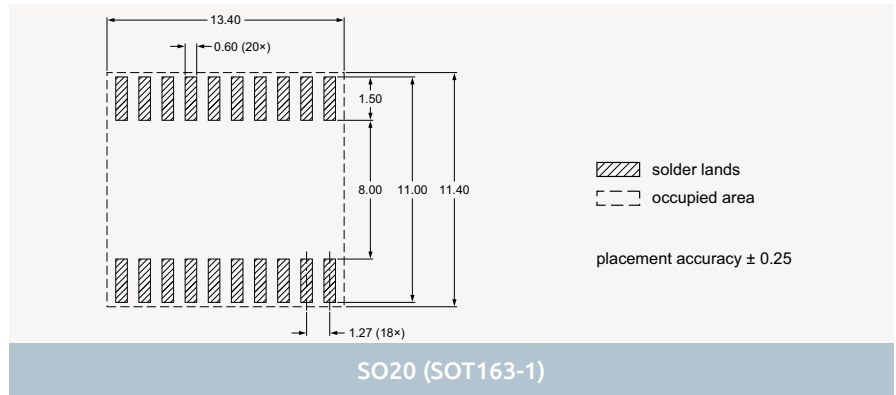
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

The drawing illustrates the mechanical specifications of a TSSOP16 (SOT403-1) package. It includes three views: a top view, a side view, and an end view. The top view shows a square package with a width of 6.4 mm and a height of 16 mm. The distance between the centers of the two rows of pins is 4.4 mm. The package has a central square area with a circle inside, and a dashed line indicating the center. The side view shows the package height of 5.0 mm. The end view shows the package width of 9 mm and the maximum pin height of 1.1 mm. The package is labeled with '1' on the left, '8' on the bottom left, '9' on the bottom right, and '16' on the right.

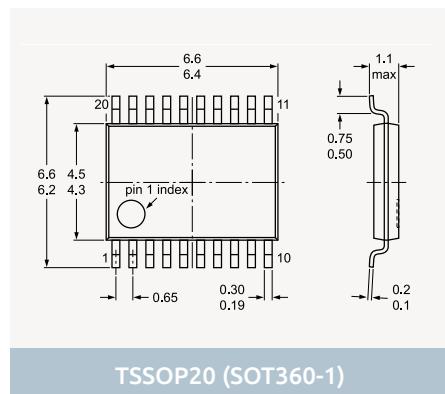


The drawing shows the mechanical specifications for the SO20 (SOT163-1) package. The top view includes overall dimensions of 13.0 mm by 10.65 mm, with a pin pitch of 1.27 mm. It also shows individual pin widths (e.g., 1.1 mm, 1.0 mm) and a central pin index. The side view illustrates the package height of 2.65 mm max, a mounting tab width of 1.1 mm, and lead dimensions of 0.4 mm and 0.32 mm.

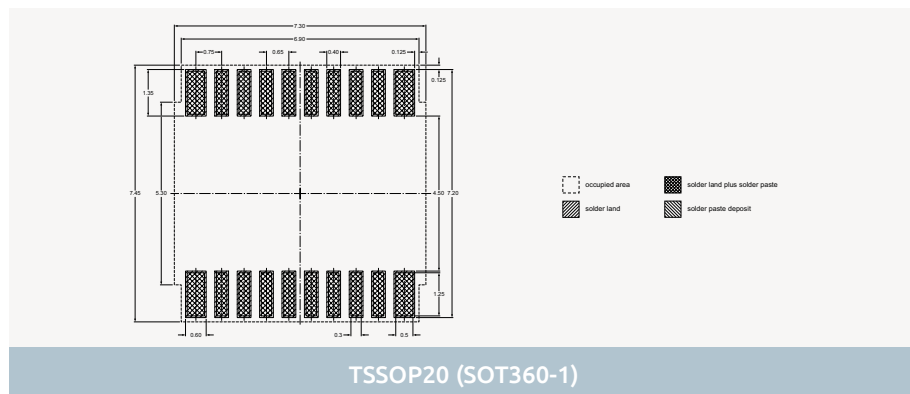


Images are for reference only, for detailed drawings please visit nexperia.com/packages

20-pin SMD packages

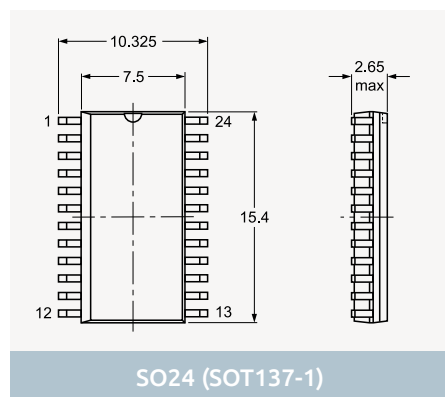


TSSOP20 (SOT360-1)

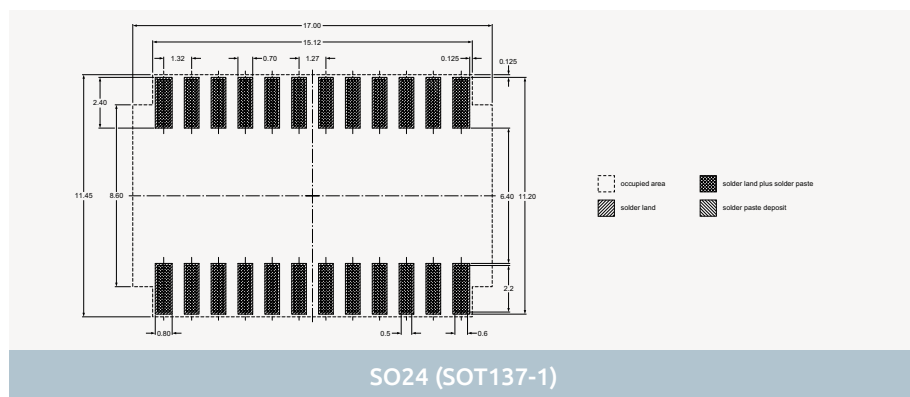


TSSOP20 (SOT360-1)

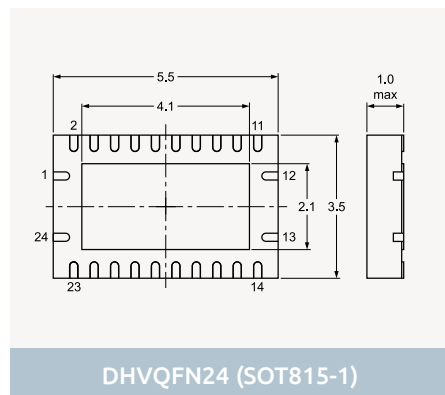
24-pin SMD packages



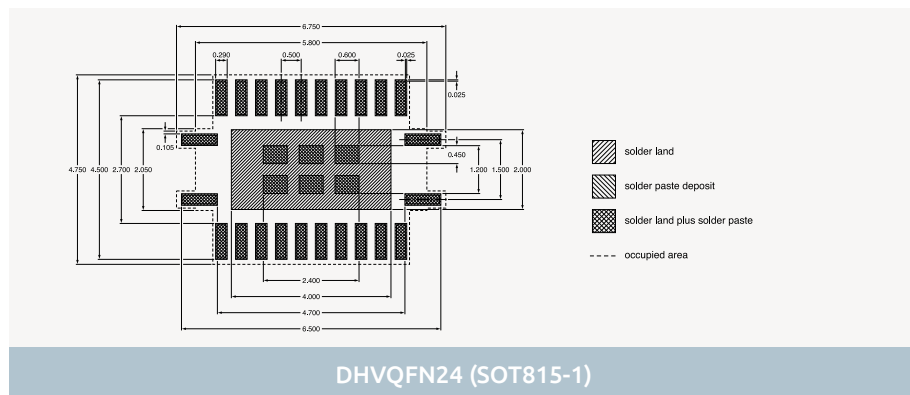
SO24 (SOT137-1)



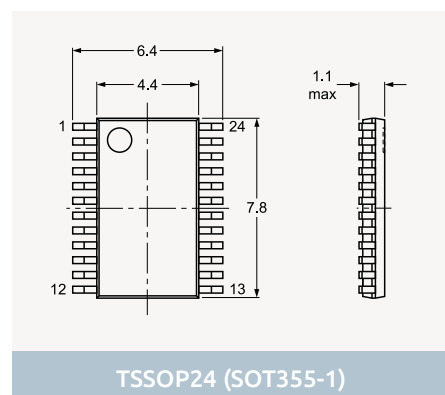
SO24 (SOT137-1)



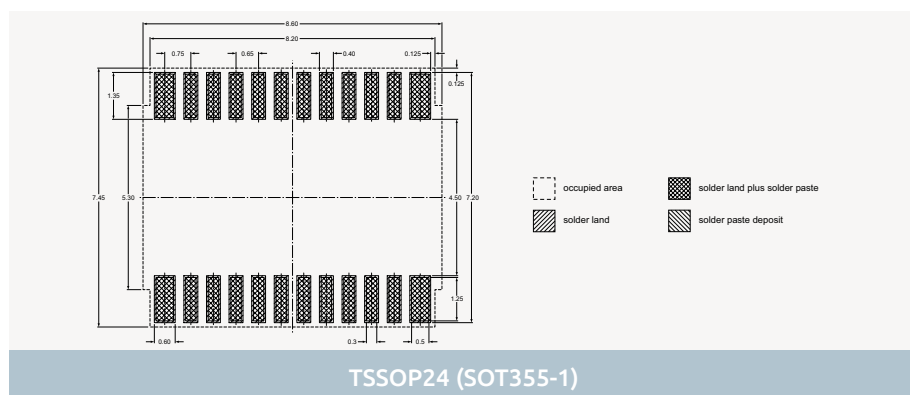
DHVQFN24 (SOT815-1)



DHVQFN24 (SOT815-1)



TSSOP24 (SOT355-1)

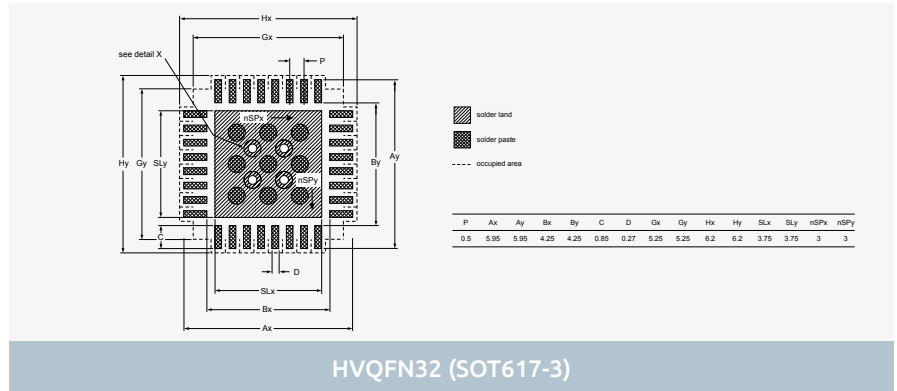
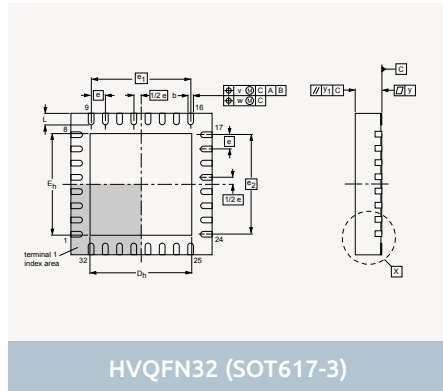


TSSOP24 (SOT355-1)

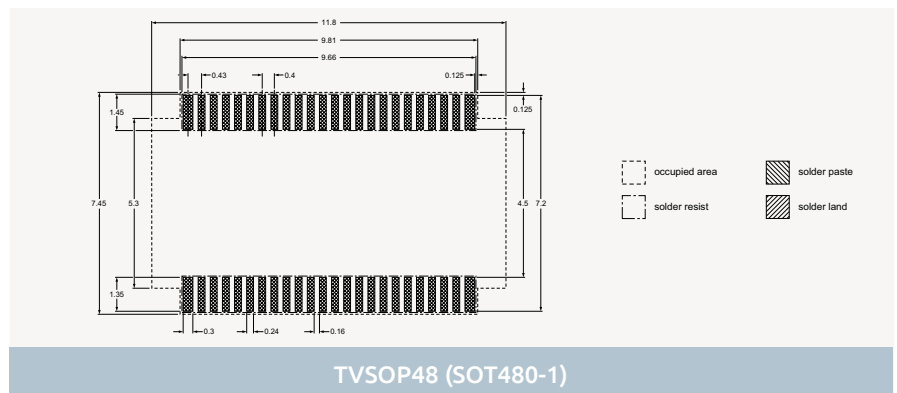
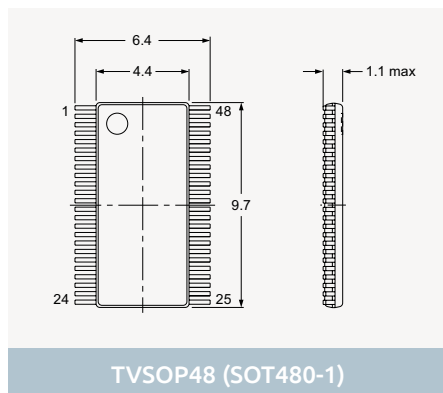
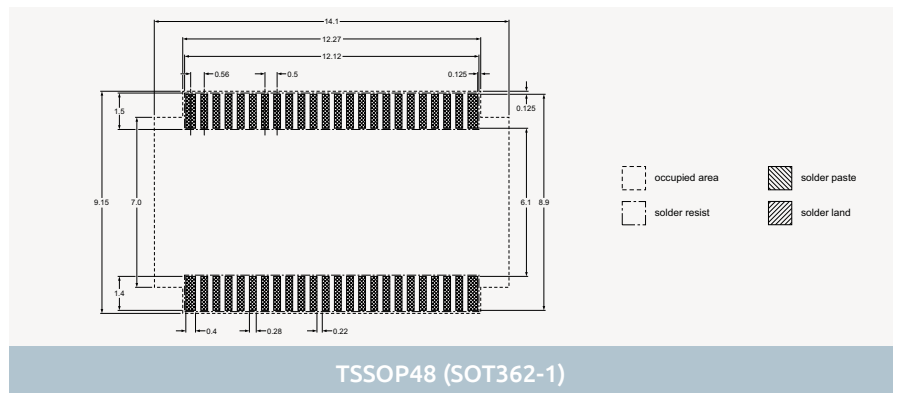
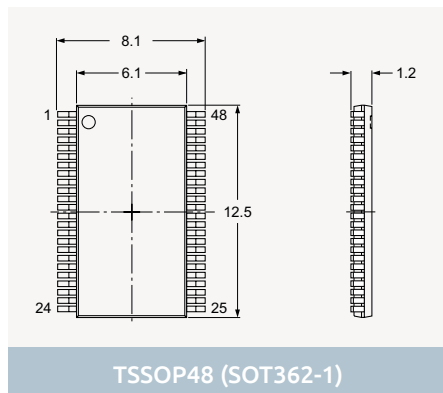
Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

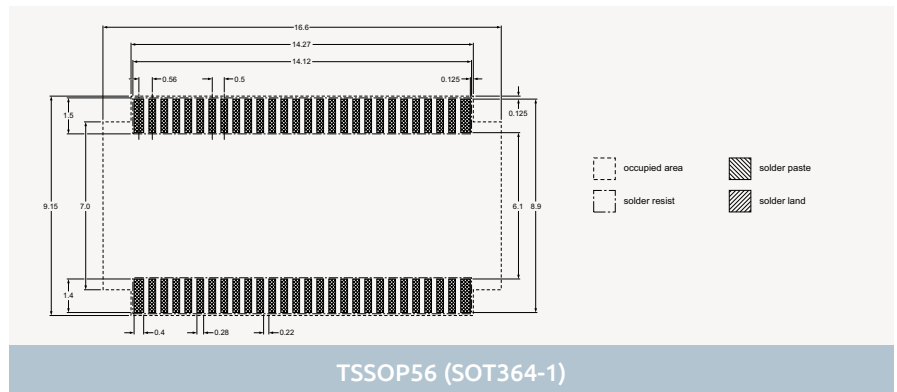
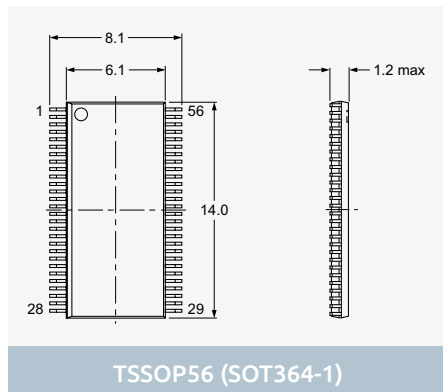
32-pin SMD packages



48-pin SMD packages



56-pin SMD packages



Dimensions in mm

Images are for reference only, for detailed drawings please visit nexperia.com/packages

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
1N47xxA series	36	2PD602ASL	14	74AHC1G17-Q100	124	74AHC74-Q100	113	74AHCT244	131
1PS10SB82	43	74ABT00	158	74AHC1G32	161	74AHC86	158	74AHCT244-Q100	109
1PS300	38	74ABT04	131	74AHC1G32-Q100	127	74AHC86-Q100	115	74AHCT244A	131
1PS301	38	74ABT08	156	74AHC1G4210	154	74AHC9541A	131	74AHCT245	141
1PS302	38	74ABT125	131	74AHC1G4212	154	74AHCT00	158	74AHCT245-Q100	122
1PS705B20	47	74ABT126	131	74AHC1G4214	154	74AHCT00-Q100	115	74AHCT245A	141
1PS705B82	43	74ABT162244	131	74AHC1G66	145	74AHCT02	160	74AHCT257	148
1PS705B84	43	74ABT162245A	141	74AHC1G66-Q100	123	74AHCT02-Q100	115	74AHCT257-Q100	113
1PS705B85	43	74ABT16240A	131	74AHC1G79	152	74AHCT04	131	74AHCT273	152
1PS705B86	43	74ABT16244A	131	74AHC1G79-Q100	126	74AHCT04-Q100	109	74AHCT273-Q100	113
1PS745B23	47	74ABT16245B	141	74AHC1G86	158	74AHCT04A	131	74AHCT2G00	159
1PS765B17	43	74ABT20	158	74AHC1G86-Q100	127	74AHCT07A	131	74AHCT2G00-Q100	127
1PS795B17	43	74ABT244	131	74AHC1GU04	131	74AHCT08	156	74AHCT2G08	156
1PS885B82	43	74ABT245	141	74AHC1GU04-Q100	124	74AHCT08-Q100	115	74AHCT2G08-Q100	127
2N7002BK	85	74ABT32	161	74AHC240-Q100	109	74AHCT123A	155	74AHCT2G125	131
2N7002BKM	85	74ABTH162245A	141	74AHC244	131	74AHCT123A-Q100	118	74AHCT2G125-Q100	124
2N7002BKMB	94	74AHC00	158	74AHC244-Q100	109	74AHCT125	131	74AHCT2G126	132
2N7002BKS	85	74AHC00-Q100	115	74AHC245	131	74AHCT125-Q100	109	74AHCT2G126-Q100	124
2N7002BKW	85	74AHC02	160	74AHC245-Q100	122	74AHCT126	131	74AHCT2G241	132
2N7002CK	85	74AHC02-Q100	115	74AHC257	113	74AHCT126-Q100	109	74AHCT2G241-Q100	124
2N700BKM	94	74AHC04	131	74AHC257-Q100	148	74AHCT132	138	74AHCT2G32	161
2PA1576Q	14	74AHC04-Q100	109	74AHC273	152	74AHCT132-Q100	109	74AHCT2G32-Q100	127
2PA1576R	14	74AHC08	156	74AHC273-Q100	113	74AHCT138	147	74AHCT30	159
2PA1576S	14	74AHC08-Q100	115	74AHC2G00	158	74AHCT138-Q100	112	74AHCT30-Q100	115
2PA1774QM	14	74AHC123A	155	74AHC2G00-Q100	127	74AHCT139	147	74AHCT32	161
2PA1774QMB	14	74AHC123A-Q100	118	74AHC2G08	156	74AHCT139-Q100	112	74AHCT32-Q100	115
2PA1774RM	14	74AHC125	131	74AHC2G08-Q100	127	74AHCT14	131, 138	74AHCT374	152
2PA1774RMB	14	74AHC125-Q100	109	74AHC2G125	131	74AHCT14-Q100	119	74AHCT374-Q100	113
2PA1774SM	14	74AHC126	131	74AHC2G125-Q100	124	74AHCT14A	131	74AHCT377	152
2PA1774SMB	14	74AHC126-Q100	109	74AHC2G126	131	74AHCT157	148	74AHCT377-Q100	113
2PB1219AQ	14	74AHC132	138, 158	74AHC2G126-Q100	124	74AHCT157-Q100	113	74AHCT3G04	132
2PB1219AR	14	74AHC132-Q100	119	74AHC2G241	131	74AHCT164	148	74AHCT3G04-Q100	124
2PB1219AS	14	74AHC138	147	74AHC2G241-Q100	124	74AHCT164-Q100	120	74AHCT3G14	132, 138
2PB709ARL	14	74AHC138-Q100	112	74AHC2G32	161	74AHCT17A	131, 138	74AHCT3G14-Q100	129
2PB709ART	14	74AHC139	147	74AHC2G32-Q100	127	74AHCT1G00	127	74AHCT541	132
2PB709ARW	14	74AHC139-Q100	112	74AHC30	159	74AHCT1G00-Q100	159	74AHCT541-Q100	109
2PB709ASL	14	74AHC14	131, 138	74AHC30-Q100	115	74AHCT1G02	160	74AHCT541A	132
2PB709ASW	14	74AHC14-Q100	119	74AHC32	161	74AHCT1G02-Q100	127	74AHCT573	150
2PB709BRL	14	74AHC157	148	74AHC32-Q100	115	74AHCT1G04	131	74AHCT573-Q100	117
2PB709BSL	14	74AHC157-Q100	113	74AHC373	150	74AHCT1G04-Q100	124	74AHCT574	152
2PB710ARL	14	74AHC164	148	74AHC374	152	74AHCT1G08	156	74AHCT594	148
2PB710ASL	14	74AHC164-Q100	120	74AHC374-Q100	113	74AHCT1G08-Q100	127	74AHCT594-Q100	120
2PC4081Q	14	74AHC1G00	158	74AHC377	152	74AHCT1G125	131	74AHCT595	148
2PC4081R	14	74AHC1G00-Q100	127	74AHC377-Q100	113	74AHCT1G125-Q100	124	74AHCT595-Q100	120
2PC4081S	14	74AHC1G02	160	74AHC3G04	131	74AHCT1G126	131	74AHCT74	152
2PC4617QM	14	74AHC1G02-Q100	127	74AHC3G04-Q100	124	74AHCT1G126-Q100	124	74AHCT74-Q100	113
2PC4617QMB	14	74AHC1G04	131	74AHC3G14	131, 138	74AHCT1G14	131, 138	74AHCT86	158
2PC4617RM	14	74AHC1G04-Q100	124	74AHC3G14-Q100	129	74AHCT1G14-Q100	129	74AHCT86-Q100	115
2PC4617RMB	14	74AHC1G07-Q100	124	74AHC3GU04	131	74AHCT1G17	131, 138	74AHCU04	132
2PD1820AR	14	74AHC1G08	158	74AHC3GU04-Q100	124	74AHCT1G17-Q100	124	74AHCU04-Q100	109
2PD1820AS	14	74AHC1G08-Q100	127	74AHC541	131	74AHCT1G32	161	74AHCV07A	132, 138
2PD601ARL	14	74AHC1G09	156	74AHC541-Q100	109	74AHCT1G32-Q100	124	74AHCV14A	132, 138
2PD601ART	14	74AHC1G09-Q100	127	74AHC573	150	74AHCT1G66	145	74AHCV17A	132, 138
2PD601ARW	14	74AHC1G125	131	74AHC573-Q100	117	74AHCT1G66-Q100	123	74AHCV244A	132, 138
2PD601ASL	14	74AHC1G125-Q100	124	74AHC574	150	74AHCT1G79	152	74AHCV245A	132, 138
2PD601ASW	14	74AHC1G126	131	74AHC594	148	74AHCT1G79-Q100	126	74AHCV541A	132, 138
2PD601BRL	14	74AHC1G126-Q100	124	74AHC594-Q100	120	74AHCT1G86	158	74ALVC00	159
2PD601BSL	14	74AHC1G14	131, 138	74AHC595	148	74AHCT1G86-Q100	127	74ALVC00-Q100	115
2PD602AQL	14	74AHC1G14-Q100	129	74AHC595-Q100	120	74AHCT240	109	74ALVC02	160
2PD602ARL	14	74AHC1G17	131, 138	74AHC74	152	74AHCT240-Q100	131	74ALVC04	132

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74ALVC08	156	74AUP1G02-Q100	127	74AUP1T57	142, 157	74AVC1T1004	11, 133, 143	74AXP2T3407	143
74ALVC125	132	74AUP1G04	132	74AUP1T58	142, 157	74AVC1T1022	143	74CB3Q3253	146
74ALVC125-Q100	109	74AUP1G04-Q100	124	74AUP1T86	11, 142, 158	74AVC1T45	143	74CB3Q3257	146
74ALVC14	132, 138	74AUP1G06	132	74AUP1T87	11, 142, 158	74AVC1T45-Q100	130	74CBTLV16211	146
74ALVC162334A	150	74AUP1G06-Q100	124	74AUP1T97	142, 157	74AVC1T8128	11, 143	74CBTLV1G125	146
74ALVC16244	132	74AUP1G07	132	74AUP1T98	142, 157	74AVC1T8832	11, 143	74CBTLV3125	146
74ALVC16245	141	74AUP1G08	156	74AUP1T98-Q100	130	74AVC20T245	143	74CBTLV3125-Q100	112
74ALVC162834A	150	74AUP1G08-Q100	127	74AUP1Z04	157	74AVC20T245-Q100	118	74CBTLV3126	146
74ALVC162835A	150	74AUP1G0832	157	74AUP1Z125	157	74AVC2T245	143	74CBTLV3126-Q100	112
74ALVC162836A	150	74AUP1G09	156	74AUP2G00	159	74AVC2T45	143	74CBTLV3244	146
74ALVC164245	142	74AUP1G11	156	74AUP2G02	160	74AVC2T45-Q100	130	74CBTLV3245	146
74ALVC164245-Q100	118	74AUP1G125	132	74AUP2G04	132	74AVC32T245	143	74CBTLV3245-Q100	112
74ALVC16834A	150	74AUP1G125-Q100	124	74AUP2G04-Q100	124	74AVC4T245	143	74CBTLV3253	146
74ALVC16835A	150	74AUP1G126	132	74AUP2G06	132	74AVC4T245-Q100	118	74CBTLV3253-Q100	112
74ALVC16836A	150	74AUP1G132	138, 159	74AUP2G0604	157	74AVC4T3144	11, 133, 143	74CBTLV3257	146
74ALVC244	132	74AUP1G14	132, 138	74AUP2G07	132	74AVC4T774	11, 141, 143	74CBTLV3257-Q100	112
74ALVC245	141	74AUP1G157	148	74AUP2G08	156	74AVC4TD245	143	74CBTLV3306	146
74ALVC32	161	74AUP1G158	148	74AUP2G125	133	74AVC8T245	118	74CBTLV3384	146
74ALVC32-Q100	132	74AUP1G16	132	74AUP2G126	133	74AVC8T245-Q100	143	74CBTLV3861	146
74ALVC373	150	74AUP1G17	138	74AUP2G132	139, 159	74AVCH16244	133	74CBTLVD3244	146
74ALVC374	152	74AUP1G175	152	74AUP2G14	133, 139	74AVCH16245	141	74CBTLVD3245	146
74ALVC541	132	74AUP1G175-Q100	126	74AUP2G157	148	74AVCH16T245	143	74CBTLVD3245-Q100	112
74ALVC541-Q100	109	74AUP1G18	147	74AUP2G16	133	74AVCH1T45	143	74CBTLVD3384	146
74ALVC573	150	74AUP1G19	147	74AUP2G17	133, 139	74AVCH1T45-Q100	130	74CBTLVD3861	146
74ALVC574	152	74AUP1G240	132	74AUP2G240	133	74AVCH20T245	143	74HC00	159
74ALVC74	152	74AUP1G32	161	74AUP2G241	133	74AVCH2T45	143	74HC00-Q100	116
74ALVCH162244	132	74AUP1G32-Q100	127	74AUP2G32	161	74AVCH4T245	143	74HC02	160
74ALVCH162245	141	74AUP1G3208	158	74AUP2G34	133	74AVCH4T245-Q100	118	74HC02-Q100	116
74ALVCH16244	132	74AUP1G332	161	74AUP2G3404	157	74AVCH8T245	143	74HC03	159
74ALVCH16245	141	74AUP1G34	132	74AUP2G3407	157	74AXP1G00	159	74HC03-Q100	116
74ALVCH162601	141	74AUP1G34-Q100	124	74AUP2G38	159	74AXP1G02	160	74HC04	133
74ALVCH162827	132	74AUP1G373	150	74AUP2G57	157	74AXP1G04	133	74HC04-Q100	109
74ALVCH16373	150	74AUP1G373-Q100	128	74AUP2G58	139, 157	74AXP1G06	133	74HC05	133
74ALVCH16374	152	74AUP1G374	150	74AUP2G79	152	74AXP1G07	133	74HC05-Q100	109
74ALVCH16500	150	74AUP1G374-Q100	128	74AUP2G79-Q100	126	74AXP1G08	156	74HC08	156
74ALVCH16501	141	74AUP1G38	158	74AUP2G80	152	74AXP1G09	156	74HC08-Q100	116
74ALVCH16543	141	74AUP1G386	158	74AUP2G86	158	74AXP1G10	159	74HC10	159
74ALVCH16600	141	74AUP1G57	139, 157	74AUP2G97	139, 157	74AXP1G11	156	74HC10-Q100	116
74ALVCH16601	141	74AUP1G58	139, 157	74AUP2G98	139, 157	74AXP1G125	133	74HC107	152
74ALVCH16646	141	74AUP1G74	152	74AUP2GU04	133	74AXP1G14	133, 139	74HC107-Q100	111
74ALVCH16652	141	74AUP1G74-Q100	126	74AUP2GU04-Q100	124	74AXP1G157	148	74HC109	152
74ALVCH16821	152	74AUP1G79	152	74AUP2T1326	143, 157	74AXP1G17	133, 139	74HC109-Q100	114
74ALVCH16823	152	74AUP1G80	152	74AUP3G04	133	74AXP1G32	161	74HC11	116
74ALVCH16825	132	74AUP1G86	158	74AUP3G0434	157	74AXP1G57	139, 157	74HC11-Q100	156
74ALVCH16827	152	74AUP1G86-Q100	127	74AUP3G14	133, 139	74AXP1G58	139, 157	74HC112	152
74ALVCH16841	150	74AUP1G885	157	74AUP3G16	133	74AXP1G86	158	74HC123	155
74ALVCH16843	150	74AUP1G97	139, 157	74AUP3G17	133, 137	74AXP1G97	139, 157	74HC123-Q100	118
74ALVCH16952	141	74AUP1G98	139, 157	74AUP3G3404	157	74AXP1G98	139, 157	74HC125	133
74ALVCH32973	150	74AUP1GU04	132	74AVC16244	133	74AXP1T125	143	74HC125-Q100	109
74ALVT162245	141	74AUP1T00	11, 142, 159	74AVC16245	141	74AXP1T14	139, 143	74HC126	133
74ALVT16244	132	74AUP1T02	11, 142, 160	74AVC16245-Q100	122	74AXP1T32	143	74HC126-Q100	109
74ALVT162821	152	74AUP1T04	11, 132, 142	74AVC16334A	150	74AXP1T34	143	74HC132	139, 159
74ALVT162823	152	74AUP1T08	11, 142, 156	74AVC16373	150	74AXP1T57	139, 143	74HC132-Q100	119
74ALVT162827	132	74AUP1T14	11, 132, 142	74AVC16374	152	74AXP1T57-Q100	130	74HC137	147
74ALVT16373	150	74AUP1T17	11, 132, 142	74AVC16374-Q100	113	74AXP2G14	139	74HC138	147
74ALVT16821	152	74AUP1T32	11, 142, 161	74AVC16834A	150	74AXP2G17	133, 139	74HC138-Q100	112
74ALVT16823	152	74AUP1T34	142	74AVC16835A	150	74AXP2G34	133	74HC139	147
74ALVT16827	132	74AUP1T34-Q100	130	74AVC16836A	150	74AXP2G3404	133	74HC139-Q100	112
74AUP1G00	159	74AUP1T45	142	74AVC16T245	143	74AXP2T08	143	74HC14	133, 139
74AUP1G02	160	74AUP1T50	11, 132, 142	74AVC16T245-Q100	118	74AXP2T08-Q100	130	74HC14-Q100	119

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74HC151	148	74HC245-Q100	122	74HC3G14	134	74HC573	150	74HCT151	148
74HC151-Q100	113	74HC251	148	74HC3G14-Q100	129	74HC573-Q100	117	74HCT151-Q100	113
74HC153	148	74HC251-Q100	113	74HC3G16	134	74HC574	153	74HCT153	148
74HC153-Q100	113	74HC253	148	74HC3G34	134	74HC574-Q100	114	74HCT153-Q100	113
74HC154	147	74HC253-Q100	113	74HC3G34-Q100	125	74HC590	154	74HCT154	147
74HC157	148	74HC257	148	74HC3GU04	134	74HC594	149	74HCT157	148
74HC157-Q100	113	74HC257-Q100	113	74HC3GU04-Q100	124	74HC594-Q100	120	74HCT157-Q100	113
74HC158	148	74HC259	150	74HC4002	160	74HC595	149	74HCT161	154
74HC160	154	74HC259-Q100	117	74HC4002-Q100	116	74HC595-Q100	120	74HCT163	154
74HC161	154	74HC27	160	74HC40103	154	74HC597	149	74HCT163-Q100	111
74HC161-Q100	111	74HC27-Q100	116	74HC40105	154	74HC597-Q100	120	74HCT164	149
74HC163-Q100	111	74HC273	152	74HC4016	145	74HC6323	154	74HCT164-Q100	120
74HC164	149	74HC273-Q100	114	74HC4017	154	74HC688	162	74HCT165	149
74HC164-Q100	120	74HC280	162	74HC4017-Q100	111	74HC7014	134, 139	74HCT165-Q100	120
74HC165	149	74HC2G00	159	74HC4020	154	74HC7014-Q100	119	74HCT166	149
74HC165-Q100	120	74HC2G00-Q100	127	74HC4020-Q100	111	74HC73	153	74HCT166-Q100	120
74HC166	149	74HC2G02	160	74HC4024	154	74HC74	153	74HCT173	153
74HC166-Q100	120	74HC2G02-Q100	127	74HC4024-Q100	111	74HC74-Q100	114	74HCT174	153
74HC173	152	74HC2G04	133	74HC4040	154	74HC75	150	74HCT174-Q100	114
74HC174	152	74HC2G04-Q100	125	74HC4040-Q100	111	74HC7540	134, 139	74HCT175	153
74HC174-Q100	114	74HC2G08	156	74HC4046A	155	74HC7541	134, 139	74HCT175-Q100	114
74HC175	152	74HC2G08-Q100	127	74HC4049	143	74HC7541-Q100	119	74HCT193	154
74HC175-Q100	114	74HC2G125	133	74HC4050	143	74HC85	162	74HCT193-Q100	111
74HC191	154	74HC2G125-Q100	125	74HC4050-Q100	118	74HC86	158	74HCT1G00	159
74HC193	154	74HC2G14	133, 139	74HC4051	145	74HC86-Q100	116	74HCT1G00-Q100	127
74HC193-Q100	111	74HC2G14-Q100	129	74HC4051-Q100	108	74HC9114	134, 139	74HCT1G02	160
74HC1G00	159	74HC2G17	134, 139	74HC4052	145	74HC9115	134, 139	74HCT1G02-Q100	127
74HC1G00-Q100	127	74HC2G17-Q100	129	74HC4052-Q100	108	74HCT00	159	74HCT1G04	134
74HC1G02	160	74HC2G32	161	74HC4053	145	74HCT00-Q100	116	74HCT1G04-Q100	124
74HC1G02-Q100	127	74HC2G32-Q100	128	74HC4053-Q100	108	74HCT02	160	74HCT1G08	156
74HC1G04	133	74HC2G34	134	74HC4060	154	74HCT02-Q100	116	74HCT1G08-Q100	127
74HC1G04-Q100	124	74HC2G34-Q100	125	74HC4060-Q100	111	74HCT03	159	74HCT1G125	134
74HC1G08	156	74HC2G66	145	74HC4066	145	74HCT03-Q100	116	74HCT1G125-Q100	124
74HC1G08-Q100	127	74HC2G66-Q100	133	74HC4066-Q100	108	74HCT04	134	74HCT1G126	134
74HC1G125	133	74HC2G86	158	74HC4067	145	74HCT04-Q100	134	74HCT1G14	134, 140
74HC1G125-Q100	124	74HC2G86-Q100	128	74HC4067-Q100	108	74HCT08	156	74HCT1G14-Q100	129
74HC1G126	133	74HC2GU04	134	74HC4075	161	74HCT08-Q100	116	74HCT1G32	161
74HC1G14	133, 139	74HC2GU04-Q100	124	74HC4075-Q100	116	74HCT10	159	74HCT1G32-Q100	127
74HC1G14-Q100	129	74HC30	159	74HC4094	149	74HCT10-Q100	116	74HCT1G66	145
74HC1G32	161	74HC30-Q100	116	74HC4094-Q100	120	74HCT107	153	74HCT1G66-Q100	123
74HC1G32-Q100	127	74HC32	161	74HC42	147	74HCT107-Q100	114	74HCT1G86	158
74HC1G66	145	74HC32-Q100	116	74HC423	155	74HCT109	153	74HCT1G86-Q100	128
74HC1G66-Q100	123	74HC365	134	74HC4316	145	74HCT109-Q100	114	74HCT20	159
74HC1G86	158	74HC365-Q100	109	74HC4351	145	74HCT11	156	74HCT20-Q100	116
74HC1G86-Q100	127	74HC366	134	74HC4511	147	74HCT11-Q100	116	74HCT221	155
74HC1GU04	133	74HC366-Q100	109	74HC4514	147	74HCT112	153	74HCT238	147
74HC1GU04-Q100	124	74HC368	134	74HC4515	147	74HCT123	155	74HCT238-Q100	112
74HC20	159	74HC373	150	74HC4520	154	74HCT123-Q100	118	74HCT240	134
74HC20-Q100	116	74HC373-Q100	117	74HC4520-Q100	111	74HCT125	134	74HCT240-Q100	109
74HC21	156	74HC374	153	74HC4538	155	74HCT125-Q100	109	74HCT241	134
74HC237	147	74HC377	153	74HC4538-Q100	118	74HCT126	134	74HCT244	134
74HC237-Q100	112	74HC377-Q100	114	74HC4851	145	74HCT126-Q100	109	74HCT244-Q100	109
74HC238	147	74HC390	154	74HC4851-Q100	108	74HCT132	139, 159	74HCT245	141
74HC238-Q100	112	74HC393	154	74HC4852	145	74HCT132-Q100	119	74HCT245-Q100	122
74HC240	133	74HC393-Q100	111	74HC4852-Q100	108	74HCT138	147	74HCT251	148
74HC240-Q100	109	74HC3G04	134	74HC540	134	74HCT138-Q100	112	74HCT251-Q100	113
74HC241	133	74HC3G04-Q100	125	74HC540-Q100	109	74HCT139	147	74HCT253	148
74HC244	133	74HC3G06	134	74HC541	134	74HCT139-Q100	112	74HCT253-Q100	113
74HC244-Q100	109	74HC3G07	134	74HC541-Q100	109	74HCT14	134, 139	74HCT257	148
74HC245	141	74HC3G07-Q100	125	74HC5555	154	74HCT14-Q100	119	74HCT257-Q100	113

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74HCT259	150	74HCT4020	154	74HCU04	135	74LVC00A	159	74LVC1G123	155
74HCT259-Q100	117	74HCT4020-Q100	111	74HCU04-Q100	110	74LVC00A-Q100	116	74LVC1G123-Q100	129
74HCT27	160	74HCT4040	154	74LV00	159	74LVC02A	160	74LVC1G125	135
74HCT27-Q100	116	74HCT4040-Q100	111	74LV02	160	74LVC02A-Q100	116	74LVC1G125-Q100	125
74HCT273	153	74HCT4046A	155	74LV03	159	74LVC04A	135	74LVC1G126	136
74HCT273-Q100	114	74HCT4051	145	74LV04	135	74LVC04A-Q100	110	74LVC1G126-Q100	125
74HCT280	162	74HCT4051-Q100	108	74LV04AT	135	74LVC06A	135	74LVC1G14	136, 140
74HCT2G00	159	74HCT4052	145	74LV05A	135	74LVC06A-Q100	110	74LVC1G14-Q100	129
74HCT2G00-Q100	127	74HCT4052-Q100	108	74LV07A	135	74LVC07A	135	74LVC1G157	148
74HCT2G02	160	74HCT4053	145	74LV07AT	135	74LVC07A-Q100	110	74LVC1G157-Q100	126
74HCT2G02-Q100	127	74HCT4053-Q100	108	74LV08	156	74LVC08	156	74LVC1G16	136
74HCT2G04	134	74HCT4060	154	74LV08-Q100	116	74LVC08A-Q100	116	74LVC1G17	136, 140
74HCT2G04-Q100	125	74HCT4060-Q100	111	74LV123	155	74LVC10A	159	74LVC1G17-Q100	129
74HCT2G08	156	74HCT4066	145	74LV132	140, 159	74LVC11	156	74LVC1G175	153
74HCT2G08-Q100	128	74HCT4066-Q100	108	74LV132-Q100	119	74LVC11-Q100	116	74LVC1G175-Q100	126
74HCT2G125	134	74HCT4067	145	74LV138	147	74LVC125A	135	74LVC1G18	147
74HCT2G125-Q100	125	74HCT4067-Q100	108	74LV14	135, 140	74LVC125A-Q100	110	74LVC1G18-Q100	126
74HCT2G14	134, 140	74HCT4075	161	74LV14A	135, 140	74LVC126A	135	74LVC1G19	147
74HCT2G14-Q100	129	74HCT4075-Q100	116	74LV164	149	74LVC126A-Q100	110	74LVC1G19-Q100	126
74HCT2G17	134, 140	74HCT4094	149	74LV164-Q100	120	74LVC132A	140, 159	74LVC1G27	160
74HCT2G17-Q100	129	74HCT4094-Q100	120	74LV165	149	74LVC132A-Q100	119	74LVC1G3157	145
74HCT2G32	161	74HCT423	155	74LV165-Q100	120	74LVC138A	147	74LVC1G3157-Q100	123
74HCT2G32-Q100	128	74HCT4316	145	74LV165A	149	74LVC138A-Q100	112	74LVC1G32	161
74HCT2G34	134	74HCT4351	145	74LV165A-Q100	121	74LVC139	147	74LVC1G32-Q100	128
74HCT2G34-Q100	125	74HCT4511	147	74LV17A	135	74LVC14A	135, 140	74LVC1G332	161
74HCT2G66	145	74HCT4514	147	74LV1T00	11, 143, 159	74LVC14A-Q100	119	74LVC1G332-Q100	128
74HCT2G66-Q100	123	74HCT4520	154	74LV1T02	11, 143, 160	74LVC157A	148	74LVC1G34	136
74HCT2G86	158	74HCT4520-Q100	111	74LV1T04	11, 135, 143	74LVC157A-Q100	113	74LVC1G34-Q100	125
74HCT2G86-Q100	128	74HCT4538	155	74LV1T08	11, 144, 156	74LVC161	155	74LVC1G38	159
74HCT30	159	74HCT4538-Q100	118	74LV1T125	11, 135, 144	74LVC162244A	135	74LVC1G38-Q100	128
74HCT30-Q100	116	74HCT4851	145	74LV1T126	11, 135, 144	74LVC162245A	141	74LVC1G384	145
74HCT32	161	74HCT4851-Q100	108	74LV1T32	11, 144, 161	74LVC162245A-Q100	122	74LVC1G384-Q100	123
74HCT32-Q100	116	74HCT4852	145	74LV1T34	11, 135, 144	74LVC162373A	150	74LVC1G386	158
74HCT365	134	74HCT4852-Q100	108	74LV1T86	11, 144, 158	74LVC16240A	135	74LVC1G53	145
74HCT365-Q100	109	74HCT540	135	74LV1T87	11, 144, 158	74LVC16240A-Q100	110	74LVC1G53-Q100	123
74HCT366	134	74HCT540-Q100	109	74LV244	135	74LVC16241A	135	74LVC1G57	140, 157
74HCT366-Q100	109	74HCT541	135	74LV244-Q100	110	74LVC16244A	135	74LVC1G57-Q100	128
74HCT367	134	74HCT541-Q100	110	74LV244A	135	74LVC16244A-Q100	110	74LVC1G58	140, 157
74HCT368	134	74HCT573	150	74LV244AT	135	74LVC16245A	141	74LVC1G58-Q100	128
74HCT373	150	74HCT573-Q100	117	74LV245	141	74LVC163	155	74LVC1G66	145
74HCT373-Q100	117	74HCT574	153	74LV245A	141	74LVC16373A	150	74LVC1G66-Q100	123
74HCT374	153	74HCT574-Q100	117	74LV245AT	141	74LVC16373A-Q100	117	74LVC1G74	153
74HCT377	153	74HCT594	149	74LV365	135	74LVC16374A	153	74LVC1G74-Q100	126
74HCT377-Q100	114	74HCT594-Q100	120	74LV393	154	74LVC16374A-Q100	115	74LVC1G79	153
74HCT390	154	74HCT595	149	74LV393-Q100	111	74LVC1G00	159	74LVC1G79-Q100	126
74HCT393	154	74HCT595-Q100	120	74LV4020	154	74LVC1G00-Q100	128	74LVC1G80	153
74HCT393-Q100	111	74HCT597	149	74LV4051	145	74LVC1G02	160	74LVC1G80-Q100	126
74HCT3G04	134	74HCT597-Q100	120	74LV4052	145	74LVC1G02-Q100	128	74LVC1G86	158
74HCT3G04-Q100	125	74HCT6323	154	74LV4052-Q100	108	74LVC1G04	135	74LVC1G86-Q100	128
74HCT3G06	134	74HCT688	162	74LV4053	145	74LVC1G04-Q100	125	74LVC1G97	140, 157
74HCT3G07	135	74HCT74	153	74LV4053-Q100	108	74LVC1G06	135	74LVC1G98	140, 157
74HCT3G07-Q100	125	74HCT74-Q100	114	74LV4060	154	74LVC1G06-Q100	125	74LVC1G99	140, 157
74HCT3G14	135, 140	74HCT7540	135, 140	74LV4060-Q100	121	74LVC1G07	135	74LVC1GU04	136
74HCT3G14-Q100	129	74HCT7541	135, 140	74LV4066	145	74LVC1G07-Q100	125	74LVC1GX04-Q100	125
74HCT3G16	135	74HCT7541-Q100	119	74LV4094	149	74LVC1G08	156	74LVC1GX04	157
74HCT3G34	135	74HCT85	162	74LV540A	135	74LVC1G08-Q100	128	74LVC1GX04-Q100	128
74HCT3G34-Q100	125	74HCT86	158	74LV541A	135	74LVC1G10	159	74LVC1T45	144
74HCT4002	160	74HCT86-Q100	116	74LV541AT	135	74LVC1G10-Q100	128	74LVC1T45-Q100	130
74HCT4017	154	74HCT9046A	155	74LV74	153	74LVC1G11	156	74LVC2244A	136
74HCT4017-Q100	111	74HCT9114	135, 140	74LV74-Q100	114	74LVC1G11-Q100	128	74LVC2245A	141

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
74LVC240A	136	74LVC3G04-Q100	125	74LVT08	156	74VHCT245	142	BAS70	42
74LVC244A	136	74LVC3G06	136	74LVT125	136	74VHCT32	161	BAS70-04	42
74LVC244A-Q100	110	74LVC3G07	136	74LVT126	136	74VHCT32-Q100	117	BAS70-04W	43
74LVC245A	141	74LVC3G07-Q100	125	74LVT14	136, 140	74VHCT541	137	BAS70-05	42
74LVC245A-Q100	122	74LVC3G14	136, 140	74LVT162240A	136	74VHCT541-Q100	110	BAS70-05W	43
74LVC257A	148	74LVC3G16	136	74LVT162244B	136	74VHCT595-Q100	121	BAS70-06	42
74LVC273	153	74LVC3G17	136	74LVT162245B	142	BAL74	38	BAS70-06W	43
74LVC273-Q100	114	74LVC3G17-Q100	129	74LVT162373	151	BAL99	38	BAS70-07	42
74LVC2G00	159	74LVC3G34	136, 140	74LVT162374	153	BAS101	39	BAS70H	43
74LVC2G00-Q100	128	74LVC3G34-Q100	125	74LVT16240A	136	BAS101S	39	BAS70W	43
74LVC2G02	160	74LVC3GU04	136	74LVT16244B	137	BAS116	40	BAS716	40
74LVC2G02-Q100	128	74LVC4066	145	74LVT16245B	142	BAS116GW	40	BAS85	42
74LVC2G04	136	74LVC4066-Q100	108	74LVT16373A	151	BAS116H	40	BAS86	42
74LVC2G04-Q100	125	74LVC4245	144	74LVT16374A	153	BAS116L	40	BAT120A	48
74LVC2G06	136	74LVC4245A	144	74LVT16543A	142	BAS116QA	40	BAT120C	48
74LVC2G06-Q100	125	74LVC4245A-Q100	118	74LVT2241	137	BAS16	38	BAT120S	48
74LVC2G07	136	74LVC4T3144-Q100	118	74LVT2244	137	BAS16GW	38	BAT160A	48
74LVC2G07-Q100	125	74LVC541A	136	74LVT2245	142	BAS16H	38	BAT160C	48
74LVC2G08	156	74LVC541A-Q100	110	74LVT240	137	BAS16J	38	BAT160S	48
74LVC2G08-Q100	128	74LVC573A	150	74LVT241	137	BAS16L	38	BAT165A	47
74LVC2G125	136	74LVC573A-Q100	115	74LVT244A	137	BAS16LD	38	BAT17	43
74LVC2G125-Q100	125	74LVC574A	153	74LVT244A-Q100	110	BAS16QA	38	BAT46GW	42
74LVC2G126	136	74LVC594A-Q100	121	74LVT244B	137	BAS16VY	38	BAT46WH	43
74LVC2G126-Q100	125	74LVC74A	114	74LVT245	142	BAS16W	38	BAT54	43
74LVC2G14	136, 140	74LVC74A-Q100	114	74LVT245B	142	BAS20	39	BAT54A	42
74LVC2G14-Q100	129	74LVC823A	153	74LVT573	151	BAS21	39	BAT54AW	43
74LVC2G16	136	74LVC823A-Q100	115	74LVT640	142	BAS21AVD	39	BAT54C	42
74LVC2G17	136, 140	74LVC827A	136	74LVTH125	137	BAS21AW	39	BAT54CW	43
74LVC2G17-Q100	129	74LVC86	158	74LVTH16244B	137	BAS21GW	39	BAT54GW	42
74LVC2G240	136	74LVC8T245	144	74LVTH16245B	142	BAS21H	39	BAT54H	43
74LVC2G240-Q100	125	74LVC8T245-Q100	118	74LVTH16374A	153	BAS21J	39	BAT54S	42
74LVC2G241	136	74LVC8T595	144, 149	74LVTH2245	142	BAS21PG	39	BAT54SW	43
74LVC2G241-Q100	125	74LVCH162244A	138	74LVTH244A	137	BAS21SW	39	BAT54W	43
74LVC2G3157	145	74LVCH162245A	141	74LVTH244A-Q100	110	BAS21VD	39	BAT720	47
74LVC2G32	161	74LVCH162373A	150	74LVTH244B	137	BAS21W	39	BAT721	42
74LVC2G32-Q100	128	74LVCH162374A	153	74LVTN16244B	137	BAS28	38	BAT721A	42
74LVC2G34	136	74LVCH16244A	153	74LVTN16245B	142	BAS29	40	BAT721C	42
74LVC2G34-Q100	128	74LVCH16244A-Q100	110	74VHC02	160	BAS31	40	BAT721S	42
74LVC2G38	159	74LVCH16245A	141	74VHC02-Q100	116	BAS316	38	BAT74	42
74LVC2G53	145	74LVCH16373A	150	74VHC08	156	BAS321	39	BAT754	42
74LVC2G66	145	74LVCH16373A-Q100	117	74VHC125	137	BAS321J	39	BAT754A	42
74LVC2G66-Q100	123	74LVCH16374A	153	74VHC126	137	BAS32L	38	BAT754C	42
74LVC2G74	153	74LVCH16374A-Q100	115	74VHC126-Q100	110	BAS35	40	BAT754S	42
74LVC2G74-Q100	126	74LVCH16541A	136	74VHC14	137, 140	BAS40	42	BAT760	47
74LVC2G86	158	74LVCH1T45	144	74VHC244	137	BAS40-04	42	BAT85	42
74LVC2G86-Q100	128	74LVCH1T45-Q100	130	74VHC245	142	BAS40-04W	43	BAT854AW	43
74LVC2GU04	136	74LVCH244A	136	74VHC32	161	BAS40-05	42	BAT854CW	43
74LVC2GU04-Q100	125	74LVCH244A-Q100	110	74VHC32-Q100	117	BAS40-05W	43	BAT854SW	43
74LVC2T45	144	74LVCH245A	141	74VHC541	137	BAS40-06	42	BAT854W	43
74LVC2T45-Q100	130	74LVCH245A-Q100	122	74VHC541-Q100	110	BAS40-06W	43	BAT86	42
74LVC30A	159	74LVCH2T45	144	74VHC595-Q100	121	BAS40-07	42	BAV102	39
74LVC32245A	141	74LVCH2T45-Q100	130	74VHCT02	160	BAS40H	43	BAV103	39
74LVC32A	161	74LVCH8T245	144	74VHCT02-Q100	116	BAS40W	43	BAV170	40
74LVC32A-Q100	116	74LVCH8T245-Q100	118	74VHCT08	156	BAS416	40	BAV170M	40
74LVC373A	150	74LVCU04A	136	74VHCT08-Q100	117	BAS45A	40	BAV170QA	40
74LVC373A-Q100	117	74LVCU04A-Q100	110	74VHCT125	137	BAS45AL	40	BAV199	40
74LVC374A	153	74LVCV2G66	145	74VHCT126	137	BAS516	38	BAV199W	40
74LVC374A-Q100	114	74LVT02	160	74VHCT126-Q100	110	BAS521	39	BAV21QA	8, 39
74LVC377	153	74LVT04	136	74VHCT14	137, 140	BAS521B	8, 39	BAV23	39
74LVC3G04	136	74LVT04-Q100	110	74VHCT244	137	BAS56	40	BAV23A	39

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BAV23C	39	BC69-2SPA	18	BC847BPN	15	BC860B	20	BCV61C	21
BAV23QA	39	BC69PA	18	BC847BQA	14	BC860BW	20	BCV62	20
BAV23S	39	BC69PAS	18	BC847BS	15	BC860C	20	BCV62A	20
BAV70	38	BC807	14	BC847BW	14	BC860CW	20	BCV62B	20
BAV70M	38	BC807-16	14	BC847CM	14	BC868	18	BCV62C	20
BAV70QA	38	BC807-16H	17	BC847CMB	14	BC868-25	18	BCV63	20
BAV70S	38	BC807-16W	14	BC847CQA	14	BC869	18	BCV63B	20
BAV70SRA	38	BC807-25	14	BC847CW	14	BC869-16	18	BCV64B	20
BAV70W	38	BC807-25H	17	BC847DS	15	BC869-25	18	BCV65	22
BAV74	38	BC807-25QA	14	BC847QAPN	15	BCM53DS	21	BCV71	14
BAV756S	38	BC807-25W	14	BC847QAS	15	BCM56DS	21	BCV72	14
BAV99	38	BC807-40	14	BC847RA	15	BCM61B	21	BCW29	14
BAV99QA	38	BC807-40H	17	BC847RAPN	15	BCM62B	21	BCW30	14
BAV99S	38	BC807-40QA	14	BC847W	15	BCM846BS	21	BCW31	14
BAV99W	38	BC807-40W	14	BC848B	14	BCM847BS	21	BCW32	14
BAW101	39	BC807DS	15	BC848W	14	BCM847DS	21	BCW33	14
BAW101S	39	BC807K-16	15	BC849B	20	BCM847QAS	21	BCW60B	14
BAW156	40	BC807K-25	15	BC849BW	20	BCM856DS	21	BCW60C	14
BAW56	38	BC807K-40	15	BC849C	20	BCM857DS	21	BCW60D	14
BAW56M	38	BC807RA	15	BC849CW	20	BCM857QAS	21	BCW61B	14
BAW56QA	38	BC807W	14	BC850B	20	BCP51	18	BCW61C	14
BAW56S	38	BC816	14	BC850BW	20	BCP51-10	18	BCW61D	14
BAW56SRA	38	BC816W	14	BC850C	20	BCP51-16	18	BCW66F	14
BAW56W	38	BC817	14	BC850CW	20	BCP52	18	BCW66G	14
BC51-10PA	18	BC817-25QA	14	BC856	14	BCP52-10	18	BCW66H	14
BC51-10PAS	18	BC817-40QA	14	BC856A	14	BCP52-16	18	BCW68F	14
BC51-16PA	18	BC817DPN	15	BC856AW	14	BCP53	17	BCW68G	14
BC51PA	18	BC817DS	15	BC856B	14	BCP53-10	18	BCW68H	14
BC51PAS	18	BC817K-16	16	BC856BM	14	BCP53-10H	17	BCW69	14
BC52-10PA	18	BC817K-16H	16	BC856BMB	14	BCP53-16	18	BCW70	14
BC52-10PAS	18	BC817K-25	15	BC856BS	15	BCP53-16H	17	BCW71	14
BC52-16PA	18	BC817K-25H	16	BC856BW	14	BCP53H	17	BCW72	14
BC52PA	18	BC817K-40	15	BC856S	15	BCP54	18	BCW89	14
BC52PAS	18	BC817K-40H	16	BC856W	14	BCP54-10	18	BCX17	14
BC53-10PA	18	BC817RA	15	BC857	14	BCP54-16	18	BCX18	14
BC53-10PAS	18	BC817RAPN	15	BC857A	14	BCP55	18	BCX19	14
BC53-16PA	18	BC817W	14	BC857AM	14	BCP55-10	18	BCX51	18
BC53PA	18	BC825	14	BC857AMB	14	BCP55-16	18	BCX51-10	18
BC53PAS	18	BC825W	14	BC857AQA	14	BCP56	18	BCX51-16	18
BC54-10PA	18	BC840	14	BC857AW	14	BCP56-10	18	BCX52	18
BC54-10PAS	18	BC840W	14	BC857B	14	BCP56-10H	17	BCX52-10	18
BC54-16PA	18	BC846	14	BC857BM	14	BCP56-16	18	BCX52-16	18
BC54PA	18	BC846A	14	BC857BMB	14	BCP56-16H	17	BCX53	18
BC54PAS	18	BC846AW	14	BC857BQA	14	BCP56H	17	BCX53-10	18
BC55-10PA	18	BC846B	14	BC857BS	15	BCP68	18	BCX53-16	18
BC55-10PAS	18	BC846BM	14	BC857BW	14	BCP68-25	18	BCX54	18
BC55-16PA	18	BC846BMB	14	BC857C	14	BCP69	18	BCX54-10	18
BC55PA	18	BC846BPN	15	BC857CM	14	BCP69-16	18	BCX54-16	18
BC55PAS	18	BC846BS	15	BC857CMB	14	BCP69-25	18	BCX55	18
BC56-10PA	18	BC846DS	15	BC857CQA	14	BCV26	20	BCX55-10	18
BC56-10PAS	18	BC846S	15	BC857CW	14	BCV27	20	BCX55-16	18
BC56-16PA	18	BC846W	14	BC857QAS	15	BCV28	20	BCX56	18
BC569-16PAS	18	BC847	14	BC857RA	15	BCV29	20	BCX56-10	18
BC56PA	18	BC847A	14	BC857W	14	BCV46	20	BCX56-16	18
BC56PAS	18	BC847AM	14	BC858B	14	BCV47	20	BCX70G	14
BC68-2SPA	18	BC847AMB	14	BC858W	14	BCV48	20	BCX70H	14
BC68-2SPAS	18	BC847AQA	14	BC859B	20	BCV49	20	BCX70J	14
BC68PA	18	BC847AW	14	BC859BW	20	BCV61	20	BCX70K	14
BC68PAS	18	BC847BM	14	BC859C	20	BCV61A	21	BCX71H	14
BC69-16PA	18	BC847BMB	14	BC859CW	20	BCV61B	21	BCX71J	14

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BCX71K	14	BST62	20	BUK7E1R8-40E	75	BUK7Y10-30B	74	BUK965R8-100E	80
BF550	22	BUK6D120-40E	83	BUK7E1R9-40E	75	BUK7Y113-100E	80	BUK9660-100A	80
BF570	22	BUK6D120-60P	83	BUK7E2R3-40E	75	BUK7Y12-100E	80	BUK966R5-60E	77
BF620	22	BUK6D125-60E	83	BUK7E2R6-60E	77	BUK7Y12-40E	75	BUK9675-100A	80
BF621	18	BUK6D210-60E	83	BUK7E3R1-40E	75	BUK7Y14-80E	79	BUK9675-55A	77
BF622	18	BUK6D23-40E	83	BUK7E3R5-60E	77	BUK7Y15-100E	80	BUK969R0-60E	77
BF623	18	BUK6D230-80E	83	BUK7E4R6-60E	77	BUK7Y15-60E	78	BUK969R3-100E	80
BF720	18	BUK6D335-100E	83	BUK7E5R2-100E	80	BUK7Y153-100E	80	BUK98150-55A/CU	78
BF722	18	BUK6D43-40P	83	BUK7E8R3-40E	75	BUK7Y19-100E	80	BUK98180-100A/CU	81
BF723	18	BUK6D56-60E	83	BUK7J1R0-40H	75	BUK7Y1R4-40H	75	BUK9832-55A/CU	78
BF820	18	BUK6D88-60E	83	BUK7J1R4-40H	75	BUK7Y1R7-40H	75	BUK9875-100A/CU	81
BF820W	18	BUK6D98-80E	83	BUK7K12-60E	78	BUK7Y20-30B	74	BUK9880-55A/CU	78
BF821	18	BUK6Y12-30P	81	BUK7K13-60E	78	BUK7Y21-40E	75	BUK9D23-40E	83
BF822	18	BUK6Y15-40P	81	BUK7K134-100E	81	BUK7Y22-100E	80	BUK9J0R9-40H	75
BF823	18	BUK6Y20-30P	81	BUK7K15-80E	79	BUK7Y25-60E	78	BUK9K12-60E	78
BF824	22	BUK6Y25-40P	81	BUK7K17-60E	78	BUK7Y25-80E	79	BUK9K13-60E	78
BF824W	22	BUK6Y32-60P	81	BUK7K17-80E	79	BUK7Y29-40E	75	BUK9K134-100E	81
BF840	22	BUK6Y57-60P	81	BUK7K18-40E	76	BUK7Y2R0-40H	75	BUK9K17-60E	78
BFS19	22	BUK751R8-40E	75	BUK7K23-80E	79	BUK7Y2R5-40H	75	BUK9K18-40E	76
BFS20	22	BUK752R3-40E	75	BUK7K25-40E	76	BUK7Y38-100E	80	BUK9K20-80E	79
BFS20W	22	BUK753R1-40E	75	BUK7K29-100E	81	BUK7Y3R0-40H	75	BUK9K22-80E	79
BSH111BK	99	BUK753R8-80E	79	BUK7K32-100E	81	BUK7Y3R5-40E	75	BUK9K25-40E	76
BSH205G2	83, 101	BUK755R4-100E	80	BUK7K35-60E	78	BUK7Y3R5-40H	75	BUK9K29-100E	81
BSN20BK	99	BUK758R3-40E	75	BUK7K45-100E	81	BUK7Y41-80E	79	BUK9K30-80E	79
BSP19	18	BUK7610-55AL	77	BUK7K52-60E	78	BUK7Y43-60E	78	BUK9K32-100E	81
BSP31	18	BUK7613-100E	80	BUK7K5R1-30E	74	BUK7Y4R4-40E	75	BUK9K35-60E	78
BSP32	18	BUK7613-60E	77	BUK7K5R6-30E	74	BUK7Y4R8-60E	78	BUK9K45-100E	81
BSP41	18	BUK7613-75B	79	BUK7K6R2-40E	76	BUK7Y59-60E	78	BUK9K52-60E	78
BSP43	18	BUK761R6-40E	75	BUK7K6R8-40E	76	BUK7Y65-100E	80	BUK9K5R1-30E	74
BSP50	20	BUK761R7-40E	75	BUK7K89-100E	81	BUK7Y6R0-60E	78	BUK9K5R6-30E	74
BSP51	20	BUK7620-55A	77	BUK7K8R7-40E	76	BUK7Y72-80E	79	BUK9K6R2-40E	76
BSP52	20	BUK7623-75A	79	BUK7M10-40E	76	BUK7Y7R2-60E	78	BUK9K6R8-40E	76
BSP60	20	BUK762R0-40E	75	BUK7M11-40H	76	BUK7Y7R6-40E	75	BUK9K89-100E	81
BSP61	20	BUK762R4-60E	77	BUK7M12-40E	76	BUK7Y7R8-80E	79	BUK9K8R7-40E	76
BSP62	20	BUK762R6-40E	75	BUK7M12-60E	78	BUK7Y8R7-60E	78	BUK9M10-30E	74
BSR14	16	BUK762R6-60E	77	BUK7M15-40H	76	BUK7Y98-80E	79	BUK9M11-40E	76
BSR16	16	BUK762R7-30B	74	BUK7M15-60E	78	BUK7Y9R9-80E	79	BUK9M11-40H	76
BSR19A	18	BUK762R9-40E	75	BUK7M17-80E	79	BUK953R5-60E	77	BUK9M12-60E	78
BSR30	18	BUK7631-100E	80	BUK7M19-60E	78	BUK954R8-60E	77	BUK9M120-100E	81
BSR33	18	BUK7635-55A	77	BUK7M20-40H	76	BUK9611-80E	79	BUK9M14-40E	76
BSR41	18	BUK763R1-60E	77	BUK7M21-40E	76	BUK9614-60E	77	BUK9M15-40H	76
BSR43	18	BUK763R4-30B	74	BUK7M22-80E	79	BUK9615-100E	80	BUK9M15-60E	78
BSS138AKA	85	BUK763R8-80E	79	BUK7M27-80E	79	BUK9616-75B	79	BUK9M156-100E	81
BSS138BK	85	BUK763R9-60E	77	BUK7M33-60E	78	BUK96180-100A	80	BUK9M17-30E	74
BSS138BKS	85	BUK764R0-40E	75	BUK7M3R3-40H	76	BUK961R6-40E	75	BUK9M19-60E	78
BSS138BKW	85	BUK764R2-80E	79	BUK7M42-60E	78	BUK9620-55A	77	BUK9M20-40H	76
BSS138P	85	BUK764R4-60E	77	BUK7M45-40E	76	BUK9624-55A	77	BUK9M23-80E	79
BSS138PS	85	BUK765R0-100E	80	BUK7M4R3-40H	76	BUK9628-55A	77	BUK9M24-40E	76
BSS138PW	85	BUK765R3-40E	75	BUK7M5R0-40H	76	BUK962R5-60E	77	BUK9M24-60E	78
BSS63	14, 18	BUK7660-100A	80	BUK7M67-60E	78	BUK962R6-40E	75	BUK9M28-80E	79
BSS84AK	85, 94, 101	BUK766R0-60E	77	BUK7M6R0-40H	76	BUK962R8-60E	77	BUK9M34-100E	81
BSS84AKM	85, 94, 101	BUK7675-100A	80	BUK7M6R3-40E	76	BUK9635-55A	77	BUK9M35-80E	79
BSS84AKMB	94, 101	BUK7675-55A	77	BUK7M6R7-40H	76	BUK9637-100E	80	BUK9M3R3-40H	76
BSS84AKS	85, 103	BUK768R1-100E	80	BUK7M8R0-40E	76	BUK963R1-40E	75	BUK9M42-60E	78
BSS84AKW	85, 101	BUK768R1-40E	75	BUK7M8R5-40H	76	BUK963R3-60E	77	BUK9M43-100E	81
BST39	18	BUK768R3-60E	77	BUK7M9R5-40H	76	BUK964R1-40E	75	BUK9M4R3-40H	76
BST50	20	BUK769R6-80E	79	BUK7M9R9-60E	78	BUK964R2-60E	77	BUK9M52-40E	76
BST51	20	BUK78150-55A/CU	78	BUK7S0R7-40H	75	BUK964R2-80E	79	BUK9M53-60E	78
BST52	20	BUK7880-55A/CU	78	BUK7S0R9-40H	75	BUK964R7-80E	79	BUK9M5R0-40H	76
BST60	20	BUK7D25-40E	83	BUK7S1R0-40H	75	BUK964R8-60E	77	BUK9M5R2-30E	74
BST61	20	BUK7E13-60E	77	BUK7Y07-30B	74	BUK965R4-40E	75	BUK9M6R0-40H	76

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
BUK9M6R6-30E	74	BZX79 series	36	HEF4052B-Q100	108	MMBZ15VAL	67	NZH series	36
BUK9M6R7-40H	76	BZX84 series	36	HEF4053B	145	MMBZ15VDL	67	NZX series	36, 37
BUK9M7R2-40E	76	BZX84J series	36	HEF4053B-Q100	108	MMBZ16VAL	67	PBHV2160Z	29
BUK9M8S-60E	78	BZX884 series	36	HEF4060B	155	MMBZ16VTAL	67	PBHV3160Z	29
BUK9M8R5-40H	76	CBT16210	146	HEF4060B-Q100	111	MMBZ18VAL	67	PBHV8115T	29
BUK9M9R1-40E	76	CBT3125	146	HEF4066B	145	MMBZ18VCL	67	PBHV8115TLH	29
BUK9M9R5-40H	76	CBT3244A	146	HEF4066B-Q100	108	MMBZ20VAL	67	PBHV8115X	29
BUK9Y07-30B	74	CBT3245A	146	HEF4067B	145	MMBZ20VCL	67	PBHV8115Z	29
BUK9Y107-80E	79	CBT3245A-Q100	112	HEF4067B-Q100	108	MMBZ27VAL	67	PBHV8118T	29
BUK9Y11-30B	74	CBT3251	146	HEF4069UB	137	MMBZ27VCL	67	PBHV8140Z	29
BUK9Y11-80E	79	CBT3253	146	HEF4069UB-Q100	110	MMBZ33VAL	67	PBHV8215Z	29
BUK9Y113-100E	80	CBT3253A	146	HEF4070	158	MMBZ33VCL	67	PBHV8515QA	29
BUK9Y12-100E	80	CBT3257A	146	HEF4070B-Q100	117	MMBZ5V6AL	67	PBHV8540T	29
BUK9Y12-40E	75	CBT3306	146	HEF4071	161	MMBZ6V2AL	67	PBHV8540X	29
BUK9Y14-80E	79	CBT3306-Q100	123	HEF4073B	156	MMBZ6V8AL	67	PBHV8540Z	29
BUK9Y15-100E	80	CBT3861	146	HEF4077	158	MMBZ9V1AL	67	PBHV8560Z	29
BUK9Y15-60E	78	CBTD16210	146	HEF4081B	156	NCR401T	19	PBHV9040T	29
BUK9Y153-100E	80	CBTD3306	146	HEF4081B-Q100	117	NCR401U	19	PBHV9040X	29
BUK9Y19-100E	80	CBTD3384	146	HEF4082B	156	NCR402T	19	PBHV9040Z	29
BUK9Y1R3-40H	75	CBTD3861	146	HEF4082B-Q100	117	NCR402U	19	PBHV9050T	29
BUK9Y1R6-40H	75	HEF4000	163	HEF4093B	140, 159	NCR405U	19	PBHV9050Z	29
BUK9Y1R9-40H	75	HEF4001B	160	HEF4094B-Q100	121	NMB2227A	16	PBHV9115T	29
BUK9Y21-40E	75	HEF4001B-Q100	117	HEF4104B	144	NPIC6C4894	149	PBHV9115TLH	29
BUK9Y22-100E	80	HEF4002B	160	HEF4104B-Q100	118	NPIC6C4894-Q100	121	PBHV9115X	29
BUK9Y22-30B	74	HEF4007UB	157	HEF4518B	155	NPIC6C595	149	PBHV9115Z	29
BUK9Y25-60E	78	HEF40098B	137	HEF4520B	155	NPIC6C595-Q100	121	PBHV9215Z	29
BUK9Y25-80E	79	HEF40106B	140	HEF4520B-Q100	111	NPIC6C596	149	PBHV9414Z	29
BUK9Y29-40E	75	HEF40106B-Q100	119	HEF4521B	155	NPIC6C596-Q100	121	PBHV9515QA	29
BUK9Y2R4-40H	75	HEF4011B	159	HEF4528B	155	NPIC6C596A	149	PBHV9540X	29
BUK9Y2R8-40H	75	HEF4011B-Q100	117	HEF4528B-Q100	118	NPIC6C596A-Q100	121	PBHV9540Z	29
BUK9Y38-100E	80	HEF4013B	153	HEF4538B	155	NUP1301	53	PBHV9560Z	29
BUK9Y3R0-40E	75	HEF4013B-Q100	115	HEF4538B-Q100	118	NUP1301QA	53	PBLS1501Y	28
BUK9Y3R5-40E	75	HEF4014B-Q100	121	HEF4541B	155	NUP1301U	53	PBLS1502Y	28
BUK9Y41-80E	79	HEF4016B	145	HEF4541B-Q100	111	NX138AK	99	PBLS1503Y	28
BUK9Y43-60E	78	HEF40175B	153	HEF4543B	147	NX138AKS	103	PBLS1504Y	28
BUK9Y4R4-40E	75	HEF4017B	155	HEF4555B	147	NX138BK	99	PBLS2001D	28
BUK9Y4R8-60E	78	HEF4017B-Q100	111	HEF4555B-Q100	112	NX138BKS	103	PBLS2002D	28
BUK9Y59-60E	78	HEF4020B	155	HEF4794B	149	NX138BKW	99	PBLS2003D	28
BUK9Y65-100E	80	HEF4020B-Q100	111	HEF4794B-Q100	121	NX2301P	83, 101	PBLS2004D	28
BUK9Y6R0-60E	78	HEF4021B-Q100	121	HEF4894B	149	NX3008CBKS	84, 102	PBLS2021D	28
BUK9Y72-80E	79	HEF40244B	137	HEF4894B-Q100	121	NX3008NBK	85, 99	PBLS2022D	28
BUK9Y7R2-60E	78	HEF4024B	155	IP3319CX6	170	NX3008NBKS	85, 103	PBLS2023D	28
BUK9Y7R6-40E	75	HEF4027B	153	IP4220CZ6	54, 64	NX3008NBKW	85, 99	PBLS2024D	28
BUK9Y8R5-80E	79	HEF4027B-Q100	115	IP4251CZ16-8-TTL	66	NX3008PBK	85, 101	PBLS4001D	28
BUK9Y8R7-60E	78	HEF4028B	147	IP4252CZ16-8-TTL	66	NX3008PBKS	85, 103	PBLS4001Y	28
BZA408B	60	HEF4030	158	IP4252CZ8-4-TTL	66	NX3008PBKW	85, 101	PBLS4002D	28
BZA420A	60	HEF4030B-Q100	117	IP4254CZ16-8-TTL	66	NX3020NAK	103	PBLS4002Y	28
BZA456A	60	HEF40373B	151	IP4254CZ8-4-TTL	66	NX3020NAKS	103	PBLS4003D	28
BZA856A	60	HEF4040B	155	IP4264CZ8-20-TTL	66	NX3020NAKW	99	PBLS4003Y	28
BZB100A	36	HEF4040B-Q100	111	IP4283CZ10-TBR	54, 63	NX7002AK	99	PBLS4004D	28
BZB784 series	36	HEF4043B	151	IP4292CZ10-TBR	54, 63	NX7002AKS	103	PBLS4004Y	28
BZB84 series	36	HEF4043B-Q100	117	IP4294CZ10-TBR	54, 55, 63	NX7002AKW	99	PBLS4005D	28
BZT52 series	36	HEF4046B	155	IP4786CZ32	66	NX7002BK	99	PBLS4005Y	28
BZT52H series	36	HEF4047B	155	IP4788CZ32	66	NX7002BKH	11, 94	PBLS6001D	28
BZV49 series	36	HEF4049B	137	IP4856CX25/C	66	NX7002BKM	94, 99	PBLS6002D	28
BZV55 series	36	HEF4049B-Q100	110	MMBT2222A	16	NX7002BKMB	94, 99	PBLS6003D	28
BZV85 series	36	HEF4050B	137	MMBT3904	16	NX7002BKS	103	PBLS6004D	28
BZV90 series	36	HEF4050B-Q100	110	MMBT3906	16	NX7002BKW	99	PBLS6005D	28
BZX100A	36	HEF4051B	145	MMBZ10VAL	67	NX7002BKXB	95, 103	PBLS6021D	28
BZX384 series	36	HEF4051B-Q100	108	MMBZ12VAL	67	NXP3875G	14	PBLS6022D	28
BZX585 series	36	HEF4052B	145	MMBZ12VDL	67	NXP3875Y	14	PBLS6023D	28

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PBSL6024D	28	PBSS4021SPN	27	PBSS4350SS	27	PBSS5540Z	25	PDTA123ET	31
PBRN113ET	29	PBSS4032ND ³⁾	23	PBSS4350T	24	PBSS5560PA	25	PDTA123EU	31
PBRN113ZT	29	PBSS4032NT ³⁾	24	PBSS4350X	23	PBSS5580PA	25	PDTA123JM	31
PBRN123ET	29	PBSS4032NX ³⁾	23	PBSS4350Z	23	PBSS5612PA	25	PDTA123JMB	31
PBRN123YT	29	PBSS4032NZ ³⁾	23	PBSS4360PAS	23	PBSS5620PA	25	PDTA123JT	31
PBRP113ET	29	PBSS4032PD ³⁾	25	PBSS4360X	23	PBSS5630PA	25	PDTA123JU	31
PBRP113ZT	29	PBSS4032PT	26	PBSS4360Z	23	PBSS8110D	23	PDTA123TM	31
PBRP123ET	29	PBSS4032PX ³⁾	25	PBSS4480X	23	PBSS8110T	24	PDTA123TMB	31
PBRP123YT	29	PBSS4032PZ ³⁾	25	PBSS4520X	23	PBSS8110X	23	PDTA123TT	31
PBSMS240PF	30	PBSS4032SN ³⁾	27	PBSS4540X	23	PBSS8110Y	24	PDTA123TU	31
PBSMS240PFH	30	PBSS4032SP ³⁾	27	PBSS4540Z	23	PBSS8110Z	23	PDTA123XQA	31
PBSS2515M	24	PBSS4032SPN ³⁾	27	PBSS4560PA	23	PBSS8510PA	23	PDTA123YM	31
PBSS2515MB	24	PBSS4041NT	24	PBSS4580PA	23	PBSS9110D	25	PDTA123YMB	31
PBSS2540M	24	PBSS4041NX	23	PBSS4612PA	23	PBSS9110T	26	PDTA123YT	31
PBSS2540MB	24	PBSS4041NZ	23	PBSS4620PA	23	PBSS9110X	25	PDTA123YU	31
PBSS301ND	23	PBSS4041PT	26	PBSS4630PA	23	PBSS9110Y	26	PDTA124EM	31
PBSS301NX	23	PBSS4041PX	25	PBSS5112PAP	27	PBSS9110Z	25	PDTA124EMB	31
PBSS301NZ	23	PBSS4041PZ	25	PBSS5120T	26	PBSS9410PA	25	PDTA124EQA	31
PBSS301PD	25	PBSS4041SN	27	PBSS5130PAP	27	PCMF1HDMI2S	65	PDTA124ET	31
PBSS301PX	25	PBSS4041SP	27	PBSS5130QA	26	PCMF1USB3B/C	55, 56, 61, 65	PDTA124EU	31
PBSS301PZ	25	PBSS4041SPN	27	PBSS5130T	26	PCMF1USB3S	55, 56, 65, 170	PDTA124TM	31
PBSS302ND	23	PBSS4112PAN	27	PBSS5140T	26	PCMF2HDMI2S	65	PDTA124TMB	31
PBSS302NX	23	PBSS4112PANP	27	PBSS5140U	26	PCMF2USB3B/C	56, 61, 65	PDTA124TT	31
PBSS302NZ	23	PBSS4120T	24	PBSS5160DS	27	PCMF2USB3S	56, 65, 170	PDTA124TU	31
PBSS302PD	25	PBSS4130PAN	27	PBSS5160PAP	27	PCMF3HDMI2S	65	PDTA124XM	31
PBSS302PX	25	PBSS4130PANP	27	PBSS5160PAPS	27	PCMF3USB3B/C	56, 61, 65	PDTA124XMB	31
PBSS302PZ	25	PBSS4130QA	24	PBSS5160QA	26	PCMF3USB3S	56, 65, 170	PDTA124XT	31
PBSS303ND	23	PBSS4130T	24	PBSS5160T	26	PD1284P11	137	PDTA124XU	31
PBSS303NX	23	PBSS4140DPN	27	PBSS5160U	26	PDTA113EM	31	PDTA143EM	31
PBSS303NZ	24	PBSS4140T	24	PBSS5220PAPS	27	PDTA113EMB	31	PDTA143EMB	31
PBSS303PD	25	PBSS4160DPN	27	PBSS5220T	26	PDTA113ET	31	PDTA143EQA	31
PBSS303PX	25	PBSS4160DS	27	PBSS5230PAP	27	PDTA113EU	31	PDTA143ET	31
PBSS303PZ	25	PBSS4160PAN	27	PBSS5230QA	26	PDTA113ZM	31	PDTA143EU	31
PBSS304ND	23	PBSS4160PANP	27	PBSS5230T	26	PDTA113ZMB	31	PDTA143TM	31
PBSS304NX	23	PBSS4160PANPS	27	PBSS5240T	26	PDTA113ZT	31	PDTA143TMB	31
PBSS304NZ	23	PBSS4160PANS	27	PBSS5240X	25	PDTA113ZU	31	PDTA143TT	31
PBSS304PD	25	PBSS4160QA	24	PBSS5240Y	26	PDTA114EM	31	PDTA143TU	31
PBSS304PX	25	PBSS4160T	24	PBSS5250T	26	PDTA114EMB	31	PDTA143XM	31
PBSS304PZ	25	PBSS4160X	23	PBSS5250TH	26	PDTA114EQA	31	PDTA143XMB	31
PBSS305ND	23	PBSS4220PANS	27	PBSS5250X	25	PDTA114ET	31	PDTA143XQA	31
PBSS305NX	23	PBSS4230PAN	27	PBSS5260PAP	27	PDTA114EU	31	PDTA143XT	31
PBSS305NZ	23	PBSS4230PANP	27	PBSS5260PAPS	27	PDTA114TM	31	PDTA143XU	31
PBSS305PD	25	PBSS4230QA	24	PBSS5260QA	26	PDTA114TMB	31	PDTA143ZM	31
PBSS305PX	25	PBSS4230T	24	PBSS5320D	25	PDTA114TT	31	PDTA143ZMB	31
PBSS305PZ	25	PBSS4240DPN	27	PBSS5320T	26	PDTA114TU	31	PDTA143ZQA	31
PBSS306NX	23	PBSS4240T	24	PBSS5320X	25	PDTA114YM	31	PDTA143ZT	31
PBSS306NZ	23	PBSS4240X	23	PBSS5330PA	25	PDTA114YMB	31	PDTA143ZU	31
PBSS306PX	25	PBSS4240Y	24	PBSS5330PAS	25	PDTA114YQA	31	PDTA144EM	31
PBSS306PZ	25	PBSS4250X	23	PBSS5330X	25	PDTA114YT	31	PDTA144EMB	31
PBSS3515M	26	PBSS4260PAN	27	PBSS5350D	25	PDTA114YU	31	PDTA144EQA	31
PBSS3515MB	26	PBSS4260PANP	27	PBSS5350SS	27	PDTA115EM	31	PDTA144ET	31
PBSS3540M	26	PBSS4260PANPS	27	PBSS5350T	26	PDTA115EMB	31	PDTA144EU	31
PBSS3540MB	26	PBSS4260PANS	27	PBSS5350TH	26	PDTA115ET	31	PDTA144TM	31
PBSS4021NT	24	PBSS4260QA	24	PBSS5350X	25	PDTA115EU	31	PDTA144TMB	31
PBSS4021NX	23	PBSS4320T	24	PBSS5350Z	25	PDTA115TM	31	PDTA144TT	31
PBSS4021NZ	23	PBSS4320X	23	PBSS5360PAS	25	PDTA115TMB	31	PDTA144TU	31
PBSS4021PT	26	PBSS4330PA	23	PBSS5360X	25	PDTA115TT	31	PDTA144VM	31
PBSS4021PX	25	PBSS4330PAS	23	PBSS5360Z	25	PDTA115TU	31	PDTA144VMB	31
PBSS4021PZ	25	PBSS4330X	23	PBSS5480X	25	PDTA123EM	31	PDTA144VT	31
PBSS4021SN	27	PBSS4350D	23	PBSS5520X	25	PDTA123EMB	31	PDTA144VU	31
PBSS4021SP	27	PBSS4350SPN	27	PBSS5540X	25			PDTA144WM	31

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PDTA144WMB	31	PDTC123YT	31	PDTD123ET	32	PESD24VS1ULD	57	PESD3V3X4UHM	9, 54, 66
PDTA144WT	31	PDTC123YU	31	PDTD123EU	32	PESD24VS2UAT	59	PESD3V3Y1BSF	9, 52, 55
PDTA144WU	31	PDTC124EM	31	PDTD123TT	32	PESD24VS2UT	59	PESD3V3Z1BCSF	9, 52, 55
PDTB113ET	32	PDTC124EMB	31	PDTD123YQA	32	PESD24VS4UD	60	PESD3V3Z1BSF	52, 55, 56
PDTB113EU	32	PDTC124EQA	31	PDTD123YT	32	PESD24VS5UD	60	PESD4V0W1BCSF	9, 52, 56, 61
PDTB113ZQA	32	PDTC124ET	31	PDTD123YU	32	PESD24VU1UT	52	PESD4V0Y1BSF	9, 52
PDTB113ZT	32	PDTC124EU	31	PDTD143EQA	32	PESD2CAN	62	PESD4V0Z1BCSF	9, 52, 56, 61
PDTB113ZU	32	PDTC124TM	31	PDTD143ET	32	PESD2ETH-AD	62	PESD4V0Z1BSF	9, 52, 56, 61
PDTB114EQA	32	PDTC124TMB	31	PDTD143EU	32	PESD2ETH-AX	62	PESD5V0C1BSF	52, 55, 56
PDTB114ET	32	PDTC124TT	31	PDTD143XQA	32	PESD2ETH-D	62	PESD5V0C1USF	52, 55, 56
PDTB114EU	32	PDTC124TU	31	PDTD143XT	32	PESD2ETH-X	62	PESD5V0F1BL	52, 62
PDTB123EQA	32	PDTC124XM	31	PDTD143XU	32	PESD2IVN-U	62	PESD5V0F1BLD	52, 62
PDTB123ET	32	PDTC124XMB	31	PDZ-B series	36	PESD2IVN24-T	62	PESD5V0F1BRLD	52
PDTB123EU	32	PDTC124XT	31	PDZ-GW series	36	PESD2IVN24-U	62	PESD5V0F1BRSF	52
PDTB123TT	32	PDTC124XU	31	PES2V0Y1BSF	56	PESD2IVN27-T	62	PESD5V0F1BSF	52
PDTB123YQA	32	PDTC143EM	31	PES2V5Y1BSF	56	PESD2IVN27-U	62	PESD5V0F1BSH	52
PDTB123YT	32	PDTC143EMB	31	PES3V3Y1BSF	56	PESD2NFC-L	64	PESD5V0F1USF	52
PDTB123YU	32	PDTC143EQA	31	PES4V0Y1BSF	56	PESD2NFC-SF	64	PESD5V0H1BSF	52, 55, 56
PDTB143EQA	32	PDTC143ET	31	PESD12VL1BA	58	PESD2USB3B	9, 56, 61, 65	PESD5V0L1BA	58
PDTB143ET	32	PDTC143EU	31	PESD12VL2BT	59	PESD2USB3S	56, 65, 170	PESD5V0L1BSF	58
PDTB143EU	32	PDTC143TM	31	PESD12VS1UA	57, 63	PESD2V0Y1BSF	9, 52	PESD5V0L1UA	57
PDTB143XQA	32	PDTC143TMB	31	PESD12VS1UB	57	PESD2V5Y1BSF	9, 52, 55	PESD5V0L1UB	57
PDTB143XT	32	PDTC143TT	31	PESD12VS1UJ	57, 63	PESD30VF1BL	64	PESD5V0L1UL	57
PDTB143XU	32	PDTC143TU	31	PESD12VS1UL	57	PESD36VS1UJ	57	PESD5V0L1ULD	57
PDTC114EM	31	PDTC143XM	31	PESD12VS1ULD	57	PESD36VS1UL	57	PESD5V0L1USF	57
PDTC114EMB	31	PDTC143XMB	31	PESD12VS2UT	59	PESD36VS2UT	59	PESD5V0L2BT	59
PDTC114EQA	31	PDTC143XQA	31	PESD12VU1UT	52	PESD3USB3B	9, 56, 61, 65	PESD5V0L2UM	59
PDTC114ET	31	PDTC143XT	31	PESD12VV1BL	58, 61	PESD3USB3S	56, 65, 170	PESD5V0L2UMB	59
PDTC114EU	31	PDTC143XU	31	PESD15VL1BA	58	PESD3V3C1BSF	52, 55, 56	PESD5V0L2UU	59
PDTC114TM	31	PDTC143ZM	31	PESD15VL2BT	59	PESD3V3L1BA	58	PESD5V0L4UF	60
PDTC114TMB	31	PDTC143ZMB	31	PESD15VS1UB	57	PESD3V3L1UB	57	PESD5V0L4UG	60
PDTC114TT	31	PDTC143ZQA	31	PESD15VS1UL	57	PESD3V3L1UL	57	PESD5V0L5UF	60
PDTC114TU	31	PDTC143ZT	31	PESD15VS1ULD	57	PESD3V3L2BT	59	PESD5V0L5UY	60
PDTC114YM	31	PDTC143ZU	31	PESD15VS2UAT	59	PESD3V3L2UM	59	PESD5V0R1BSF	9, 52, 55, 56
PDTC114YMB	31	PDTC144EM	31	PESD15VS2UT	59	PESD3V3L4BHM	9, 60	PESD5V0S1BA	58
PDTC114YQA	31	PDTC144EMB	31	PESD15VU1UT	52	PESD3V3L4UF	60	PESD5V0S1BB	58
PDTC114YT	31	PDTC144EQA	31	PESD16VV1BSF	9, 58	PESD3V3L4UG	60	PESD5V0S1BL	58, 61
PDTC114YU	31	PDTC144ET	31	PESD16XV1UL	52	PESD3V3LSUF	60	PESD5V0S1BLD	58, 61
PDTC115EM	31	PDTC144EU	31	PESD18VF1BL	52, 64	PESD3V3LSUK	60	PESD5V0S1BSF	58
PDTC115EMB	31	PDTC144TM	31	PESD18VF1BSF	52, 64	PESD3V3LSUY	60	PESD5V0S1UA	57, 63
PDTC115ET	31	PDTC144TMB	31	PESD18VV1BBSF	9, 58	PESD3V3S1BL	9, 58	PESD5V0S1UB	57
PDTC115EU	31	PDTC144TT	31	PESD1CAN	62	PESD3V3S1UB	57	PESD5V0S1UJ	57, 63
PDTC115TM	31	PDTC144TU	31	PESD1CAN-U	62	PESD3V3S1UL	57	PESD5V0S1UL	57
PDTC115TMB	31	PDTC144VM	31	PESD1FLEX	62	PESD3V3S2UAT	59	PESD5V0S1ULD	57
PDTC115TT	31	PDTC144VMB	31	PESD1IVN-U	62	PESD3V3S2UT	59	PESD5V0S1USF	57
PDTC115TU	31	PDTC144VT	31	PESD1IVN24-A	62	PESD3V3S4UD	60	PESD5V0S2BQA	59, 61, 63
PDTC123EM	31	PDTC144VU	31	PESD1IVN27-A	62	PESD3V3S4UF	60	PESD5V0S2BT	59
PDTC123EMB	31	PDTC144WM	31	PESD1IVN27-U	62	PESD3V3S5UD	60	PESD5V0S4UD	60
PDTC123ET	31	PDTC144WMB	31	PESD1LIN	62	PESD3V3T1BL	9, 58, 61	PESD5V0S4UF	60
PDTC123EU	31	PDTC144WT	31	PESD1LVDS	62	PESD3V3T1BLD	9, 58	PESD5V0S5UD	60
PDTC123JM	31	PDTC144WU	31	PESD1NFC-L	64	PESD3V3U1BCSF	58	PESD5V0U1BA	58
PDTC123JMB	31	PDTD113EQA	32	PESD1NFC-SF	64	PESD3V3U1UA	57	PESD5V0U1BB	58
PDTC123JT	31	PDTD113ET	32	PESD1USB3B	9, 56, 61, 65	PESD3V3U1UB	57	PESD5V0U1BL	58
PDTC123JU	31	PDTD113EU	32	PESD1USB3S	55, 56, 65, 170	PESD3V3U1UL	57	PESD5V0U1BLD	58
PDTC123TM	31	PDTD113ZQA	32	PESD24VF1BL	52, 64	PESD3V3U1UT	52	PESD5V0U1UA	57
PDTC123TMB	31	PDTD113ZT	32	PESD24VF1BSF	52, 64	PESD3V3V1BCSF	58	PESD5V0U1UB	57
PDTC123TT	31	PDTD113ZU	32	PESD24VL1BA	58	PESD3V3V1BL	9, 58	PESD5V0U1UL	57
PDTC123TU	31	PDTD114EQA	32	PESD24VL2BT	59	PESD3V3W1BCSF	52, 55, 56	PESD5V0U1UT	52
PDTC123XQA	31	PDTD114ET	32	PESD24VS1UA	57	PESD3V3W1BSF	56	PESD5V0U2BM	59
PDTC123YM	31	PDTD114EU	32	PESD24VS1UB	57	PESD3V3X1BCSF	52	PESD5V0U2BMB	59
PDTC123YMB	31	PDTD123EQA	32	PESD24VS1UL	57	PESD3V3X1BL	52	PESD5V0U2BT	59

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PESD5V0U4BF	60	PHPT60606PY	30	PMBTA14	20	PMEG10020AELR	46	PMEG3002AESF	44
PESD5V0U5BF	60	PHPT60610NY	30	PMBTA42	18	PMEG10020ELR	46	PMEG3002EEF	8, 45
PESD5V0V1BA	58	PHPT60610PY	30	PMBTA42DS	18	PMEG10030ELP	46	PMEG3002EJ	47
PESD5V0V1BB	58	PHPT61002NYC	30	PMBTA44	18	PMEG100V060ELPD	46	PMEG3002ESF	44
PESD5V0V1BCSF	58	PHPT61002NYCLH	30	PMBTA45	29	PMEG100V080ELPD	46	PMEG3005AEA	47
PESD5V0V1BDSF	58	PHPT61002PYC	30	PMBTA56	14	PMEG100V100ELPD	47	PMEG3005AESF	44
PESD5V0V1BL	58, 61	PHPT61002PYCLH	30	PMBTA64	20	PMEG1020EA	47	PMEG3005CT	48
PESD5V0V1BLD	58, 61	PHPT610030NK	30	PMBTA92	18	PMEG1020EH	47	PMEG3005EB	47
PESD5V0V1BSF	58	PHPT610030PK	30	PMC85XP	96	PMEG1020EJ	47	PMEG3005EEF	8, 45
PESD5V0V2BM	59, 61, 63	PHPT610035NK	21, 30	PMC4401UNE	97	PMEG1030EH	47	PMEG3005EGW	47
PESD5V0V2BMB	59, 61, 63	PHPT610035PK	21, 30	PMC4401UPE	97	PMEG1030EJ	47	PMEG3005EH	47
PESD5V0X1BCAL	52	PHPT61003NY	30	PMC4401VNE	97, 170	PMEG2002AESF	44	PMEG3005EJ	47
PESD5V0X1BCL	52	PHPT61003PY	30	PMC4401VPE	97, 170	PMEG2002AESFB	44	PMEG3005EL	45
PESD5V0X1BCSF	52	PHPT61006NY	30	PMC4402UPE	97	PMEG2002ESF	44	PMEG3005ELD	46
PESD5V0X1BL	52	PHPT61006PY	30	PMC6501CUNE	97	PMEG2005AEA	47	PMEG3005ESF	44
PESD5V0X1BT	53	PHPT61010NY	30	PMC6501UNE	97	PMEG2005AEL	45	PMEG3005ET	47
PESD5V0X1UAB	52	PHPT61010PY	30	PMC6501UPE	97	PMEG2005AELD	45	PMEG3010AESA	45
PESD5V0X1UALD	52	PIMC31	32	PMC6501VNE	97	PMEG2005AESF	44	PMEG3010AESB	44
PESD5V0X1UB	52	PIMN31	32	PMC6501VPE	97	PMEG2005BELD	45	PMEG3010BEA	47
PESD5V0X1ULD	52	PIMT1	15	PMCPB5530X	96, 102	PMEG2005CT	48	PMEG3010BEP	46
PESD5V0X2UAM	53	PIMZ2	15	PM CXB1000UE	95, 102	PMEG2005EB	47	PMEG3010BER	46
PESD5V0X2UAMB	53	PLVA600A series	36	PM CXB900UE	95, 102	PMEG2005EGW	47	PMEG3010CEH	47
PESD5V0X2UM	53	PMBD353	43	PM CXB900UEL	95	PMEG2005EH	47	PMEG3010CEJ	47
PESD5V0X2UMB	53	PMBD354	43	PMD2001D	22	PMEG2005EJ	47	PMEG3010EB	47
PESD5V2S2UT	59	PMB53904	16	PMD3001D	22	PMEG2005EL	45	PMEG3010EGW	47
PESD5VOL5UK	60	PMB53906	16	PMDPB30XN	96, 103	PMEG2005ELD	45	PMEG3010EH	47
PESD5Z12	57	PMBT2222	16	PMDPB55XP	96, 103	PMEG2005EPK	45	PMEG3010EJ	47
PESD5Z2.5	57	PMBT2222A	16	PMDPB56XNEA	83, 85, 96, 103	PMEG2005ESF	44	PMEG3010EP	46
PESD5Z3.3	57	PMBT2222AM	8, 16	PMDPB58UPE	96, 103	PMEG2005ET	47	PMEG3010ER	46
PESD5Z5.0	57	PMBT2222AMB	8, 16	PMDPB70XP	96, 103	PMEG2010AEB	47	PMEG3010ESB	44
PESD5Z6.0	57	PMBT2222AQA	8, 16	PMDPB70XPE	96, 103	PMEG2010AEH	47	PMEG3010ET	47
PESD5Z7.0	57	PMBT2222AYS	16	PMDPB80XP	96, 103	PMEG2010AEJ	47	PMEG3015EH	47
PESD6V0L2UU	59	PMBT2369	16	PMDPB85UPE	96, 103	PMEG2010AET	47	PMEG3015EJ	47
PESD6V5C1USF	9, 52, 55, 56	PMBT2907	16	PMDPB95XNE2	96, 103	PMEG2010BEA	47	PMEG3020BEP	46
PESD7V0C1BSF	9, 52, 55, 56	PMBT2907A	16	PMDXB1200UPE	95, 103	PMEG2010BELD	45	PMEG3020BER	46
PESD7V0H1BSF	9, 52, 55, 56	PMBT2907AM	8, 16	PMDXB550UNE	95, 103	PMEG2010BER	46	PMEG3020CEP	46
PESD7V0R1BSF	52, 55, 56	PMBT2907AMB	8, 16	PMDXB600UNE	95, 103	PMEG2010EA	47	PMEG3020CPA	48
PESD8V0S1ULD	9, 57	PMBT2907AQA	8, 16	PMDXB600UNEL	95	PMEG2010EH	47	PMEG3020CPAS	48
PESD9V0C1BSF	52, 55	PMBT2907AYS	16	PMDXB950UPE	95, 103	PMEG2010EJ	47	PMEG3020DEP	46
PESD9V0C1USF	56	PMBT3904	16	PMDXB950UPEL	95	PMEG2010EPA	45	PMEG3020EGW	47
PHB33NQ20T	91	PMBT3904M	16	PMEG030V030EPD	46	PMEG2010EPAS	45	PMEG3020EH	47
PHB45NQ15T	91	PMBT3904MB	16	PMEG030V050EPD	46	PMEG2010EPK	45	PMEG3020EJ	47
PHDMI2AB4	55, 63	PMBT3904QA	8, 16	PMEG040V030EPD	46	PMEG2010ER	46	PMEG3020EP	46
PHDMI2F4	55, 63	PMBT3904RA	8, 16	PMEG040V050EPD	46	PMEG2010ET	47	PMEG3020EPA	45
PHDMI2FR4	55, 63	PMBT3904YS	16	PMEG045T030EPD	46	PMEG2015EA	47	PMEG3020EPAS	45
PHPT18NQ11T	90	PMBT3906	16	PMEG045T050EPD	46	PMEG2015EH	47	PMEG3020ER	46
PHP20NQ20T	90	PMBT3906M	16	PMEG045T100EPD	47	PMEG2015EJ	47	PMEG3030BEP	46
PHP23NQ11T	90	PMBT3906MB	16	PMEG045T150EIPD	47	PMEG2015EPK	45	PMEG3030EP	46
PHP27NQ11T	90	PMBT3906YS	16	PMEG045T150EPD	47	PMEG2020AEA	47	PMEG3050BEP	46
PHP28NQ15T	90	PMBT3946YPN	16	PMEG045V050EPD	46	PMEG2020CPA	48	PMEG3050EP	46
PHP33NQ20T	90	PMBT4401	16	PMEG045V100EPD	47	PMEG2020CPAS	48	PMEG4002AESF	44
PHPT60406NY	30	PMBT4401YS	16	PMEG045V150EPD	47	PMEG2020EH	47	PMEG4002EB	47
PHPT60406PY	30	PMBT4403	16	PMEG050T150EPD	47	PMEG2020EJ	47	PMEG4002EJ	47
PHPT60410NY	30	PMBT4403YS	16	PMEG050V030EPD	46	PMEG2020EPA	45	PMEG4002EL	45
PHPT60410PY	30	PMBT5550	18	PMEG050V150EPD	47	PMEG2020EPAS	45	PMEG4002ELD	45
PHPT60415NY	30	PMBT5551	18	PMEG060V030EPD	46	PMEG2020EPK	45	PMEG4002ESF	44
PHPT60415PY	30	PMBT6428	14	PMEG060V050EPD	46	PMEG3001EEF	8, 45	PMEG4005AEA	47
PHPT60603NY	30	PMBT6429	14	PMEG060V100EPD	47	PMEG3002AEB	47	PMEG4005AESF	44
PHPT60603PY	30	PMBTA06	8, 14	PMEG10010ELR	46	PMEG3002AEL	45	PMEG4005CEA	47
PHPT60606NY	30	PMBTA13	20	PMEG10020AELP	46	PMEG3002AELD	45	PMEG4005CEJ	47

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PMEG4005CT	48	PMEG6010ETR	46	PMN55ENEA	10, 83	PMST5551	18	PMXB75UPE	95
PMEG4005EGW	47	PMEG6020AELP	46	PMN70EPE	101	PMST6428	14	PMZ1200UPE	94, 101
PMEG4005EH	47	PMEG6020AELR	46	PMN70XP	101	PMST6429	14	PMZ130UNE	94, 99
PMEG4005EJ	47	PMEG6020ELR	46	PMN70XPE	101	PMSTA05	14	PMZ200UNE	94, 99
PMEG4005EPK	45	PMEG6020EP	46	PMP4201G	21	PMSTA06	8, 14	PMZ290UNE2	94, 99
PMEG4005ESF	44	PMEG6020EPA	45	PMP4201Y	21	PMSTA42	18	PMZ320UPE	94, 101
PMEG4005ET	47	PMEG6020EPAS	45	PMP4501G	21	PMSTA55	14	PMZ350UPE	94, 101
PMEG4010AESB	44	PMEG6020ER	46	PMP4501QAS	21	PMSTA56	14	PMZ390UNE	94, 99
PMEG4010BEA	47	PMEG6020ETP	46	PMP4501Y	21	PMSTA92	18	PMZ550UNE	94, 99
PMEG4010CEA	47	PMEG6020ETR	46	PMP5501QAS	21	PMT280ENEA	83, 99	PMZ600UNE	94, 99
PMEG4010CEGW	47	PMEG6030ELP	46	PMPB100ENE	11, 96	PMT560ENEA	83, 99	PMZ600UNEL	95
PMEG4010CEH	47	PMEG6030EP	46	PMPB10XNE	96	PMV100ENEA	83	PMZ950UPE	94, 101
PMEG4010CEJ	47	PMEG6030ETP	46	PMPB10XNEA	83	PMV100XPEA	83, 101	PMZ950UPEL	95
PMEG4010CPA	48	PMEG6030EVP	46	PMPB11EN	96	PMV120ENEA	83, 99	PMZB1200UPE	94, 101
PMEG4010CPAS	48	PMEG6045ETP	46	PMPB12UNE	96	PMV130ENEA	83, 99	PMZB150UNE	94, 99
PMEG4010EGW	47	PMEG60T10ELP	8, 46	PMPB12UNEA	83	PMV160UP	101	PMZB200UNE	94, 99
PMEG4010EH	47	PMEG60T10ELR	8, 46	PMPB13XNE	96	PMV16XN	99	PMZB290UNE2	94, 99
PMEG4010EJ	47	PMEG60T20ELP	8, 46	PMPB13XNEA	83	PMV20EN	99	PMZB320UPE	94, 101
PMEG4010EP	46	PMEG60T20ELR	46	PMPB14XP	11, 96	PMV20XNE	99	PMZB350UPE	94, 101
PMEG4010EPK	45	PMEG60T30ELP	8, 46	PMPB15XN	96	PMV20XNEA	83, 99	PMZB390UNE	94, 99
PMEG4010ER	46	PMEG60T30ELR	8, 46	PMPB15XPA	83	PMV230ENEA	83, 99	PMZB550UNE	94, 99
PMEG4010ESB	44	PMEG60T50ELP	8, 46	PMPB19XP	96	PMV250EPEA	83, 101	PMZB600UNE	94, 99
PMEG4010ET	47	PMF170XP	101	PMPB20EN	96	PMV25ENEA	83, 99	PMZB600UNEL	95
PMEG4010ETP	46	PMF250XNE	99	PMPB20XNEA	83, 96	PMV27UPE	101	PMZB950UPE	94, 101
PMEG4010ETR	46	PMF63UNE	99	PMPB20XPE	96	PMV27UPEA	83	PMZB950UPEL	95
PMEG4015EPK	45	PMFPB8032XP	96	PMPB20XPEA	83	PMV280ENEA	83, 99	PNE20010ER	8, 41
PMEG4020EP	46	PMFPB8040XP	100	PMPB215ENEA	83, 96	PMV28UNEA	83, 99	PNE20020EP	8, 41
PMEG4020EPA	45	PMG85XP	101	PMPB23XNE	96	PMV30ENEA	10, 83	PNE20020ER	8, 41
PMEG4020EPAS	45	PMGD175XNE	103	PMPB24EP	11, 96	PMV30UN2	99	PNE20030EP	8, 41
PMEG4020EPK	45	PMGD290UCEA	85	PMPB25ENE	11, 96	PMV30XPEA	83, 101	PN540010ER	41
PMEG4020ER	46	PMH1200UPE	11, 94	PMPB27EPA	83	PMV32UP	101	PQMB11	32
PMEG4020ETP	46	PMH550UNE	11, 94	PMPB29XNE	96	PMV33UPE	101	PQMD10	32
PMEG4020ETR	46	PMH600UNE	11, 94	PMPB29XNEA	83	PMV35EPE	101	PQMD12	32
PMEG4030EP	46	PMH950UPE	11, 94	PMPB29XPE	96	PMV37EN2	99	PQMD13	32
PMEG4030ER	46	PML260SN	92	PMPB29XPEA	83	PMV40UN2	99	PQMD16	32
PMEG4030ETP	46	PML340SN	92	PMPB30XPE	11, 96	PMV42ENE	99	PQMD2	32
PMEG4050EP	46	PMMT491A	24	PMPB33XN	96	PMV450ENEA	83, 99	PQMD3	32
PMEG4050ETP	46	PMMT591A	26	PMPB33XP	96	PMV45EN2	99	PQMH10	32
PMEG40T10ER	46	PMN120ENE	11, 99	PMPB43XPE	96	PMV48XP	101	PQMH11	32
PMEG40T20EP	46	PMN120ENEA	10, 83	PMPB43XPEA	83	PMV48XPA	83	PQMH13	32
PMEG40T20ER	46	PMN16XNE	99	PMPB47XP	96	PMV50ENEA	83, 99	PQMH2	32
PMEG40T30EP	46	PMN20ENA	10, 83	PMPB48EP	96	PMV50EPEA	83	PQMH9	32
PMEG40T30ER	46	PMN230ENE	11, 99	PMPB50ENE	11, 96	PMV50UPE	101	PRMB11	32
PMEG40T50EP	46	PMN230ENEA	10, 83	PMPB50EPEA	83	PMV50XP	101	PRMD10	32
PMEG45A10EPD	47	PMN25ENE	11, 99	PMPB55ENEA	83, 96	PMV55ENEA	83, 99	PRMD12	32
PMEG45T15EPD	47	PMN25ENEA	10, 83	PMPB85ENEA	83, 96	PMV65ENEA	83, 99	PRMD13	32
PMEG6002EB	47	PMN280ENEA	10, 83, 99	PMPB95ENEA	83, 96	PMV65UNE	99	PRMD16	32
PMEG6002EJ	47	PMN28UNE	11, 99	PMSS3904	16	PMV65XP	101	PRMD2	32
PMEG6002EL	45	PMN30ENEA	83	PMSS3906	16	PMV65XPE	101	PRMD3	32
PMEG6002ELD	45	PMN30UN	99	PMST2222	16	PMV65XPEA	83	PRMH10	32
PMEG6010AESB	44	PMN30UNE	99	PMST2222A	16	PMV75UP	101	PRMH11	32
PMEG6010CEGW	47	PMN30XP	101	PMST2369	16	PMV90ENE	99	PRMH13	32
PMEG6010CEH	47	PMN30XPE	11, 101	PMST2907A	16	PMXB120EPE	95	PRMH2	32
PMEG6010CEJ	47	PMN40ENA	10, 83	PMST3904	16	PMXB350UPE	95	PRMH9	32
PMEG6010CPA	48	PMN40ENE	99	PMST3906	16	PMXB360ENEA	83, 95	PRTR5V0U2AX	53, 64
PMEG6010CPAS	48	PMN42XPEA	83	PMST4401	16	PMXB40UNE	95	PRTR5V0U2F	53, 64
PMEG6010ELR	46	PMN48XP	101	PMST4403	16	PMXB43UNE	95	PRTR5V0U2X	53, 64
PMEG6010EP	46	PMN50EPE	11, 101	PMST5088	14	PMXB56EN	95	PRTR5V0U4D	54, 62, 64
PMEG6010ER	46	PMN52XP	101	PMST5089	14	PMXB65ENE	95	PSMN010-80YL	92
PMEG6010ESB	44	PMN55ENE	11, 99	PMST5550	18	PMXB65UPE	95	PSMN011-100YSF	92

Index

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PSMN011-30YLC	87	PSMN0R7-25YLD	86	PSMN2R4-30MLD	88	PSMN4R5-40BS	89	PSMN8R7-80BS	91
PSMN011-60ML	89	PSMN0R9-25YLD	86	PSMN2R4-30YLD	87	PSMN4R5-40PS	88	PSMN8R7-80PS	90
PSMN011-60MS	89	PSMN0R9-30ULD	10, 87	PSMN2R5-30YL	87	PSMN4R6-60BS	89	PSMN9R0-25MLC	88
PSMN011-80YS	92	PSMN0R9-30YLD	87	PSMN2R5-40YLD	89	PSMN4R6-60PS	88	PSMN9R1-30YL	87
PSMN012-100YL	92	PSMN102-200Y	92	PSMN2R5-60PL	88	PSMN4R8-100BSE	91	PSMN9R5-100BS	91
PSMN012-100YS	92	PSMN1R0-25YLD	86	PSMN2R6-30YLC	87	PSMN4R8-100PSE	90	PSMN9R5-100PS	90
PSMN012-60YS	89	PSMN1R0-30YLC	87	PSMN2R6-40YS	89	PSMN5R0-100ES	91	PSMN9R5-30YLC	87
PSMN012-80BS	91	PSMN1R0-30YLD	87	PSMN2R6-60PS	88	PSMN5R0-100PS	90	PSMN9R8-30MLC	88
PSMN012-80PS	90	PSMN1R0-40SSH	88	PSMN2R7-30BL	86	PSMN5R0-30YL	87	PSMNR51-25YLH	86
PSMN013-100BS	91	PSMN1R0-40ULD	10, 89	PSMN2R7-30PL	86	PSMN5R0-80BS	91	PSMNR58-30YLH	87
PSMN013-100PS	90	PSMN1R0-40YLD	89	PSMN2R8-25MLC	88	PSMN5R0-80PS	90	PSMNR60-25YLH	86
PSMN013-100YSE	92	PSMN1R0-40YSH	89	PSMN2R8-40BS	89	PSMN5R2-60YL	89	PSMNR70-30YLH	87
PSMN013-30MLC	88	PSMN1R1-25YLC	86	PSMN2R8-40PS	88	PSMN5R3-25MLD	88	PSMNR70-40SSH	88
PSMN013-30YLC	87	PSMN1R1-30EL	86	PSMN2R8-40YSD	89	PSMN5R4-25YLD	86	PSMNR90-30BL	86
PSMN013-60YL	89	PSMN1R1-30PL	86	PSMN2R8-80BS	91	PSMN5R5-60YS	89	PSMNR90-40SSH	88
PSMN013-80YS	92	PSMN1R1-40BS	89	PSMN2R9-25YLC	86	PSMN5R6-100BS	91	PSMNR90-40YLH	89
PSMN014-40YS	89	PSMN1R2-25YL	86	PSMN3R0-30MLC	88	PSMN5R6-100PS	90	PSMP015-40YE	10, 92
PSMN014-80YL	92	PSMN1R2-25YLC	86	PSMN3R0-30YL	87	PSMN5R6-100YSF	92	PSMP020-30YE	10, 92
PSMN015-100YL	92	PSMN1R2-25YLD	86	PSMN3R0-30YLD	87	PSMN5R6-60YL	89	PSMP025-40YE	10, 92
PSMN015-110P	90	PSMN1R2-30YLC	87	PSMN3R0-60BS	89	PSMN5R8-40YS	89	PSMP032-60YE	10, 92
PSMN015-60BS	89	PSMN1R2-30YLD	87	PSMN3R0-60ES	89	PSMN6R0-25YLB	86	PSMP057-60YE	10, 92
PSMN015-60PS	88	PSMN1R3-30YL	87	PSMN3R0-60PS	88	PSMN6R0-25YLD	86	PSSI2021SAY	19
PSMN016-100BS	91	PSMN1R4-30YLD	87	PSMN3R2-30YLC	87	PSMN6R0-30YL	87	PTVS10VP1UP	69
PSMN016-100PS	90	PSMN1R4-40YLD	89	PSMN3R2-40YLD	89	PSMN6R0-30YLB	87	PTVS10VP1UTP	69
PSMN016-100YS	92	PSMN1R5-25MLH	88	PSMN3R3-40YS	89	PSMN6R0-30YLD	87	PTVS10VS1UR	68
PSMN017-30BL	86	PSMN1R5-25YL	86	PSMN3R3-60PL	88	PSMN6R1-25MLD	88	PTVS10VS1UTR	68
PSMN017-30EL	86	PSMN1R5-30BLE	86	PSMN3R3-80ES	91	PSMN6R1-30YLD	87	PTVS10VU1UPA	67
PSMN017-30PL	86	PSMN1R5-30YL	87	PSMN3R3-80PS	90	PSMN6R3-120ES	91	PTVS10VZ1USK	67
PSMN017-60YS	89	PSMN1R5-30YLC	87	PSMN3R4-30BL	86	PSMN6R3-120PS	90	PTVS11VP1UP	69
PSMN017-80BS	91	PSMN1R5-40ES	89	PSMN3R4-30BLE	86	PSMN6R4-30MLD	88	PTVS11VP1UTP	69
PSMN017-80PS	90	PSMN1R5-40PS	88	PSMN3R4-30PL	86	PSMN6R5-30MLD	88	PTVS11VS1UR	68
PSMN018-100ESF	91	PSMN1R5-40YSD	89	PSMN3R5-25MLD	88	PSMN6R5-80BS	91	PTVS11VS1UTR	68
PSMN018-100PSF	90	PSMN1R6-30BL	86	PSMN3R5-30YL	87	PSMN6R5-80PS	90	PTVS12VP1UP	69
PSMN018-80YS	92	PSMN1R6-30MLH	10, 88	PSMN3R5-40YLD	89	PSMN6R9-100YSF	92	PTVS12VP1UTP	69
PSMN019-100YL	92	PSMN1R6-30PL	86	PSMN3R5-80ES	91	PSMN7R0-100BS	91	PTVS12VS1UR	68
PSMN020-100YS	92	PSMN1R7-25YLD	86	PSMN3R5-80PS	90	PSMN7R0-100ES	91	PTVS12VS1UTR	68
PSMN020-30MLC	88	PSMN1R7-30YL	87	PSMN3R7-100BSE	10, 91	PSMN7R0-100PS	90	PTVS12VU1UPA	67
PSMN021-100YL	92	PSMN1R7-40YLD	89	PSMN3R8-100BS	91	PSMN7R0-30MLC	88	PTVS12VZ1USK	67
PSMN022-30BL	86	PSMN1R7-60BS	89	PSMN3R9-100YSF	92	PSMN7R0-30YL	87	PTVS13VP1UP	69
PSMN022-30PL	86	PSMN1R8-30BL	86	PSMN3R9-25MLC	88	PSMN7R0-30YLC	87	PTVS13VP1UTP	69
PSMN025-80YL	92	PSMN1R8-30PL	86	PSMN3R9-60PS	88	PSMN7R0-60YS	89	PTVS13VS1UR	68
PSMN026-80YS	92	PSMN1R8-40YLC	89	PSMN4R0-25YLC	86	PSMN7R5-30MLD	88	PTVS13VS1UTR	68
PSMN027-100BS	91	PSMN1R9-40PL	88	PSMN4R0-30YL	87	PSMN7R5-30YLD	87	PTVS14VP1UP	69
PSMN027-100PS	90	PSMN1R9-40YSD	89	PSMN4R0-30YLD	87	PSMN7R5-60YL	89	PTVS14VP1UTP	69
PSMN028-100YS	92	PSMN2R0-25MLD	88	PSMN4R0-40YS	89	PSMN7R6-100BSE	91	PTVS14VS1UR	68
PSMN030-150P	90	PSMN2R0-25YLD	86	PSMN4R0-60YS	89	PSMN7R6-60BS	89	PTVS14VS1UTR	68
PSMN030-60YS	89	PSMN2R0-30BL	86	PSMN4R1-30YLC	87	PSMN7R6-60PS	88	PTVS15VP1UP	69
PSMN034-100BS	91	PSMN2R0-30PL	86	PSMN4R1-60YL	89	PSMN7R8-100PSE	90	PTVS15VP1UTP	69
PSMN034-100PS	90	PSMN2R0-30YL	87	PSMN4R2-30MLD	88	PSMN7R8-120ES	91	PTVS15VS1UR	68
PSMN038-100YL	92	PSMN2R0-30YLD	87	PSMN4R2-60PL	88	PSMN7R8-120PS	90	PTVS15VS1UTR	68
PSMN039-100YS	92	PSMN2R0-30YLE	87	PSMN4R3-100ES	91	PSMN8R0-40BS	89	PTVS15VU1UPA	67
PSMN040-100MSE	92	PSMN2R0-40YLD	89	PSMN4R3-100PS	90	PSMN8R0-40PS	88	PTVS15VZ1USK	67
PSMN041-80YL	92	PSMN2R0-60ES	89	PSMN4R3-30BL	86	PSMN8R0-80YL	92	PTVS16VP1UP	69
PSMN045-80YS	92	PSMN2R0-60PS	88	PSMN4R3-30PL	86	PSMN8R2-80YS	92	PTVS16VP1UTP	69
PSMN050-80BS	91	PSMN2R0-60PSR	88	PSMN4R3-80ES	91	PSMN8R3-40YS	89	PTVS16VS1UR	68
PSMN057-200B	91	PSMN2R1-40PL	88	PSMN4R3-80PS	90	PSMN8R5-100ES	91	PTVS16VS1UTR	68
PSMN057-200P	90	PSMN2R2-30YLC	87	PSMN4R4-30MLC	88	PSMN8R5-100ESF	91	PTVS17VP1UP	69
PSMN059-150Y	92	PSMN2R2-40BS	89	PSMN4R4-80BS	91	PSMN8R5-100PSF	90	PTVS17VP1UTP	69
PSMN069-100YS	92	PSMN2R2-40PS	88	PSMN4R4-80PS	90	PSMN8R5-60YS	89	PTVS17VS1UR	68
PSMN075-100MSE	92	PSMN2R2-40YSD	89	PSMN4R5-30YLC	87	PSMN8R7-100YSF	92	PTVS17VS1UTR	68

Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number	Type number	Page Number
PTVS18VP1UP	69	PTVS45VP1UTP	69	PTVS8V5S1UR	68	PUMX2	15	TLVH431NQDBZR	33
PTVS18VP1UTP	69	PTVS45VS1UR	68	PTVS8V5S1UTR	68	PUMZ1	15	XC7SET02	160
PTVS18VS1UR	68	PTVS45VS1UTR	68	PTVS9V0P1UP	69	PUMZ2	15	XC7SET04	137
PTVS18VS1UTR	68	PTVS48VP1UP	69	PTVS9V0P1UTP	69	PUSB2X4D	54, 63, 64	XC7SET08	156
PTVS18VU1UPA	67	PTVS48VP1UTP	69	PTVS9V0S1UR	68	PUSB2X4Y	54, 63, 64	XC7SET12S	137
PTVS18VZ1USK	67	PTVS48VS1UR	68	PTVS9V0S1UTR	68	PUSB3AB4	54, 55, 56	XC7SET14	137, 140
PTVS20VP1UP	69	PTVS48VS1UTR	68	PUMB1	32	PUSB3AB6	54, 56, 66	XC7SET32	161
PTVS20VP1UTP	69	PTVS4V5D1BL	58, 61, 63, 67	PUMB10	32	PUSB3F96	54, 55	XC7SET86	158
PTVS20VS1UR	68	PTVS51VP1UP	69	PUMB11	32	PUSB3F97	54	XC7SH02	160
PTVS20VS1UTR	68	PTVS51VP1UTP	69	PUMB13	32	PUSB3F99	54	XC7SH04	137
PTVS20VU1UPA	67	PTVS51VS1UR	68	PUMB14	32	PUSB3FA0	54	XC7SH08	156
PTVS20VZ1USK	67	PTVS51VS1UTR	68	PUMB15	32	PUSB3FA1	54	XC7SH12S	137
PTVS22VP1UP	69	PTVS54VP1UP	69	PUMB16	32	PUSB3FA2	54	XC7SH14	137, 140
PTVS22VP1UTP	69	PTVS54VP1UTP	69	PUMB17	32	PUSB3FR4	54, 55, 56	XC7SH32	161
PTVS22VS1UR	68	PTVS54VS1UR	68	PUMB18	32	PUSB3FR6	54, 56, 66	XC7SH86	158
PTVS22VS1UTR	68	PTVS54VS1UTR	68	PUMB19	32	PUSB3TB6	54, 66	XC7SHU04	137
PTVS22VU1UPA	67	PTVS58VP1UP	69	PUMB2	32	PUSBM12VX4-TL	64	XC7WH126	137
PTVS22VZ1USK	67	PTVS58VP1UTP	69	PUMB20	32	PUSBM5V5X4-TL	64	XC7WH14	137, 140
PTVS24VP1UP	69	PTVS58VS1UR	68	PUMB24	32	PXT2222A	16	XC7WT14	137, 140
PTVS24VP1UTP	69	PTVS58VS1UTR	68	PUMB3	32	PXT2907A	16		
PTVS24VS1UR	68	PTVS5V0P1UP	69	PUMB30	32	PXT4401	16		
PTVS24VS1UTR	68	PTVS5V0P1UTP	69	PUMB4	32	PXT4403	16		
PTVS24VU1UPA	67	PTVS5V0S1UR	68	PUMB9	32	PXTA14	20		
PTVS26VP1UP	69	PTVS5V0S1UTR	68	PUMD10	32	PXTA42	18		
PTVS26VP1UTP	69	PTVS5V0Z1USK	67	PUMD12	32	PXTA92	18		
PTVS26VS1UR	68	PTVS5V0Z1USKP	67	PUMD13	32	PZT2222A	16		
PTVS26VS1UTR	68	PTVS5V5D1BL	9, 58, 61, 63, 67	PUMD14	32	PZT2907A	16		
PTVS26VU1UPA	67	PTVS60VP1UP	69	PUMD15	32	PZT4401	16		
PTVS26VZ1USK	67	PTVS60VP1UTP	69	PUMD16	32	PZT4403	16		
PTVS28VP1UP	69	PTVS60VS1UR	68	PUMD17	32	PZTA14	20		
PTVS28VP1UTP	69	PTVS60VS1UTR	68	PUMD18	32	PZTA42	18		
PTVS28VS1UR	68	PTVS60VS1UTR	68	PUMD19	32	PZTA44	18		
PTVS28VS1UTR	68	PTVS64VP1UP	69	PUMD2	32	PZTA92	18		
PTVS30VP1UP	69	PTVS64VP1UTP	69	PUMD20	32	PZU10DB2 series	36		
PTVS30VP1UTP	69	PTVS64VS1UR	68	PUMD24	32	PZUxB series	36		
PTVS30VS1UR	68	PTVS64VS1UTR	68	PUMD3	32	PZUxBA series	36		
PTVS30VS1UTR	68	PTVS6V0P1UP	69	PUMD30	32	PZUxBL series	36		
PTVS33VP1UP	69	PTVS6V0P1UTP	69	PUMD4	32	TDZxJ series	36		
PTVS33VP1UTP	69	PTVS6V0S1UR	68	PUMD48	32	TL431ACDBZR	33		
PTVS33VS1UR	68	PTVS6V0S1UTR	68	PUMD6	32	TL431AFDT	33		
PTVS33VS1UTR	68	PTVS6V5P1UP	69	PUMD9	32	TL431AIDBZR	33		
PTVS36VP1UP	69	PTVS6V5P1UTP	69	PUMH1	32	TL431AMFDT	33		
PTVS36VP1UTP	69	PTVS6V5S1UR	68	PUMH10	32	TL431AQDBZR	33		
PTVS36VS1UR	68	PTVS6V5S1UTR	68	PUMH11	32	TL431BCDBZR	33		
PTVS36VS1UTR	68	PTVS7V0P1UP	69	PUMH13	32	TL431BFDT	33		
PTVS3V3D1BAL	9, 58, 61, 63, 67	PTVS7V0P1UTP	69	PUMH14	32	TL431BIDBZR	33		
PTVS3V3P1UP	69	PTVS7V0S1UR	68	PUMH15	32	TL431BMFDT	33		
PTVS3V3P1UTP	69	PTVS7V0S1UTR	68	PUMH16	32	TL431BQDBZR	33		
PTVS3V3S1UR	68	PTVS7V5P1UP	69	PUMH17	32	TL431CDBZR	33		
PTVS3V3S1UTR	68	PTVS7V5P1UTP	69	PUMH18	32	TL431FDT	33		
PTVS40VP1UP	69	PTVS7V5S1UR	68	PUMH19	32	TL431IDBZR	33		
PTVS40VP1UTP	69	PTVS7V5S1UTR	68	PUMH2	32	TL431MFDT	33		
PTVS40VS1UR	68	PTVS7V5U1UPA	67	PUMH20	32	TL431QDBZR	33		
PTVS40VS1UTR	68	PTVS7V5Z1USK	67	PUMH24	32	TLVH431NACDBZR	33		
PTVS43VP1UP	69	PTVS8V0P1UP	69	PUMH30	32	TLVH431NAIDBZR	33		
PTVS43VP1UTP	69	PTVS8V0P1UTP	69	PUMH4	32	TLVH431NAMQDBZR	33		
PTVS43VS1UR	68	PTVS8V0S1UR	68	PUMH7	32	TLVH431NAQDBZR	33		
PTVS43VS1UTR	68	PTVS8V0S1UTR	68	PUMH9	32	TLVH431NCDBZR	33		
PTVS43VS1UTR	68	PTVS8V5P1UP	69	PUMT1	15	TLVH431NIDBZR	33		
PTVS45VP1UP	69	PTVS8V5P1UTP	69	PUMX1	15	TLVH431NMQDBZR	33		

Notes

Notes



© 2019 Nexperia B.V.

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Date of release:

January 2019

Printed:

In the Netherlands

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 View [PMP5501QASZ](#) on WIN SOURCE

 [Nexperia USA Inc.](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management