



**THE DATASHEET OF  
74LVC1G17Z-7**

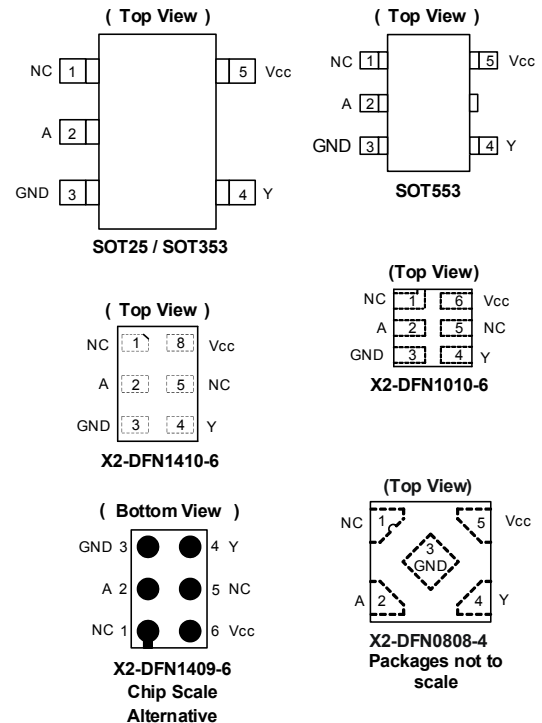


## Description

The 74LVC1G17 is a single 1-input Schmitt-trigger buffer with a standard push-pull output. The device is designed for operation with a power supply range of 1.65V to 5.5V. The inputs are tolerant to 5.5V allowing this device to be used in a mixed voltage environment. The device is fully specified for partial power down applications using I<sub>OFF</sub>. The I<sub>OFF</sub> circuitry disables the output preventing damaging current backflow when the device is powered down. The gate performs the positive Boolean function:

$$Y = A$$

## Pin Assignments



## Features

- Wide Supply Voltage Range from 1.65V to 5.5V
- ±24mA Output Drive at 3.3V
- CMOS Low Power Consumption
- I<sub>OFF</sub> Supports Partial-Power-Down Mode Operation
- Inputs Accept up to 5.5V
- ESD Protection Tested per JESD 22
  - Exceeds 2000-V Human Body Model (A114)
  - Exceeds 1000-V Charged Device Model (C101)
- Latch-Up Exceeds 100mA per JESD 78, Class I
- Range of Package Options
- **Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative.**  
<https://www.diodes.com/quality/product-definitions/>
- **An Automotive-Compliant Part is Available Under Separate Datasheet ([74LVC1G17Q](#))**

## Applications

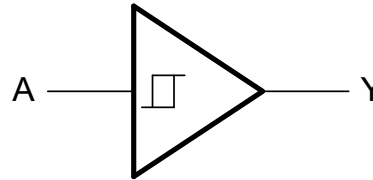
- Voltage Level Shifting
- General Purpose Logic
- Power Down Signal Isolation
- Wide Array of Products such as:
  - PCs, Networking, Notebooks, Netbooks,
  - Computer Peripherals, Hard Drives, CD/DVD ROM
  - TV, DVD, DVR, Set Top Box
  - Cell Phones, Personal Navigation / GPS
  - MP3 Players, Cameras, Video Recorders

Notes: 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant.  
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.  
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

### Pin Descriptions

Pin Name	Description
A	Data Input
GND	Ground
Y	Data Output
V <sub>CC</sub>	Supply Voltage

### Logic Diagram



### Function Table

Input	Output
A	Y
H	H
L	L

### Absolute Maximum Ratings (Notes 4 & 5)

Symbol	Description	Rating	Unit
ESD HBM	Human Body Model ESD Protection	2	kV
ESD CDM	Charged Device Model ESD Protection	1	kV
V <sub>CC</sub>	Supply Voltage Range	-0.5 to 6.5	V
V <sub>I</sub>	Input Voltage Range	-0.5 to 6.5	V
V <sub>O</sub>	Voltage Applied to Output in High Impedance or I <sub>OFF</sub> State	-0.5 to 6.5	V
V <sub>O</sub>	Voltage Applied to Output in High or Low State	-0.5 to V <sub>CC</sub> + 0.5	V
I <sub>IK</sub>	Input Clamp Current V <sub>I</sub> < 0	-50	mA
I <sub>OK</sub>	Output Clamp Current	-50	mA
I <sub>O</sub>	Continuous Output Current	±50	mA
I <sub>CC</sub> , I <sub>GND</sub>	Continuous Current through V <sub>CC</sub> or GND	±100	mA
T <sub>J</sub>	Operating Junction Temperature	-40 to +150	°C
T <sub>STG</sub>	Storage Temperature	-65 to +150	°C

- Notes:
- Stresses beyond the absolute maximum can result in immediate failure or reduced reliability. These are stress values and device operation should be within recommend values.
  - Forcing the maximum allowed voltage could cause a condition exceeding the maximum current or conversely forcing the maximum current could cause a condition exceeding the maximum voltage. The ratings of both current and voltage must be maintained within the controlled range.

### Recommended Operating Conditions (Note 6)

Symbol	Parameter		Min	Max	Unit
V <sub>CC</sub>	Operating Voltage	Operating	1.65	5.5	V
		Data retention only	1.5	—	V
V <sub>I</sub>	Input Voltage		0	5.5	V
V <sub>O</sub>	Output Voltage		0	V <sub>CC</sub>	V
I <sub>OH</sub>	High-Level Output current	V <sub>CC</sub> = 1.65V	—	-4	mA
		V <sub>CC</sub> = 2.3V	—	-8	
		V <sub>CC</sub> = 2.7V	—	-12	
		V <sub>CC</sub> = 3V	—	-16	
		V <sub>CC</sub> = 4.5V	—	-24	
I <sub>OL</sub>	Low-Level Output current	V <sub>CC</sub> = 1.65V	—	4	mA
		V <sub>CC</sub> = 2.3V	—	8	
		V <sub>CC</sub> = 2.7V	—	12	
		V <sub>CC</sub> = 3V	—	16	
		V <sub>CC</sub> = 4.5V	—	24	
T <sub>A</sub>	Operating Free-Air Temperature	—	-40	+125	°C

Note: 6. Unused inputs should be held at V<sub>CC</sub> or Ground.

**Electrical Characteristics** (@  $T_A = -40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ . All typical values are at  $V_{CC} = 3.3\text{V}$ ,  $T_A = +25^{\circ}\text{C}$ .)

Symbol	Parameter	Test Conditions	$V_{CC}$	Min	Typ	Max	Unit
$V_{T+}$	Positive-Going Input Threshold Voltage	—	1.65V	0.70	—	1.20	—
		—	2.3V	1.11	—	1.60	—
		—	3V	1.50	—	2.00	—
		—	4.5V	2.16	—	2.74	—
		—	5.5V	2.61	—	3.33	—
$V_{T-}$	Negative-Going Input Threshold Voltage	—	1.65V	0.30	—	0.72	—
		—	2.3V	0.58	—	1.00	—
		—	3V	0.80	—	1.30	—
		—	4.5V	1.21	—	1.95	—
		—	5.5V	1.45	—	2.35	—
$\Delta V_T$	Hysteresis ( $V_{T+} - V_{T-}$ )	—	1.65V	0.30	—	0.62	—
		—	2.3V	0.40	—	0.80	—
		—	3V	0.35	—	1.00	—
		—	4.5V	0.55	—	1.10	—
		—	5.5V	0.60	—	1.20	—
$V_{OH}$	High Level Output Voltage	$I_{OH} = -100\mu\text{A}$	1.65V to 5.5V	$V_{CC} - 0.1$	—	—	V
		$I_{OH} = -4\text{mA}$	1.65V	1.2	—	—	
		$I_{OH} = -8\text{mA}$	2.3V	1.9	—	—	
		$I_{OH} = -12\text{mA}$	2.7V	2.2	—	—	
		$I_{OH} = -16\text{mA}$	3V	2.4	—	—	
		$I_{OH} = -24\text{mA}$		2.3	—	—	
		$I_{OH} = -32\text{mA}$	4.5V	3.8	—	—	
$V_{OL}$	Low-Level Output Voltage	$I_{OL} = 100\mu\text{A}$	1.65V to 5.5V	—	—	0.1	V
		$I_{OL} = 4\text{mA}$	1.65V	—	—	0.45	
		$I_{OL} = 8\text{mA}$	2.3V	—	—	0.3	
		$I_{OL} = 12\text{mA}$	2.7V	—	—	0.4	
		$I_{OL} = 16\text{mA}$	3V	—	—	0.4	
		$I_{OL} = 24\text{mA}$		—	—	0.55	
		$I_{OL} = 32\text{mA}$	4.5V	—	—	0.55	
$I_i$	Input Current	$V_i = 5.5\text{V}$ or GND	0 to 5.5V	—	—	$\pm 5$	$\mu\text{A}$
$I_{OFF}$	Power Down Leakage Current	$V_i$ or $V_o = 5.5\text{V}$	0	—	—	$\pm 10$	$\mu\text{A}$
$I_{CC}$	Supply Current	$V_i = 5.5\text{V}$ of GND $I_o = 0$	1.65V to 5.5V	—	—	10	$\mu\text{A}$
$\Delta I_{CC}$	Additional Supply Current	Input at $V_{CC} - 0.6\text{V}$	3V to 5.5V	—	—	500	$\mu\text{A}$

**Electrical Characteristics** (continued) (@  $T_A = -40^\circ\text{C}$  to  $+125^\circ\text{C}$ . All typical values are at  $V_{CC} = 3.3\text{V}$ ,  $T_A = +25^\circ\text{C}$ .)

Symbol	Parameter	Test Conditions	V <sub>CC</sub>	Min	Typ	Max	Unit
V <sub>T+</sub>	Positive-Going Input Threshold Voltage	—	1.65V	0.70	—	1.20	—
		—	2.3V	1.11	—	1.60	—
		—	3V	1.50	—	2.00	—
		—	4.5V	2.16	—	2.74	—
		—	5.5V	2.61	—	3.33	—
V <sub>T-</sub>	Negative-Going Input Threshold Voltage	—	1.65V	0.30	—	0.75	—
		—	2.3V	0.58	—	1.03	—
		—	3V	0.80	—	1.33	—
		—	4.5V	1.21	—	1.95	—
		—	5.5V	1.45	—	2.35	—
ΔV <sub>T</sub>	Hysteresis (V <sub>T+</sub> - V <sub>T-</sub> )	—	1.65V	0.30	—	0.62	—
		—	2.3V	0.37	—	0.80	—
		—	3V	0.32	—	1.00	—
		—	4.5V	0.50	—	1.20	—
		—	5.5V	0.55	—	1.40	—
V <sub>OH</sub>	High Level Output Voltage	I <sub>OH</sub> = -100μA	1.65V to 5.5V	V <sub>CC</sub> - 0.1	—	—	V
		I <sub>OH</sub> = -4mA	1.65V	0.95	—	—	
		I <sub>OH</sub> = -8mA	2.3V	1.7	—	—	
		I <sub>OH</sub> = -12mA	2.7V	1.9	—	—	
		I <sub>OH</sub> = -16mA	3V	2.2	—	—	
		I <sub>OH</sub> = -24mA		2.0	—	—	
		I <sub>OH</sub> = -32mA	4.5V	3.4	—	—	
V <sub>OL</sub>	Low-Level Output Voltage	I <sub>OL</sub> = 100μA	1.65V to 5.5V	—	—	0.1	V
		I <sub>OL</sub> = 4mA	1.65V	—	—	0.7	
		I <sub>OL</sub> = 8mA	2.3V	—	—	0.45	
		I <sub>OL</sub> = 12mA	2.7V	—	—	0.6	
		I <sub>OL</sub> = 16mA	3V	—	—	0.6	
		I <sub>OL</sub> = 24mA		—	—	0.8	
		I <sub>OL</sub> = 32mA	4.5V	—	—	0.8	
I <sub>I</sub>	Input Current	V <sub>I</sub> = 5.5V or GND	0 to 5.5V	—	—	±5	μA
I <sub>OFF</sub>	Power Down Leakage Current	V <sub>I</sub> or V <sub>O</sub> = 5.5V	0	—	—	±10	μA
I <sub>CC</sub>	Supply Current	V <sub>I</sub> = 5.5V of GND I <sub>O</sub> = 0	1.65V to 5.5V	—	—	10	μA
ΔI <sub>CC</sub>	Additional Supply Current	Input at V <sub>CC</sub> - 0.6V	3V to 5.5V	—	—	500	μA

**Package Characteristics** (All typical values are at  $V_{CC} = 3.3V$ ,  $T_A = +25^{\circ}C$ .)

Symbol	Parameter	Test Conditions	$V_{CC}$	Min	Typ	Max	Unit
$\theta_{JA}$	Thermal Resistance Junction-to-Ambient	SOT25	(Note 7)	—	204	—	$^{\circ}C/W$
		SOT353		—	371	—	
		SOT553		—	231	—	
		X2-DFN0808-4		—	400	—	
		X2-DFN1010-6		—	445	—	
		X2-DFN1409-6		—	470	—	
		X2-DFN1410-6		—	460	—	
$\theta_{JC}$	Thermal Resistance Junction-to-Case	SOT25	(Note 7)	—	52	—	$^{\circ}C/W$
		SOT353		—	143	—	
		SOT553		—	105	—	
		X2-DFN0808-4		—	225	—	
		X2-DFN1010-6		—	250	—	
		X2-DFN1409-6		—	275	—	
		X2-DFN1410-6		—	265	—	

Note: 7. Test condition for each of the 7 package types: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

**Switching Characteristics**

$T_A = -40^{\circ}C$  to  $+85^{\circ}C$ ,  $C_L = 15pF$  as noted (See Figure 1)

Parameter	From Input	To Output	$V_{CC} = 1.8V \pm 0.15V$		$V_{CC} = 2.5V \pm 0.2V$		$V_{CC} = 3.3V \pm 0.3V$		$V_{CC} = 5V \pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
$t_{PD}$	A	Y	1.0	9.9	0.7	5.5	0.7	4.6	0.7	4.4	ns

$T_A = -40^{\circ}C$  to  $+85^{\circ}C$ ,  $C_L = 30pF$  or  $50pF$  as noted (See Figure 2)

Parameter	From Input	To Output	$V_{CC} = 1.8V \pm 0.15V$		$V_{CC} = 2.5V \pm 0.2V$		$V_{CC} = 3.3V \pm 0.3V$		$V_{CC} = 5V \pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
$t_{PD}$	A	Y	1.0	11	0.7	6.5	0.7	5.5	0.7	5	ns

$T_A = -40^{\circ}C$  to  $+125^{\circ}C$ ,  $C_L = 15pF$  as noted (See Figure 1)

Parameter	From Input	To Output	$V_{CC} = 1.8V \pm 0.15V$		$V_{CC} = 2.5V \pm 0.2V$		$V_{CC} = 3.3V \pm 0.3V$		$V_{CC} = 5V \pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
$t_{PD}$	A	Y	1.0	12.5	0.7	7.5	0.7	6.5	0.7	5.5	ns

$T_A = -40^{\circ}C$  to  $+125^{\circ}C$ ,  $C_L = 30pF$  or  $50pF$  as noted (See Figure 2)

Parameter	From Input	To Output	$V_{CC} = 1.8V \pm 0.15V$		$V_{CC} = 2.5V \pm 0.2V$		$V_{CC} = 3.3V \pm 0.3V$		$V_{CC} = 5V \pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
$t_{PD}$	A	Y	1.0	14.0	0.7	8.5	0.7	7.0	0.7	6.5	ns

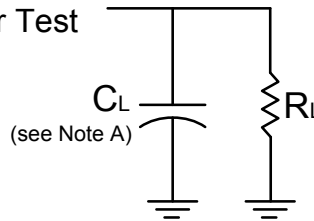
**Operating Characteristics**

T<sub>A</sub> = +25°C

Parameter		Test Conditions	V <sub>CC</sub> = 1.8V	V <sub>CC</sub> = 2.5V	V <sub>CC</sub> = 3.3V	V <sub>CC</sub> = 5V	Unit
			Typ	Typ	Typ	Typ	
C <sub>PD</sub>	Power Dissipation Capacitance	f = 10MHz	20	22	23	25	pF

**Parameter Measurement Information**

From Output Under Test



V <sub>CC</sub>	Inputs		V <sub>M</sub>	C <sub>L</sub>	R <sub>L</sub>
	V <sub>I</sub>	t <sub>R</sub> /t <sub>F</sub>			
1.8V±0.15V	V <sub>CC</sub>	≤2ns	V <sub>CC</sub> /2	15pF	1MΩ
2.5V±0.2V	V <sub>CC</sub>	≤2ns	V <sub>CC</sub> /2	15pF	1MΩ
3.3V±0.3V	3V	≤2.5ns	1.5V	15pF	1MΩ
5V±0.5V	V <sub>CC</sub>	≤2.5ns	V <sub>CC</sub> /2	15pF	1MΩ

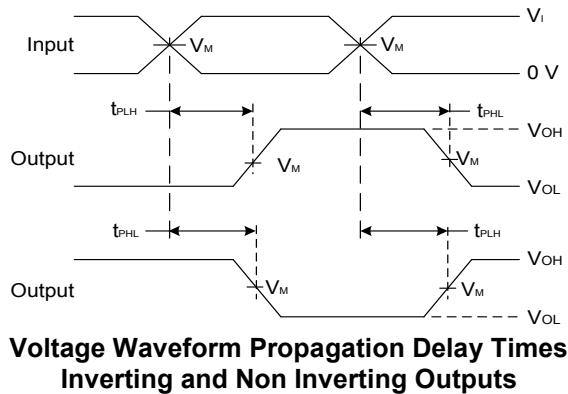
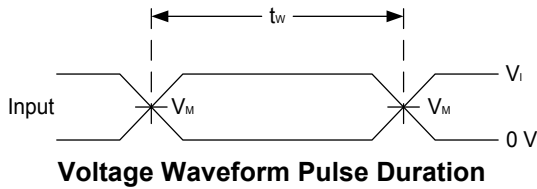
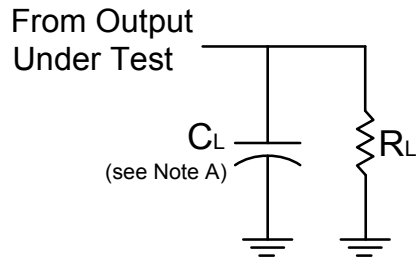


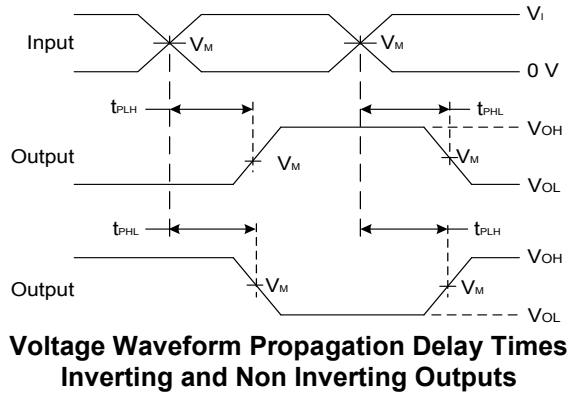
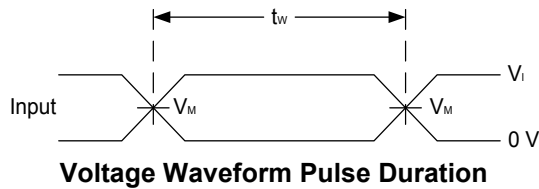
Figure 1. Load Circuit and Voltage Waveforms

- Notes:
- A. Includes test lead and test apparatus capacitance.
  - B. All pulses are supplied at pulse repetition rate ≤ 10MHz.
  - C. Inputs are measured separately one transition per measurement.
  - D. t<sub>PLH</sub> and t<sub>PHL</sub> are the same as t<sub>PD</sub>.

**Parameter Measurement Information** (continued)



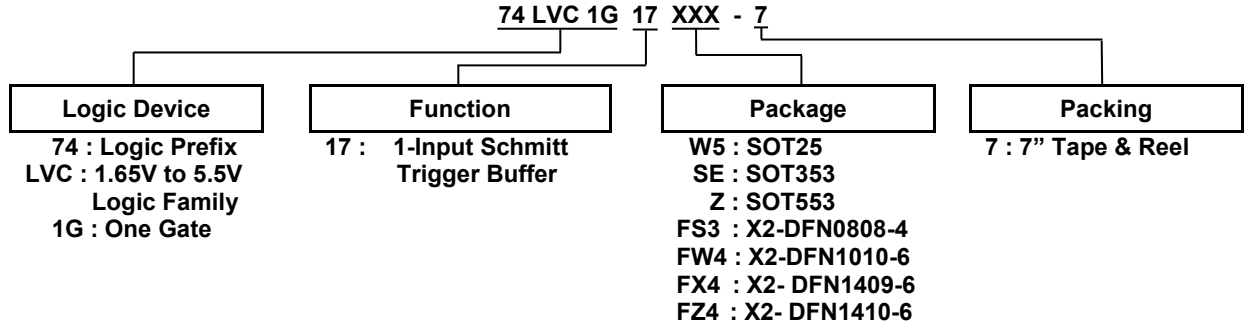
V <sub>CC</sub>	Inputs		V <sub>M</sub>	C <sub>L</sub>	R <sub>L</sub>
	V <sub>I</sub>	t <sub>R</sub> /t <sub>F</sub>			
1.8V±0.15V	V <sub>CC</sub>	≤2ns	V <sub>CC</sub> /2	30pF	1kΩ
2.5V±0.2V	V <sub>CC</sub>	≤2ns	V <sub>CC</sub> /2	30pF	500Ω
3.3V±0.3V	3V	≤2.5ns	1.5V	50pF	500Ω
5V±0.5V	V <sub>CC</sub>	≤2.5ns	V <sub>CC</sub> /2	50pF	500Ω



**Figure 2. Load Circuit and Voltage Waveforms**

- Notes:
- A. Includes test lead and test apparatus capacitance.
  - B. All pulses are supplied at pulse repetition rate ≤ 10MHz.
  - C. Inputs are measured separately one transition per measurement.
  - D. t<sub>PLH</sub> and t<sub>PHL</sub> are the same as t<sub>PD</sub>.

**Ordering Information** (Note 8)

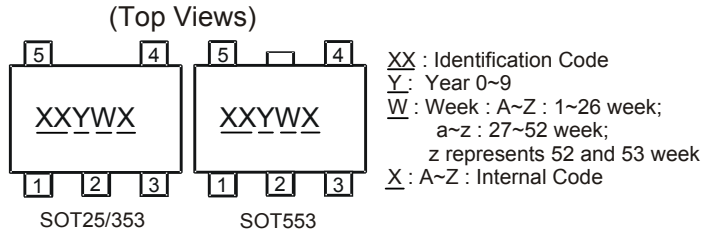


Device	Package Code	Package (Notes 9, 10)	7" Tape and Reel	
			Quantity	Part Number Suffix
74LVC1G17W5-7	W5	SOT25	3,000/Tape & Reel	-7
74LVC1G17SE-7	SE	SOT353	3,000/Tape & Reel	-7
74LVC1G17Z-7	Z	SOT553	4,000/Tape & Reel	-7
74LVC1G17FS3-7	FS3	X2-DFN0808-4	5,000/Tape & Reel	-7
74LVC1G17FW4-7	FW4	X2-DFN1010-6	5,000/Tape & Reel	-7
74LVC1G17FX4-7	FX4	X2-DFN1409-6 <b>(Chip Scale Alternative)</b>	5,000/Tape & Reel	-7
74LVC1G17FZ4-7	FZ4	X2-DFN1410-6	5,000/Tape & Reel	-7

Notes: 8. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.  
 9. Pad layout as shown in Diodes Incorporated's package outline PDFs, which can be found on our website at <http://www.diodes.com/package-outlines.html>.  
 10. The taping orientation is located on our website at <https://www.diodes.com/assets/Packaging-Support-Docs/ap02007.pdf>.

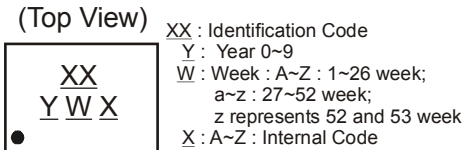
## Marking Information

(1) SOT25, SOT353 and SOT553



Part Number	Package	Identification Code
74LVC1G17W5-7	SOT25	UR
74LVC1G17SE-7	SOT353	UR
74LVC1G17Z-7	SOT553	UR

(2) DFN Packages

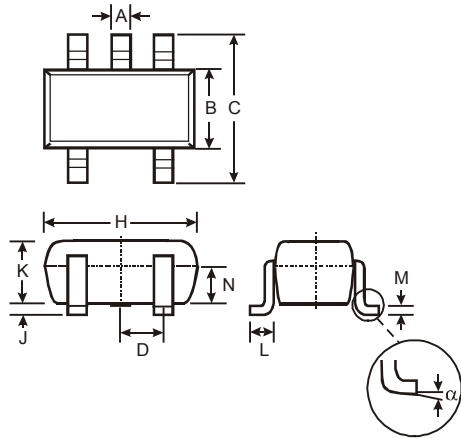


Part Number	Package	Identification Code
74LVC1G17FS3-7	X2-DFN0808-4	WR
74LVC1G17FW4-7	X2-DFN1010-6	UR
74LVC1G17FX4-7	X2-DFN1409-6	MH
74LVC1G17FZ4-7	X2-DFN1410-6	UR

**Package Outline Dimensions**

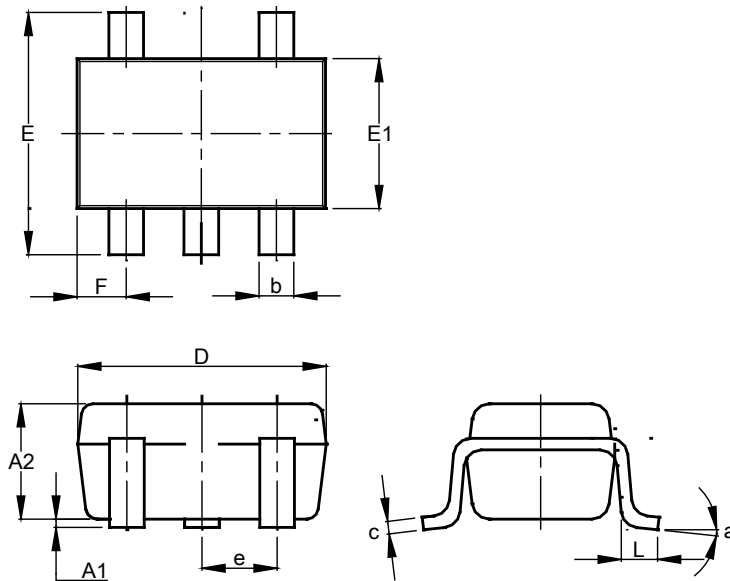
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

**(1) Package Type: SOT25**



SOT25			
Dim	Min	Max	Typ
A	0.35	0.50	0.38
B	1.50	1.70	1.60
C	2.70	3.00	2.80
D	-	-	0.95
H	2.90	3.10	3.00
J	0.013	0.10	0.05
K	1.00	1.30	1.10
L	0.35	0.55	0.40
M	0.10	0.20	0.15
N	0.70	0.80	0.75
α	0°	8°	-
All Dimensions in mm			

**(2) Package Type: SOT353**

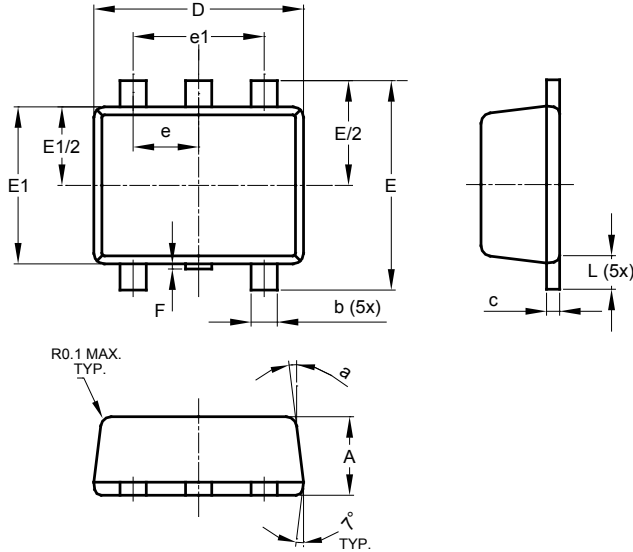


SOT353			
Dim	Min	Max	Typ
A1	0.00	0.10	0.05
A2	0.90	1.00	0.95
b	0.10	0.30	0.25
c	0.10	0.22	0.11
D	1.80	2.20	2.15
E	2.00	2.20	2.10
E1	1.15	1.35	1.30
e	0.650 BSC		
F	0.40	0.45	0.425
L	0.25	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

**Package Outline Dimensions** (continued)

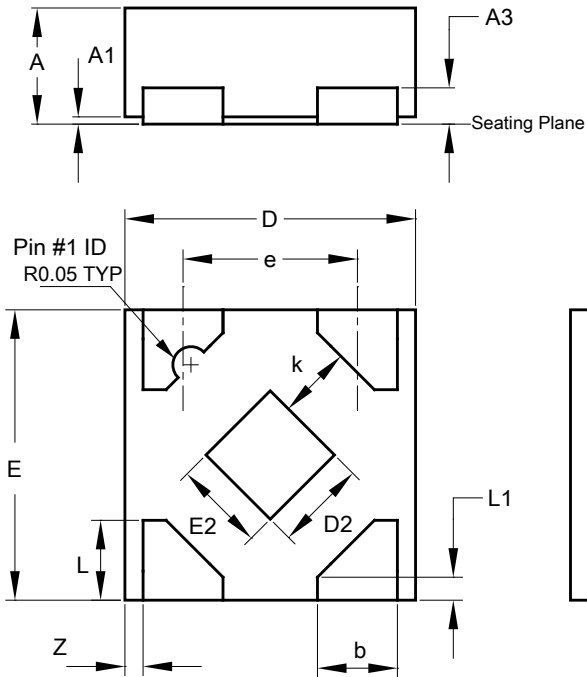
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

**(3) Package Type: SOT553**



SOT553			
Dim	Min	Max	Typ
A	0.55	0.62	0.60
b	0.15	0.30	0.20
c	0.10	0.18	0.15
D	1.50	1.70	1.60
E	1.55	1.70	1.60
E1	1.10	1.25	1.20
e	0.50 BSC		
e1	1.00 BSC		
F	0.00	0.10	—
L	0.10	0.30	0.20
a	6°	8°	7°
All Dimensions in mm			

**(4) Package Type: X2-DFN0808-4**

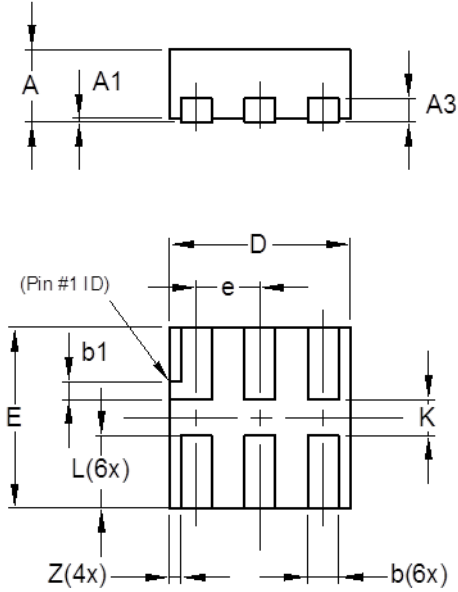


X2-DFN0808-4			
Dim	Min	Max	Typ
A	0.25	0.35	0.30
A1	0	0.04	0.02
A3	-	-	0.13
b	0.17	0.27	0.22
D	0.75	0.85	0.80
D2	0.15	0.35	0.25
E	0.75	0.85	0.80
E2	0.15	0.35	0.25
e	-	-	0.48
k	0.20	-	-
L	0.17	0.27	0.22
L1	0.02	0.12	0.07
z	-	-	0.05
All Dimensions in mm			

**Package Outline Dimensions** (continued)

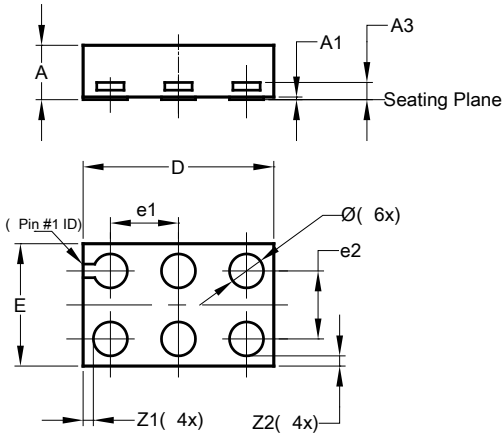
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(5) Package Type: X2-DFN1010-6



X2-DFN1010-6			
Dim	Min	Max	Typ
A	—	0.40	0.39
A1	0.00	0.05	0.02
A3	—	—	0.13
b	0.14	0.20	0.17
b1	0.05	0.15	0.10
D	0.95	1.05	1.00
E	0.95	1.05	1.00
e	—	—	0.35
L	0.35	0.45	0.40
K	0.15	—	—
Z	—	—	0.065
All Dimensions in mm			

(6) Package Type: X2-DFN1409-6

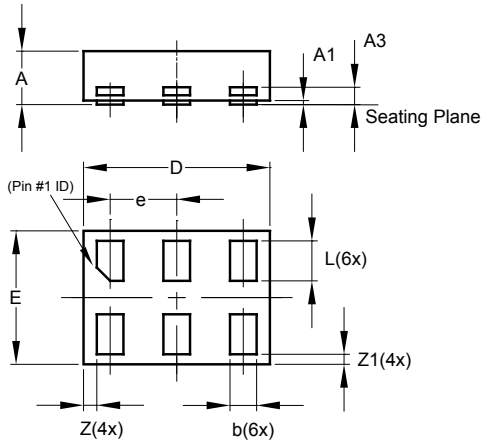


X2-DFN1409-6			
Dim	Min	Max	Typ
A	-	0.40	0.39
A1	0	0.05	0.02
A3	-	-	0.13
Ø	0.20	0.30	0.25
D	1.35	1.45	1.40
E	0.85	0.95	0.90
e1	-	-	0.50
e2	-	-	0.50
Z1	-	-	0.075
Z2	-	-	0.075
All Dimensions in mm			

**Package Outline Dimensions** (continued)

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(7) Package Type: X2-DFN1410-6

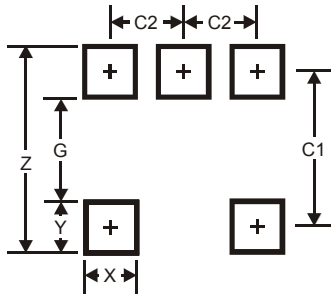


X2-DFN1410-6			
Dim	Min	Max	Typ
A	—	0.40	0.39
A1	0.00	0.05	0.02
A3	—	—	0.13
b	0.15	0.25	0.20
D	1.35	1.45	1.40
E	0.95	1.05	1.00
e	—	—	0.50
L	0.25	0.35	0.30
Z	—	—	0.10
Z1	0.045	0.105	0.075
All Dimensions in mm			

**Suggested Pad Layout**

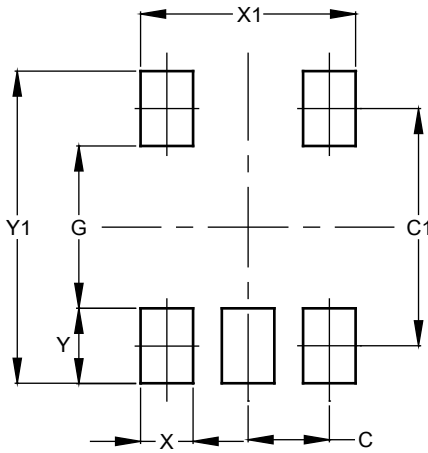
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

**(1) Package Type: SOT25**



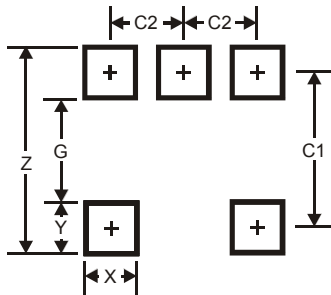
Dimensions	Value
Z	3.20
G	1.60
X	0.55
Y	0.80
C1	2.40
C2	0.95

**(2) Package Type: SOT353**



Dimensions	Value (in mm)
C	0.650
C1	1.900
G	1.300
X	0.420
X1	1.720
Y	0.600
Y1	2.500

**(3) Package Type: SOT553**

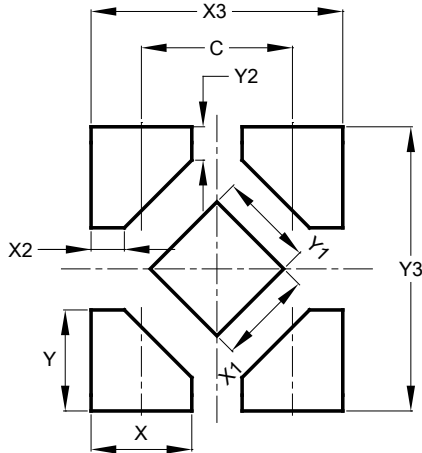


Dimensions	Value (in mm)
Z	2.2
G	1.2
X	0.375
Y	0.5
C1	1.7
C2	0.5

**Suggested Pad Layout** (continued)

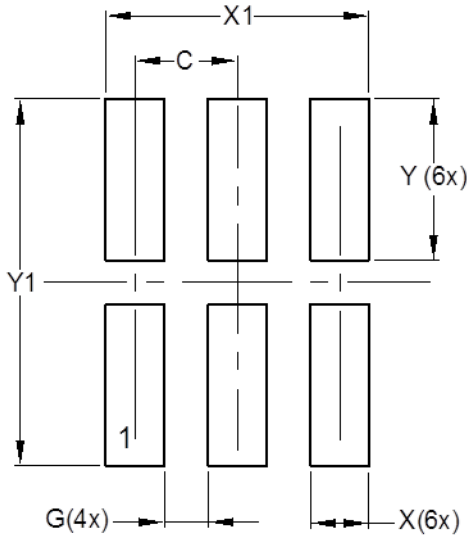
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(4) Package Type: X2-DFN0808-4



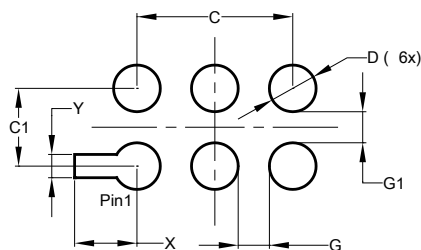
Dimensions	Value
C	0.480
X	0.320
X1	0.300
X2	0.106
X3	0.800
Y	0.320
Y1	0.300
Y2	0.106
Y3	0.900

(5) Package Type: X2-DFN1010-6



Dimensions	Value (in mm)
C	0.350
G	0.150
X	0.200
X1	0.900
Y	0.550
Y1	1.250

(6) Package Type: X2-DFN1409-6

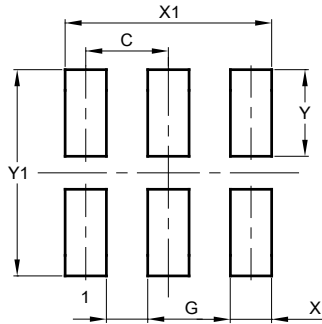


Dimensions	Value (in mm)
C	1.000
C1	0.500
D	0.300
G	0.200
G1	0.200
X	0.400
Y	0.150

## Suggested Pad Layout (continued)

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### (7) Package Type: X2-DFN1410-6



Dimensions	Value (in mm)
C	0.500
G	0.250
X	0.250
X1	1.250
Y	0.525
Y1	1.250

## Mechanical Data

### SOT25

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Weight: 0.016 grams (Approximate)

### SOT353

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Weight: 0.006 grams (Approximate)

### SOT553

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Weight: 0.003 grams (Approximate)

### X2-DFN0808-4

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 (e4)
- Weight: 0.001 grams (Approximate)

### X2-DFN1010-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 (e4)
- Weight: 0.001 grams (Approximate)

### X2-DFN1409-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 (e4)
- Weight: 0.002 grams (Approximate)

### X2-DFN1410-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 (e4)
- Weight: 0.002 grams (Approximate)

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