THE DATASHEET OF

PS2765-1-F3-A

PHOTOCOUPLERS SELCTION GUIDE

2022.12

SUITABLE PRODUCT FOR EACH APPLICATIONS

Renesas offers an array of flexible products suitable for a wide range of applications.

Application Field	Application Name	Motor Drive		Communication			Transistor Output
		IGBT drive	IPM drive	Current/ Voltage monitor	Communication		
					Digital output	Analog output	
Industry	AC Servo	•	•	•	•	•	•
	NC machine tools	•	•	•	•	•	•
	GAS / Water / Electric power Meter				•	•	•
	Smart meter				•	•	•
	Service Robot						•
	Industrial Robot	•	•	•	•	•	•
	Buttery system	•	•	•	•	•	•
	Solar power conditioner	•	•	•	•	•	•
	UPS	•	•	•	•	•	•
	Welding machine	•	•	•	•	•	•
	Semiconductor manufacturing equipment				•	•	•
	Tester / measurement device	•	•		•	•	•
	PLC	•	•		•	•	•
	Network Camera				•		•
	Vending machine	•				•	•
	Electric tools	•	•		•	•	•
	Security sensor , camera		•		•	•	•
	Industrial LED light						•
Communication	Server						•
	Network Switch				•	•	•
	Rooter				•		•
	Wireless base station				•		•
	Line-phone				•		•
	Infrastructure Switch		•		•		•
	Broadcast apparatus						•
Consumer	Video / Audio		•		•	•	•
	TB				•		•
	STB						•
	Camera		•		•	•	•
	Game(Portable / Stationary)						•
	Pachinko				•	•	•
	Air Conditioner	•	•		•	•	•
	Lightings				•	•	•
	Washing machine		•		•	•	•
	Refrigerator	•					•
	IH Cooker	•			•	•	•
OA	Scanner						•
	HDD						•
	POS				•	•	•
	PPC / Printer				•		•
	Server / Workstation / Super Comsuter	•	•		•	•	•
	Desktop PC				•		•
	Mobile PC / Tablet				•		•
	Monitor						•

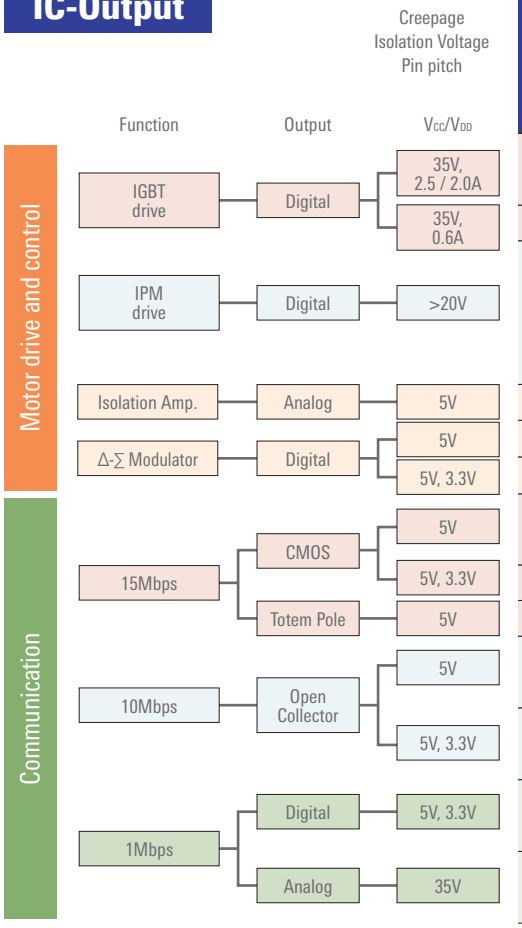
PHOTOCOUPLER LINE-UP

Renesas offers photocouplers targeted to specific applications, from high-speed products for motor drive and communication to general-purpose Tr. output products.

Visit our website.

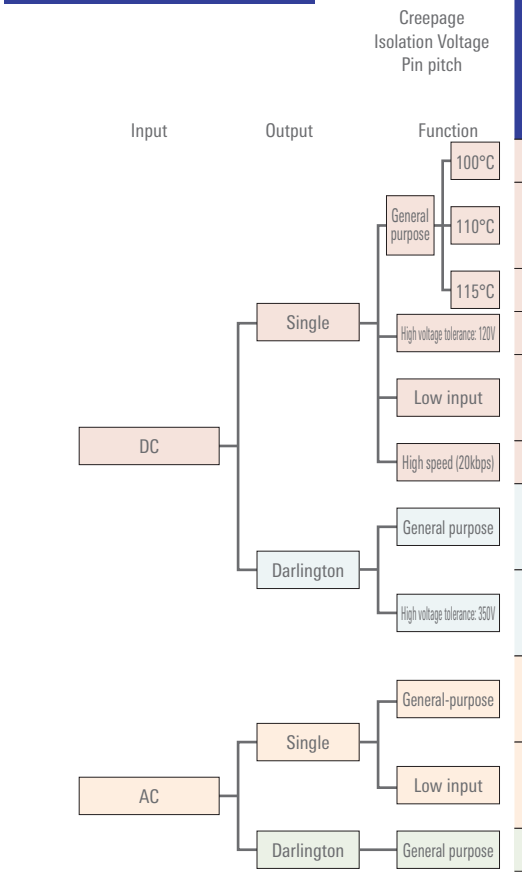
https://www.renesas.com/products/interface-connectivity/optoelectronics

IC-Output



DIP8 7/8 mm 5 kV 2.54 mm	SDIP 7/8 mm 5 kV 1.27 mm	LSDIP8 15 mm 7.5 kV 1.27 mm	LSO5 8 mm 5 kV 1.27 mm	SO5 4.2 mm 3.75 kV 1.27 mm	LSSO5 8.2 mm 5 kV 0.65 mm	SO8 4 mm 2.5 kV 1.27 mm	SO16 8 mm 5 kV 1.27 mm
PS9531	PS9331 PS9332	PS9905	PS9031		RV1S9231A		PS9402
PS9506	PS9307A				RV1S9207A		
PS9513	PS9313 PS9303 PS9309		PS9013 RV1S9062A PS9009 RV1S9061A	PS9113 RV1S9162A RV1S9161A	RV1S9213A RV1S9262A RV1S9209A RV1S9261A		
PS8551A	PS8352A						
PS9551A							
	RV1S9353A						
	PS9351			PS9151		PS9851-1 PS9851-2	
		RV1S9960A	RV1S9060A	RV1S9160A	RV1S9260A		
				PS9123			
PS9587	PS9317		PS9001	PS9117A		PS9817A-1 PS9817A-2	
	PS9324	PS9924		PS9124		PS9821-1 PS9821-2	
				PS9122		PS9822-1 PS9822-2	
PS8501 PS8502	PS8302	PS8902		PS8101		PS8802-1 PS8802-2	

Transistor-Output



DIP4 7/8 mm 5 kV 2.54 mm	LSOP 8 mm 5 kV 2.54 mm	SOP 5 mm 3.75 kV 2.54 mm	LSSOP 8.2 mm 5 kV 1.3 mm	SSOP 4/4.5/5 mm 1.5/2.5/3.75 kV 0.8/1.27 mm	Flat lead 4 mm 2.5 kV 1.27 mm
		PS2701A-1		PS2801C-1/4	
PS2561D-1 PS2561F-1		PS2761B-1		PS2861B-1	
	PS2381-1		RV1S2281A		
		PS2703-1			PS2913-1
		PS2711-1	RV1S2211A	PS2811-1/4 PS2841-4A/4B	PS2911-1
PS2514-1					
PS2562-1		PS2702-1		PS2802-1/4	
PS2533-1 PS2535-1		PS2733-1		PS2833-1/4	PS2933-1
PS2565-1		PS2705A-1	RV1S2285A	PS2805C-1/4	
		PS2715-1		PS2815-1/4 PS2845-4A	PS2915-1
PS2506-1		PS2706-1			

PHOTOCOUPLER PRODUCTS
SELECTION GUIDE

IGBT Drive

Function	Part No.	Output Peak Current [A]	Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics					Protection Functions		
								DC	SW				Protection		
				Configu-ration	Creepage Distance [mm]			IFLH max. [mA]	tpHL,LH max. [ns]	PWD max. [ns]	PDD [ns]	CMR min. [kV/μs]	UVLO	Clamp	Desat
IGBT Drive	PS9307A	0.6	10 to 30	SDIP6	L:7 L2:8	5000	125	5.0	150	50	-80 to 80	50	○	–	–
	RV1S9207A			LSSO5	8.2	5000	125	5.0	150	50	-80 to 80	50	○	–	–
	PS9506			DIP8	-/L3:7 L1/L2:8	5000	110	7.0	400	250	-300 to 300	25	–	–	–
	PS9031	2.5	15 to 30	LSO5	8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	RV1S9231A			LSSO5	8.2	5000	125	5.2	175	75	-90 to 90	50	○	–	–
	PS9331			SDIP6	L:7 L2:8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	PS9531			DIP8	-/L3:7 L1/L2:8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	PS9905			LSDIP8	15	7500	110	6.0	150	75	-100 to 100	25	○	–	–
	PS9332	2	15 to 30	SDIP8	L:7 L2:8	5000	125	4.0	200	75	-90 to 90	50	○	○	–
	PS9402	2.5	15 to 30	SO16	8	5000	110	5.0	200	100	-100 to 100	25	○	○	○

IPM Drive

Function	Part No.	Output Type	Logic	Package		Recommended Operating Conditions	Absolute Maximum Ratings		Electrical Characteristics				
									DC	SW			
				Configu-ration	Creepage Distance [mm]	Power Supply Voltage [V]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	IFHL/LH max. [mA]	tpHL/LH max. [ns]	PWD max. [ns]	PDD max. [ns]	CMR min. [kV/μs]
IPM Drive	RV1S9161A	Totem Pole	Active High	SO5	4.2	4.5 to 30	3750	125	3.0	60	20	25	100
	PS9009			LSO5	8	4.5 to 20	5000	125	3.0	200	80	100	50
	RV1S9061A					4.5 to 30	5000	125	4.5	60	20	25	100
	RV1S9209A			LSSO5	8.2	4.5 to 20	5000	125	3.8	200	80	100	50
	RV1S9261A					4.5 to 30	5000	125	4.0	60	20	25	100
	PS9309			SDIP6	L:7 L2:8	4.5 to 20	5000	110	3.0	200	80	80	15
	PS9303			SDIP6	L:7 L2:8	4.5 to 20	5000	100	5.0	500	350	–	15
	RV1S9162A		Active Low	SO5	4.2	4.5 to 30	3750	125	3.0	60	20	25	100
	RV1S9062A			LSO5	8	4.5 to 30	5000	125	4.1	60	20	25	100
	RV1S9262A			LSSO5	8.2	4.5 to 30	5000	125	4.0	60	20	25	100
	PS9513	Open Collector		DIP8	-/L3:7 L1/L2:8	4.5 to 20	5000	100	5.0	500 750	650	650	15
	PS9013			LSO5	8	4.5 to 25	5000	125	5.0	500 750	650	650	50
	RV1S9213A			LSSO5	8.2	4.5 to 25	5000	125	5.0	500/750	650	650	50
	PS9313			SDIP6	L:7 L2:8	4.5 to 20	5000	110	5.0	500 750	650	650	15
	PS9113			SO5	4.2	4.5 to 20	3750	100	5.0	500 750	650	650	15

Isolation Amplifiers

Function	Part No.	Output	Package		Absolute Maximum Ratings		Electrical Characteristics							
			Configuration	Creepage Distance [mm]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Input Voltage Linearity Range [mV]	Gain typ. [V/V]	Gain Error Max.[%]	NL typ. [%]	VDD2 [V]	CMR min. [kV/μs]	fc typ. [kHz]	Output Type
Isolation amplifier	PS8551A	Analog	DIP8	8	5000	105	-200 to 200	8	1	0.014	5	10	100	Differential
	PS8352A		SDIP8	8	5000	110	-200 to 200	8	1	0.014	5	10	100	Differential

Δ-Σ Modulators

Function	Part No.	Output	Package		Absolute Maximum Ratings		Electrical Characteristics						
			Configuration	Creepage Distance [mm]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Input Voltage Linearity Range [mV]	Gain Error Max.[%]	INL typ. [LSB]	VDD2 [V]	ENOB typ. [bits]	CMR min. [kV/μs]	fCLK typ. [MHz]
Δ-Σ Modulators	PS9551A	Digital	DIP8	8	5000	105	-200 to 200	1	3	5	12	15	10
	RV1S9353A		SDIP8	8	5000	110	-200 to 200	0.5	3	3.3/5	13.8	15	10

High-Speed Communication (Analog)

Function	Part No.	Speed [bps]	Output Type	Absolute Maximum Rated Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics						
									Detector				Coupled		
					Configuration	Creepage Distance [mm]			IOH @Vcc30V max. [μA]	VOL max. [V]	ICCL typ. [μA]	ICCH max. [μA]	CTR@ IF 16mA Vcc 4.5V Vo 0.4V [%]	tpHL/LH max. [ns]	CMR min. [kV/μs]
High-Speed Communication (Analog)	PS8101	1M	Open Collector	35	SO5	4.2	3750	100	100	0.4	50	2	15 to 35	800/1200	15
	PS8802-1/-2				SO8	4.0	2500	100	100	0.4	100/200	2/4	15 and Over	800/1200	15
	PS8302				SDIP6	L:7 L2:8	5000	110	100	0.4	150	1	15 and Over	800/800	15
	PS8501				DIP8	-/L3:7 L1/L2:8	5000	100	100	0.4	150	1	15 and Over	800/800	-
	PS8502								100	0.4	150	1	15 and Over	800/800	15
	PS8902				LSDIP8	15	7500	110	100	0.4	50	2	15 to 35	800/1200	15

High-Speed Communication (Digital)

Function	Part No.	Speed [bps]	Output Type	Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	DC			AC				
					Configuration	Creepage Distance [mm]			VOL max. [V]	VOH min. [V]	ICCL/H max. [mA]	IFHL max. [mA]	tpHL/LH max. [ns]	PWD max. [ns]	tpsk max. [ns]	CMR min. [kV/μs]
High-Speed Communication (Digital)	PS9122	1M	Open Collector	N 2.7~3.6, L 4.5~5.5	SO5	4.2	3750	100	0.6	–	3.5/2.5	5.0	500/700	200	–	15
	PS9822-1/-2				SO8	4.0	2500	100	0.6	–	3.5/2.5	5.0	500/700	200	–	–
	PS9124	10M	Open Collector	2.7~3.6 & 4.5~5.5	SO5	4.2	3750	110	0.6	–	10/7	3.0	100/100	35	40	10
	PS9324				SDIP6	L:7 L2:8	5000	110	0.6		10/7	3.0	100/100	35	40	15
	PS9924				LSDIP8	15	7500	110	0.6	–	10/7	5.0	100/100	35	40	15
	PS9821-1/-2			2.7~3.6	SO8	4.0	2500	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9587			4.5~5.5	DIP8	-/L3:7 L1/L2:8	5000	85	0.6	–	11/8	5.0	100/100	50	60	15
	PS9317				SDIP6	L:7 L2:8	5000	85	0.6	–	10/7	5.0	75/75	35	40	15
	PS9001				LSO5	8.0	5000	125	0.6	–	2/2	4.0	100/100	50	60	50
	PS9117A				SO5	4.2	3750	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9817A-1/-2				SO8	4.0	2500	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9123	15M	Totem Pole	4.5~5.5	SO5	4.2	3750	100	0.6	2.4	10/7	5.0	60/60	30	–	15
	PS9151		CMOS	4.5~5.5	SO5	4.2	3750	100	0.1	4.0	5/5	5.0	60/60	30	40	15
	RV1S9160A			2.7~5.5	SO5	4.2	3750	125	0.1	V_{DD}-0.1	2/2	2	60/60	20	25	50
	PS9851-1/-2			4.5~5.5	SO8	4.0	2500	100	0.1	4.0	5/5	6.0	60/60	30	40	10
	RV1S9060A			2.7~5.5	LSO5	8	5000	125	0.1	V_{DD}-0.1	2/2	2.2	60/60	20	25	50
	RV1S9260A			2.7~5.5	LSSO5	8.2	5000	125	0.1	V_{DD}-0.1	2/2	2.6	60/60	20	25	50
	PS9351			4.5~5.5	SDIP6	L:7 L2:8	5000	100	0.1	4.0	5/5	5.0	60/60	30	40	15
	RV1S9960A			2.7~5.5	LSDIP8	15	7500	110	0.1	V_{DD}-0.1	2/2	3.8	60/60	20	25	50

Transistor-Output (DC Input) Single

Function	Part No.	Output Type	Package		Absolute Maximum Ratings				Electrical Characteristics				
									DC	SW			
			Configuration	Creepage Distance [mm]	VCEO max. [V]	IC max. [mA]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	CTR %	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (DC Input)	PS2561D-1	Single	DIP4	-/L:7 L1/L2:8	80	50	5000	110	50 to 400	3	5	–	–
	PS2561F-1		DIP4	7	80	50	5000	110	300 to 600	5	7	–	–
	PS2514-1		DIP4	7	40	20	5000	100	50 to 200	–	–	15	15
	PS2381-1		LSOP4	8	80	50	5000	115	50 to 400	4	5	–	–
	RV1S2281A		LSSOP	8.2	80	30	5000	115	50 to 400	4	5	–	–
	PS2701A-1		SOP4	5	70	30	3750	100	50 to 300	5	7	8	10
	PS2761B-1		SOP4	5	70	50	3750	110	50 to 400	4	5	8	5
	PS2703-1		SOP4	5	120	30	3750	100	50 to 400	10	10	13	11
	PS2711-1		SOP4	5	40	40	3750	100	100 to 400	4	5	–	–
	PS2801C-1		SSOP4	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2801C-4		SSOP16	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2861B-1		SSOP4	5	70	50	3750	110	50 to 300	4	5	5	5
	PS2811-1		SSOP4	4.5	40	40	2500	100	100 to 400	4	5	7	5
	PS2811-4		SSOP16	4.5	40	40	2500	100	100 to 400	4	5	7	5
	RV1S2211A		LSSOP	8.2	40	40	5000	115	100 to 400	4	5	–	–
	PS2841-4A		SSOP12	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2841-4B		SSOP12	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2911-1		Flat Leads	4	40	40	2500	100	100 to 400	5	10	40	120
	PS2913-1		Flat Leads	4	120	30	2500	100	50 to 200	10	10	80	50

Transistor-Output (DC Input) Darlington

Function	Part No.	Output Type	Absolute Maximum Ratings		Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics						
									DC			SW			
			VCEO [V]	IC [mA/ch]	Configuration	Creepage Distance [mm]			CTR min. [%]	CTR max. [%]	VCE SAT [V]	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (DC Input)	PS2802-1	Darlington	40	90	SSOP4	4.5	2500	100	200	–	1.0	200	200	–	–
	PS2802-4			100	SSOP16	4.5	2500	100	200	–	1.0	200	200	–	–
	PS2562-1			200	DIP4	7	5000	100	200	–	1.0	100	100	–	–
	PS2702-1			200	SOP4	5	3750	100	200	–	1.0	70	60	90	60
	PS2833-1		350	60	SSOP4	4.5	2500	100	400	4500	1.0	20	5	–	–
	PS2833-4			60	SSOP16	4.5	2500	100	400	4500	1.0	20	5	–	–
	PS2535-1			120	DIP4	7	5000	100	400	5500	1.0	18	5	–	–
	PS2533-1			150	DIP4	7	5000	100	1500	6500	1.0	100	100	–	–
	PS2733-1			150	SOP4	5	2500	100	1500	–	1.0	100	100	–	–
	PS2933-1			60	Flat Leads	4	2500	100	400	4500	1.0	20	5	–	–

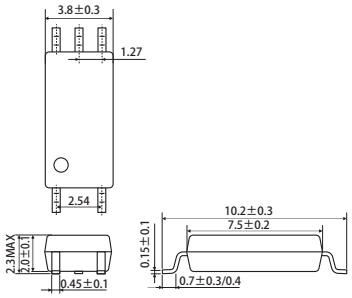
Transistor-Output (AC Input)

Function	Part No.	Output Type	Package		Absolute Maximum Ratings				Electrical Characteristics				
									DC	SW			
			Configuration	Creepage Distance [mm]	VCEO max. [V]	IC max. [mA]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	CTR %	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (AC Input)	PS2565-1	Single	DIP4	7	80	50	5000	100	80 to 400	3	5	–	–
	PS2705A-1		SOP4	5	70	30	3750	100	50 to 300	5	7	8	10
	PS2715-1		SOP4	5	40	40	3750	100	100 to 400	4	5	–	–
	PS2805C-1		SSOP4	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2805C-4		SSOP16	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2815-1		SSOP4	4.5	40	40	2500	100	100 to 400	4	5	7	5
	PS2815-4		SSOP16	4.5	40	40	2500	100	100 to 400	4	5	7	5
	RV1S2285A		LSSOP	8.2	80	30	5000	115	50 to 400	4	5	–	–
	PS2845-4A		SSOP12	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2915-1		Flat Leads	4	40	40	2500	100	100 to 400	5	10	40	120
	PS2506-1	Darlington	DIP4	7	40	200	5000	100	200 min.	100	100	–	–
	PS2706-1		SOP4	5	40	200	3750	100	200 min.	200	200	–	–

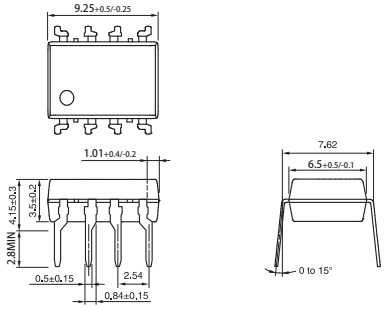
PACKAGE DIMENSIONS 1

Unit : mm

LSO5



DIP8



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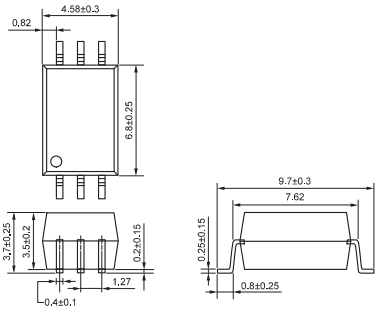
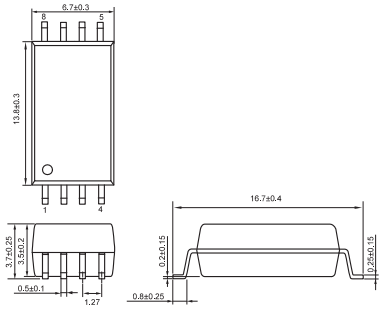


LSDIP8



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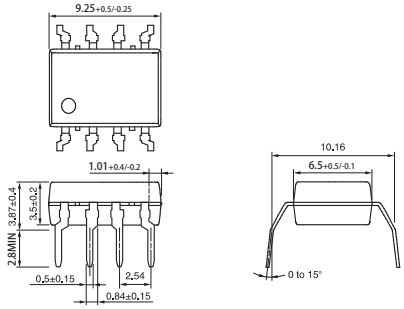

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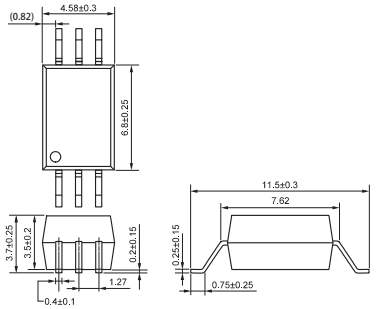
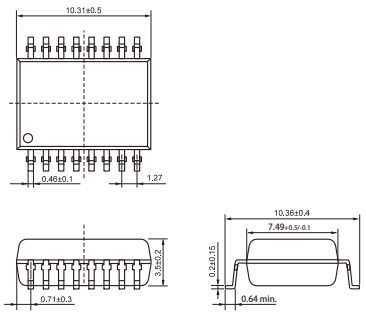
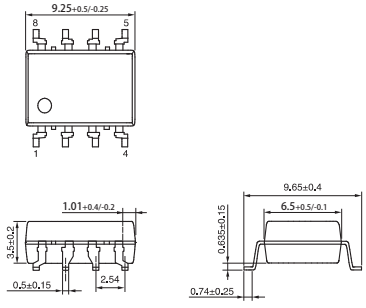


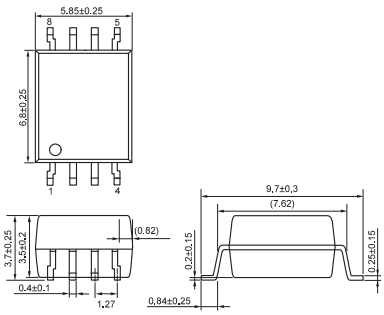
SO16



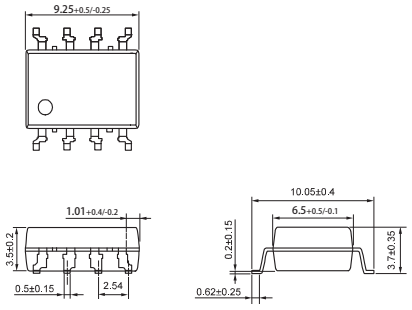
DIP8 (L3)



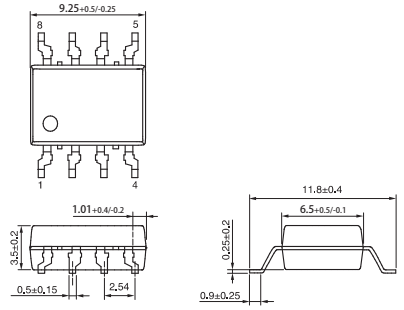
SDIP8 (L)



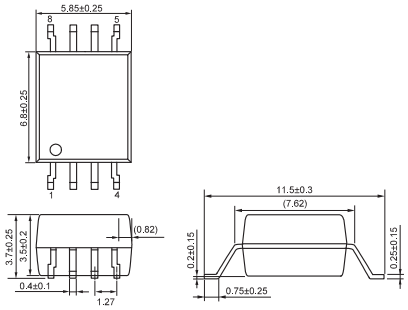
DIP8 (L4)



DIP8 (L2)



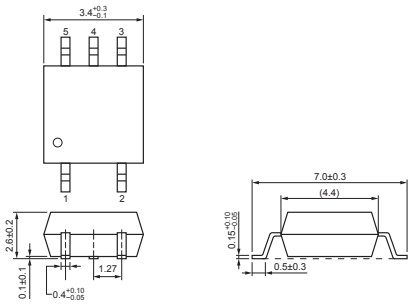
SDIP8 (L2)



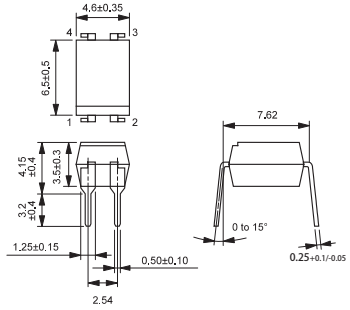
PACKAGE DIMENSIONS 2

Unit : mm

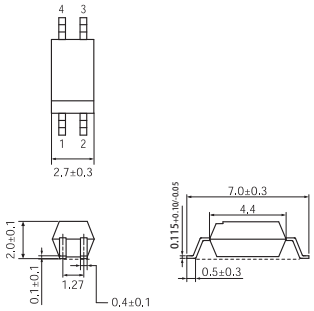
SO5



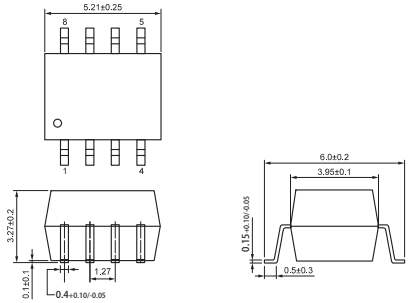
DIP4



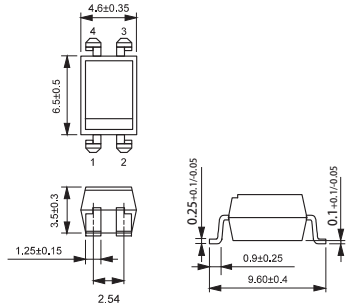
SSOP4



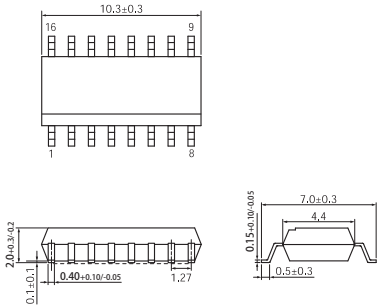
SO8



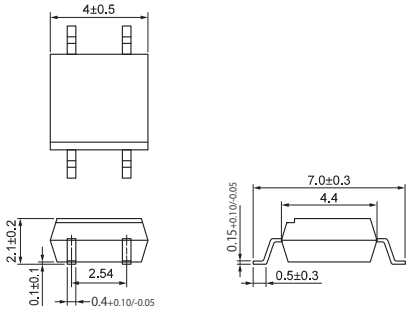
DIP4 (L)



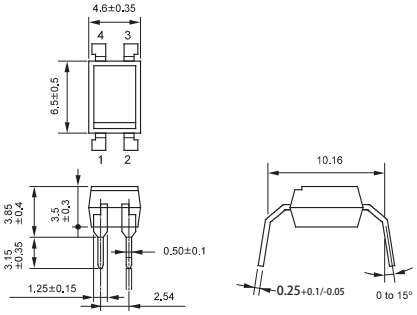
SSOP16



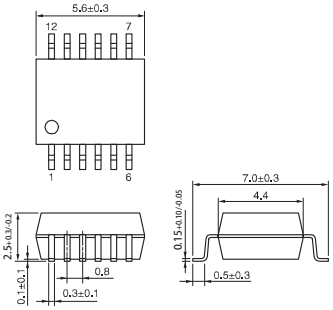
SOP



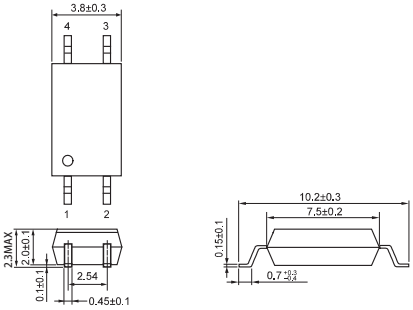
DIP4 (L1)



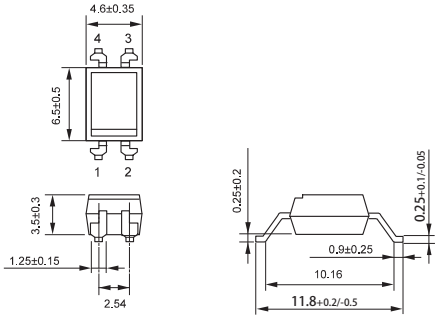
SSOP12



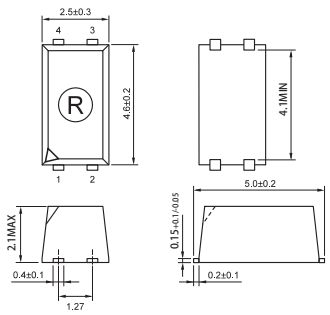
LSOP



DIP4 (L2)

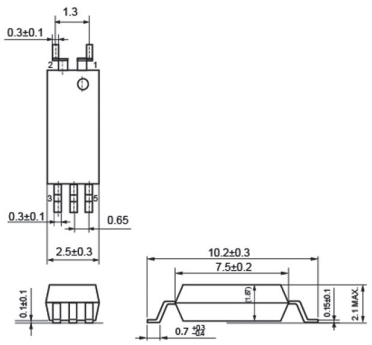
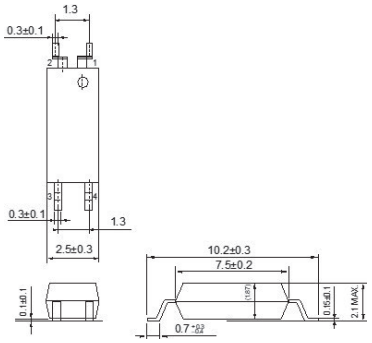


Flat lead



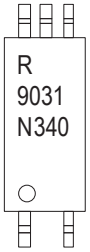
PACKAGE DIMENSIONS 3

Unit : mm

LSS05	LSS04
	

PACKAGE MARKING

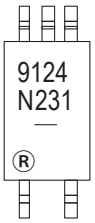
LSO5



R : An initial of "Renesas"
9031 : Part Number
N340 : Assembly Lot No.
N 3 40
- 40 — Weekly Serial Code
- 3 — Last one-digit of assembled year
- N — Rank Code

○ : No.1 pin mark

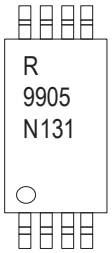
SO5



9124 : Part Number
N231 : Assembly Lot No.
N 2 31
- 31 — Weekly Serial Code
- 2 — Last one-digit of assembled year
- N — Rank Code

"–" : Pb free
® : No.1 pin mark
An initial of "Renesas"
(Carved marking)

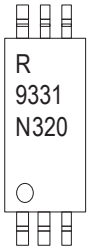
LSDIP8



R : An initial of "Renesas"
9905 : Part Number
N131 : Assembly Lot No.
N 1 31
- 31 — Weekly Serial Code
- 1 — Last one-digit of assembled year
- N — Rank Code

○ : No.1 pin mark

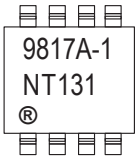
SDIP6



R : An initial of "Renesas"
9331 : Part Number
N320 : Assembly Lot No.
N 3 20
- 20 — Weekly Serial Code
- 3 — Last one-digit of assembled year
- N — Rank Code

○ : No.1 pin mark

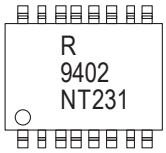
SO8



9817A-1 : Part Number
NT131 : Assembly Lot No.
N T 1 31
- 31 — Weekly Serial Code
- 1 — Last one-digit of assembled year
- T — Internal Symbol (T:Pb free, Ni/Pd/Au plating on the electrode)
- N — Rank Code

® : No.1 pin mark
An initial of "Renesas"
(Carved marking)

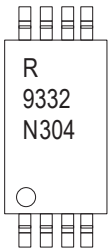
SO16



R : An initial of "Renesas"
9402 : Part Number
NT231 : Assembly Lot No.
N T 2 31
- 31 — Weekly Serial Code
- 2 — Last one-digit of assembled year
- T — Internal Symbol (T:Pb free)
- N — Rank Code

○ : No.1 pin mark

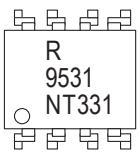
SDIP8



R : An initial of "Renesas"
9332 : Part Number
N340 : Assembly Lot No.
N 3 04
- 04 — Weekly Serial Code
- 3 — Last one-digit of assembled year
- N — Rank Code

○ : No.1 pin mark

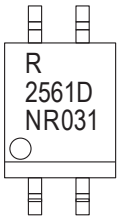
DIP8



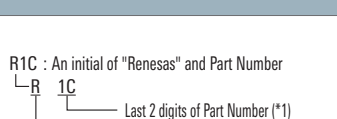
R : An initial of "Renesas"
9531 : Part Number
NT331 : Assembly Lot No.
N T 3 31
- 31 — Weekly Serial Code
- 3 — Last one-digit of assembled year
- T — Internal Symbol (T:Pb free)
- N — Rank Code

○ : No.1 pin mark

DIP4

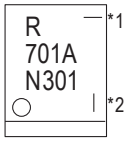


R : An initial of "Renesas"
2561D : Part Number as excluding "PS2"
NR031 : Assembly Lot No.

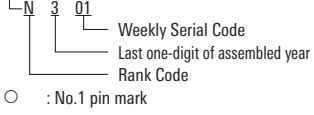


○ : No.1 pin mark

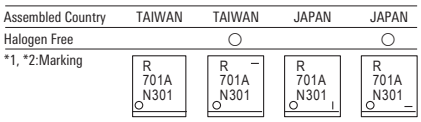
SOP



R : An initial of "Renesas"
701A : Part Number as excluding "PS2"
N301 : Assembly Lot No.

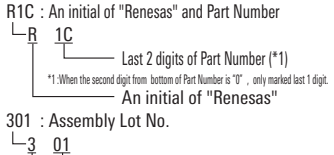


○ : No.1 pin mark

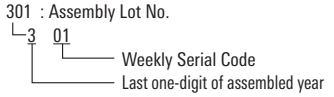


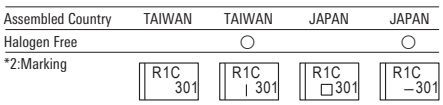
SSOP4

R1C : An initial of "Renesas" and Part Number

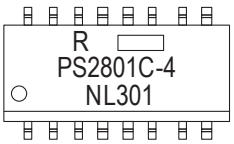


301 : Assembly Lot No.

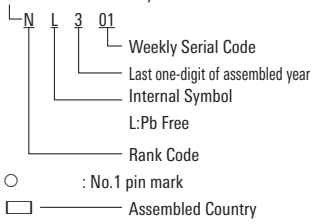




SSOP16

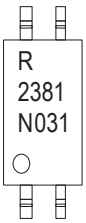


R : An initial of "Renesas"
PS2801C-4 : Part Number
NL301 : Assembly Lot No.

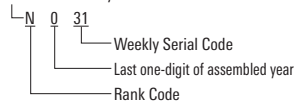


○ : No.1 pin mark

LSOP

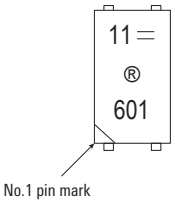


R : An initial of "Renesas"
2381 : Part Number as excluding "PS"
N031 : Assembly Lot No.



○ : No.1 pin mark

Flat lead

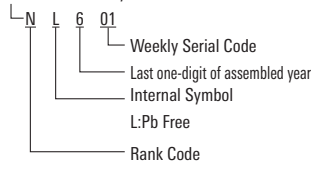


R : An initial of "Renesas"
11 : Part Number as excluding "PS29"
ex) PS2911 -> 11
601 : Assembly Lot No.

= : Pb free

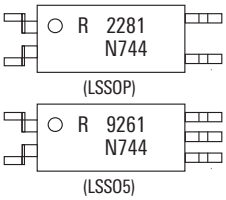
SSOP12

R : An initial of "Renesas"
2841A : Part Number as underlined of PA2841-4A
NL601 : Assembly Lot No.

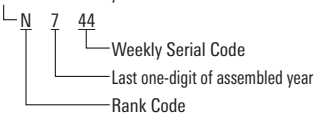


○ : No.1 pin mark

LSSOP / LSSO5

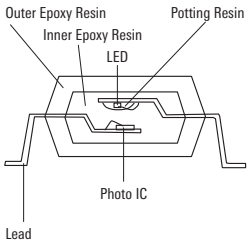
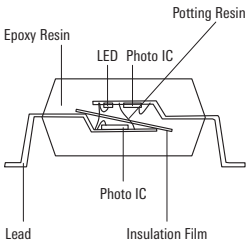
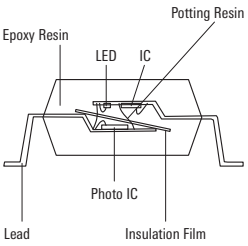


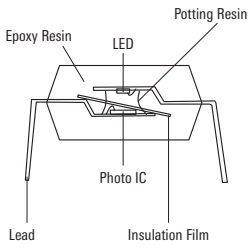
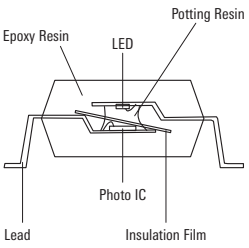
R : An initial of "Renesas"
2281 : Part Number
9261 : Part Number
N744 : Assembly Lot No.

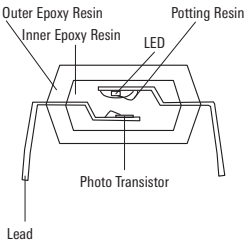
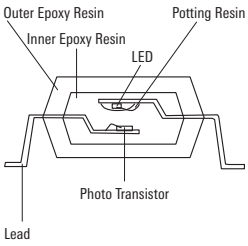


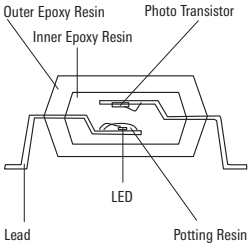
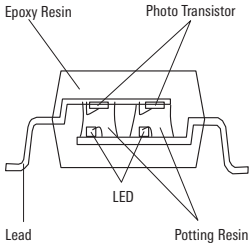
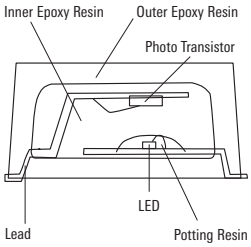
○ : No.1 pin mark

PACKAGE STRUCTURE 1

Package		LSDIP8	LSO5	SO5	SO16	DIP8 (L4)	SDIP8 (L2)
Structure							
Package		**LSDIP8**	**LSO5**	**SO5**	**SO16**	**DIP8 (L4)**	**SDIP8 (L2)**
Air Distance	[mm]	14.5	8	4.2	8	8	8
Creepage	[mm]	14.5	8	4.2	8	8	8
Isolation Distance	[mm]	0.4	0.15	0.2	0.4	0.4	0.4
CTI	[-]	175	400	175	175	175	175
Isolation Voltage	[Vr.m.s.]	7500	5000	3750	5000	5000	5000
VIORM	[Vpeak]	1600	1130	707	1130	1130	1130 / 1500 *
VIOTM	[Vpeak]	12000	8000	6000	8000	8000	8000
Part Number	VDE (Option)	PS9905 PS9924 PS8902 RV1S9960A	PS9031 PS9009 PS9013 PS9001 RV1S9060A RV1S9061A RV1S9062A	PS9113 PS9151 PS9123 PS9117A PS9124 PS9122 PS8101 RV1S9160A RV1S9161A RV1S9162A	PS9402	PS8551AL4 PS9551AL4	PS8352AL2 * RV1S9353A

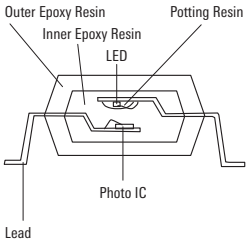
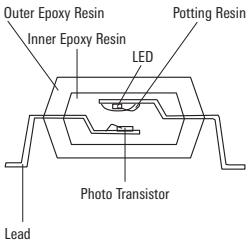
Package		DIP8	DIP8 (L1)	DIP8 (L3)	DIP8 (L2)	SDIP6 (L)	SDIP6 (L2)	SDIP8 (L)	SDIP8 (L2)	SO8
Structure										
Package		**DIP8**	**DIP8 (L1)**	**DIP8 (L3)**	**DIP8 (L2)**	**SDIP6 (L)**	**SDIP6 (L2)**	**SDIP8 (L)**	**SDIP8 (L2)**	**SO8**
Air Distance	[mm]	7	8	7	8	7	8	7	8	4
Creepage	[mm]	7	8	7	8	7	8	7	8	4
Isolation Distance	[mm]	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
CTI	[-]	175	175	175	175	175	175	175	175	175
Isolation Voltage	[Vr.m.s.]	5000	5000	5000	5000	5000	5000	5000	5000	2500
VIORM	[Vpeak]	1130	1130	1130	1130	1130	1130	1130	1130	566
VIOTM	[Vpeak]	8000	8000	8000	8000	8000	8000	8000	8000	4000
Part Number	VDE (Option)	PS9531 PS9506 PS9513 PS9587 PS8501 PS8502	PS9531L1 PS9506L1 PS9513L1 PS9587L1 PS8501L1 PS8502L1	PS9531L3 PS9506L3 PS9513L3 PS9587L3 PS8501L3 PS8502L3	PS9531L2 PS9506L2 PS9513L2 PS9587L2 PS8501L2 PS8502L2	PS9307AL PS9331L PS9317L PS9313L PS9303L PS9309L PS9351L PS9324L PS8302L	PS9307AL2 PS9331L2 PS9317L2 PS9313L2 PS9303L2 PS9309L2 PS9351L2 PS9324L2 PS8302L2	PS9332L	PS9332L2	PS9817A-1 PS9817A-2 PS9851-1 PS9851-2 PS9821-1 PS9821-2 PS9822-1 PS9822-2

Package		DIP4			DIP4 (L1)		DIP4 (L)			DIP4 (L2)		LSOP
Structure												
Air Distance	[mm]	7	7	7	8	7	7	7	7	8	7	8
Creepage	[mm]	7	7	7	8	7	7	7	7	8	7	8
Isolation Distance	[mm]	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4
CTI	[-]	175	175	175	175	175	175	175	175	175	175	175
Isolation Voltage	[Vr.m.s.]	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
VIORM	[Vpeak]	890	890	–	1130	890	890	890	–	1130	890	1130
VIOTM	[Vpeak]	8000	8000	–	8000	8000	8000	8000	–	8000	8000	8000
Part Number	VDE (Option)	PS2561D-1 PS2533-1 PS2535-1 PS2565-1	PS2514-1		PS2561DL1-1	PS2562L1-1 PS2565L1-1	PS2561DL-1 PS2533L-1 PS2535L-1 PS2565L-1	PS2514L-1		PS2561DL2-1	PS2562L2-1 PS2565L2-1	PS2381-1
	No VDE Option	PS2561F-1		PS2506-1			PS2561FL-1		PS2506L-1			

Package		SOP			SSOP4		SSOP16	SSOP12	Flat lead
Structure									
Air Distance	[mm]	5	5	5	4.5	5	4.5	4	4
Creepage	[mm]	5	5	5	4.5	5	4.5	4	4
Isolation Distance	[mm]	0.3	0.3	0.4	0.1	0.4	0.1	0.4	0.4
CTI	[-]	175	175	175	175	175	175	175	175
Isolation Voltage	[Vr.m.s.]	3750	2500	3750	2500	3750	2500	1500	2500
VIORM	[Vpeak]	707	707	707	705	710	705	–	570
VIOTM	[Vpeak]	6000	4000	6000	6000	6000	6000	–	4000
Part Number	VDE (Option)	PS2701A-1 PS2703-1 PS2702-1 PS2705A-1 PS2706-1 PS2711-1 PS2715-1	PS2733-1	PS2761B-1	PS2801C-1 PS2811-1 PS2833-1 PS2802-1 PS2805C-1 PS2815C-1	PS2861B-1	PS2801C-4 PS2811-4 PS2833-4 PS2802-4 PS2805C-4 PS2815C-4		PS2911-1 PS2913-1 PS2915-1 PS2933-1
	No VDE Option							PS2841-4A PS2841-4B PS2845-4A	

Internal Structure is a reference image

PACKAGE STRUCTURE 2

Package		LSS05	LSSOP
Structure			
Package		**LSS05**	**LSSOP**
Air Distance	[mm]	8.2	8.2
Creepage	[mm]	8.2	8.2
Isolation Distance	[mm]	0.15	0.15
CTI	[-]	400	400
Isolation Voltage	[Vr.m.s.]	5000	5000
VIORM	[Vpeak]	1075	1100
VIORM	[Vpeak]	8000	8000
Part Number	VDE (Option)	RV1S9207A RV1S9209A RV1S9213A RV1S9231A RV1S9260A RV1S9261A RV1S9262A	RV1S2211A RV1S2281A RV1S2285A

SAFETY STANDARD APPROVAL LIST 1

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1. •: certified, R: reinforced insulation, S: supplementary insulation, B: basic insulation
2. A special ordering number is required for VDE-conformant products.

https://www.renesas.com/products/interface-connectivity/optoelectronics/photocouplers-optocouplers-safety-standards-classification-chart-ul-csa-bsi-vde-approval

Part Number	Safety Standards									
	UL				CSA		BSI		VDE	
	UL1577 Single/Double Protection				CAN/CSA C22.2 62368-1 IEC 62368-1		BS EN 62368-1		DIN EN 60747-5-5 DIN EN IEC 60747-5-5	
	Single	Double	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN
RV1S2211A	•	•	•	–	•R	–	–	–	•	–
RV1S2281A	•	•	•	–	•R	–	–	–	•	–
RV1S2285A	•	•	•	–	•R	–	–	–	•	–
PS2381-1	•	•	•	–	•R	–	–	–	•	–
PS2506-1, PS2506L-1	•	•	•	–	–	–	–	–	–	–
PS2514-1, PS2514L-1	•	•	•	•	•B/R	•B/R	–	–	•	•
PS2533-1, PS2533L-1	•	•	•	–	•R	–	•R	–	•	–
PS2535-1, PS2535L-1	•	•	•	–	–	–	•R	–	•	–
PS2561D-1, PS2561DL-1 PS2561DL1-1, PS2561DL2-1	•	•	•	•	•R	•R	•R	•R	•	•
PS2561F-1, PS2561FL-1	•	•	•	•	–	–	–	–	–	–
PS2562-1, PS2562L-1 PS2562L1-1, PS2562L2-1	•	•	•	–	•R	–	•R	–	•	–
PS2565-1, PS2565L-1 PS2565L1-1, PS2565L2-1	•	•	•	•	•R	•R	•R	•R	•	•
PS2701A-1	•	–	•	•	•B/S	•B/S	•B/S	•B/S	•	•
PS2702-1	•	–	•	•	•B/S	•B/S	•B/S	•B/S	•	•
PS2703-1	•	–	•	•	•B/S	•B/S	•B/S	•B/S	•	•
PS2705A-1	•	–	•	•	•B/S	•B/S	–	–	•	•
PS2706-1	•	–	•	–	•B/S	–	•B/S	–	•	–
PS2711-1	•	–	•	–	•B/S	–	–	–	•	–
PS2715-1	•	–	•	–	•B/S	–	–	–	•	–
PS2733-1	•	–	•	–	•B/S	–	•B/S	–	•	–
PS2761B-1	•	•	•	•	•R	•R	•R	•R	•	•
PS2801C-1	•	–	•	•	•B	•B	•B/S	•B/S	•	•
PS2801C-4	•	–	•	–	•B	–	–	–	•	–
PS2802-1, -4	•	–	•	–	•B	–	•B/S	–	•	–
PS2805C-1	•	–	•	•	•B	•B	•B/S	•B/S	•	•
PS2805C-4	•	–	•	–	•B	–	–	–	•	–
PS2811-1	•	–	•	•	•B	•B	–	–	•	•
PS2811-4	•	–	•	–	•B	–	–	–	•	–
PS2815-1	•	–	•	•	•B	•B	–	–	•	•
PS2815-4	•	–	•	–	•B	–	–	–	•	–
PS2833-1	•	–	•	–	•B	–	–	–	•	–
PS2833-4	•	–	•	–	•B	–	–	–	•	–
PS2841-4A, -4B	•	–	•	–	–	–	–	–	–	–
PS2845-4A	•	–	•	–	–	–	–	–	–	–
PS2861B-1	•	–	•	•	•R	•R	•R	•R	•	•
PS2911-1	•	–	•	–	–	–	•S	–	•	–
PS2913-1	•	–	•	–	–	–	•S	–	•	–
PS2915-1	•	–	•	–	–	–	•S	–	•	–
PS2933-1	•	–	•	–	–	–	•S	–	•	–
PS8101	•	–	•	–	•B	–	–	–	•	–
PS8302L, PS8302L2	•	•	•	–	•R	–	–	–	•	–
PS8352AL2	•	•	•	–	•R	–	–	–	•	–

SAFETY STANDARD APPROVAL LIST 2

1. •: certified, R: reinforced insulation, S: supplementary insulation, B: basic insulation
2. A special ordering number is required for VDE-conformant products.

Part Number	Safety Standards									
	UL				CSA		BSI		VDE	
	UL1577 Single/Double Protection				CAN/CSA C22.2 62368-1 IEC 62368-1		BS EN 62368-1		DIN EN 60747-5-5 DIN EN IEC 60747-5-5	
	Single	Double	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN
PS8501, PS8501L1 PS8501L2, PS8501L3	•	•	•	–	•R	–	•R	–	•	–
PS8502, PS8502L1 PS8502L2, PS8502L3	•	•	•	–	•R	–	•R	–	•	–
PS8551AL4	•	•	•	–	•R	–	–	–	•	–
PS8802-1, -2	•	–	•	–	•B	–	–	–	•	–
PS8902	•	•	•	–	•R	–	–	–	•	–
PS9001	•	•	•	–	•R	–	–	–	•	–
PS9009	•	•	•	–	•R	–	–	–	•	–
PS9013	•	•	•	–	•R	–	–	–	•	–
PS9031	•	•	•	–	•R	–	–	–	•	–
RV1S9060A	•	•	•	–	•R	–	–	–	•	–
RV1S9061A	•	•	•	–	•R	–	–	–	•	–
RV1S9062A	•	•	•	–	•R	–	–	–	•	–
PS9113	•	–	•	–	•B	–	–	–	•	–
PS9117A	•	–	•	–	•B	–	–	–	•	–
PS9122	•	–	•	–	–	–	–	–	•	–
PS9123	•	–	•	–	•B	–	–	–	•	–
PS9124	•	–	•	–	•B	–	–	–	•	–
PS9151	•	–	•	–	–	–	–	–	•	–
RV1S9160A	•	•	•	–	•B	–	–	–	•	–
RV1S9161A	•	•	•	–	•B	–	–	–	•	–
RV1S9162A	•	•	•	–	•B	–	–	–	•	–
RV1S9207A	•	•	•	–	•R	–	–	–	•	–
RV1S9209A	•	•	•	–	•R	–	–	–	•	–
RV1S9213A	•	•	•	–	•R	–	–	–	•	–
RV1S9231A	•	•	•	–	•R	–	–	–	•	–
RV1S9260A	•	•	•	–	•R	–	–	–	•	–
RV1S9261A	•	•	•	–	•R	–	–	–	•	–
RV1S9262A	•	•	•	–	•R	–	–	–	•	–
PS9303L, PS9303L2	•	•	•	–	•R	–	–	–	•	–
PS9307AL, PS9307AL2	•	•	•	–	•R	–	–	–	•	–
PS9309L, PS9309L2	•	•	•	–	•R	–	–	–	•	–
PS9313L, PS9313L2	•	•	•	–	•R	–	–	–	•	–
PS9317L, PS9317L2	•	•	•	–	•R	–	–	–	•	–
PS9324L, PS9324L2	•	•	•	–	•R	–	–	–	•	–
PS9331L, PS9331L2	•	•	•	–	•R	–	–	–	•	–
PS9332L, PS9332L2	•	•	•	–	•R	–	–	–	•	–
PS9351L, PS9351L2	•	•	•	–	•R	–	–	–	•	–
PS9352AL2	•	•	•	–	•R	–	–	–	•	–
RV1S9353A	•	•	•	–	•R	–	–	–	•	–
PS9402	•	•	•	–	•R	–	–	–	•	–
PS9506, PS9506L1 PS9506L2, PS9506L3	•	•	•	–	•R	–	–	–	•	–
PS9513, PS9513L1 PS9513L2, PS9513L3	•	•	•	–	•R	–	•R	–	•	–

SAFETY STANDARD APPROVAL LIST 3

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Part Number	Safety Standards									
	UL				CSA		BSI		VDE	
	UL1577 Single/Double Protection				CAN/CSA C22.2 62368-1 IEC 62368-1		BS EN 62368-1		DIN EN 60747-5-5 DIN EN IEC 60747-5-5	
	Single	Double	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN
PS9531, PS9531L1 PS9531L2, PS9531L3	•	•	•	–	•R	–	–	–	•	–
PS9551AL4	•	•	•	–	•R	–	–	–	•	–
PS9587, PS9587L1 PS9587L2, PS9587L3	•	•	•	–	•R	–	•R	–	•	–
PS9817A-1, -2	•	–	•	–	•B	–	–	–	•	–
PS9821-1, -2	•	–	•	–	•B	–	–	–	•	–
PS9822-1, -2	•	–	•	–	–	–	–	–	•	–
PS9851-1, -2	•	–	•	–	–	–	–	–	•	–
PS9905	•	•	•	–	•R	–	–	–	•	–
PS9924	•	•	•	–	•R	–	–	–	•	–
RV1S9960A	•	•	•	–	•R	–	–	–	•	–

SAFETY STANDARD APPROVAL LIST 4

1. •: certified, R: reinforced insulation, S: supplementary insulation, B: basic insulation

Part Number	Safety Standards									
	SEMKO		NEMKO		DEMKO		FIMKO		CQC	
	EN IEC 62368 1		EN IEC 62368-1		EN IEC 62368-1		EN IEC 62368-1		GB8898:2011 (IEC 60065:2001+A1:2005), GB4943.1-2011 (IEC 60950-1:2005)	
	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN
PS2381-1	•R	–	–	–	–	–	–	–	•R	–
PS2506-1, PS2506L-1	–	–	–	–	–	–	–	–	–	–
PS2514-1, PS2514L-1	–	–	–	–	–	–	–	–	•B	•R
PS2533-1, PS2533L-1	•R	–	•R	–	•R	–	•R	–	–	–
PS2535-1, PS2535L-1	–	–	–	–	–	–	–	–	–	–
PS2561D-1, PS2561DL-1 PS2561DL1-1, PS2561DL2-1	•R	•R	•R	•R	•R	•R	•R	•R	•R	•R
PS2561F-1, PS2561FL-1	–	–	–	–	–	–	–	–	–	–
PS2562-1, PS2562L-1 PS2562L1-1, PS2562L2-1	•R	–	•R	–	•R	–	•R	–	–	–
PS2565-1, PS2565L-1 PS2565L1-1, PS2565L2-1	•R	•R	•R	•R	•R	•R	•R	•R	–	–
PS2701A-1	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	–	–
PS2702-1	–	–	–	–	–	–	–	–	–	–
PS2703-1	–	–	–	–	–	–	–	–	–	–
PS2705-1	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	•B/S	–	–
PS2706-1	–	–	–	–	–	–	–	–	–	–
PS2711-1	–	–	–	–	–	–	–	–	–	–
PS2715-1	–	–	–	–	–	–	–	–	–	–
PS2733-1	–	–	–	–	–	–	–	–	–	–
PS2761B-1	•R	•R	•R	•R	•R	•R	•R	•R	•R*	•R
PS2801C-1	–	–	–	–	–	–	–	–	–	–
PS2801C-4	–	–	–	–	–	–	–	–	–	–
PS2802-1, -4	–	–	–	–	–	–	–	–	–	–
PS2805C-1	–	–	–	–	–	–	–	–	–	–
PS2805C-4	–	–	–	–	–	–	–	–	–	–
PS2811-1	–	–	–	–	–	–	–	–	–	–
PS2811-4	–	–	–	–	–	–	–	–	–	–
PS2815-1	–	–	–	–	–	–	–	–	–	–
PS2815-4	–	–	–	–	–	–	–	–	–	–
PS2833-1	–	–	–	–	–	–	–	–	–	–
PS2833-4	–	–	–	–	–	–	–	–	–	–
PS2841-4A, -4B	–	–	–	–	–	–	–	–	–	–
PS2845-4A	–	–	–	–	–	–	–	–	–	–
PS2861B-1	•R	•R	•R	•R	•R	•R	•R	•R	•R*	•R
PS2911-1	–	–	–	–	–	–	–	–	–	–
PS2913-1	–	–	–	–	–	–	–	–	–	–
PS2915-1	–	–	–	–	–	–	–	–	–	–
PS2933-1	–	–	–	–	–	–	–	–	–	–
PS8101	–	–	–	–	–	–	–	–	–	–
PS8302L, PS8302L2	•R	–	–	–	–	–	–	–	–	–
PS8501, PS8501L1 PS8501L2, PS8501L3	•R	–	•R	–	•R	–	•R	–	–	–
PS8502, PS8502L1 PS8502L2, PS8502L3	•R	–	•R	–	•R	–	•R	–	–	–
PS8551AL4	•R	–	–	–	–	–	–	–	–	–

SAFETY STANDARD APPROVAL LIST 5

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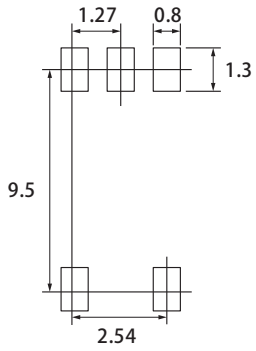
Part Number	Safety Standards									
	SEMKO		NEMKO		DEMKO		FIMKO		CQC	
	EN IEC 62368 1		EN IEC 62368-1		EN IEC 62368-1		EN IEC 62368-1		GB8898:2011 (IEC 60065:2001+A1:2005), GB4943.1-2011 (IEC 60950-1:2005)	
	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN	Assembly in JAPAN	Assembly in TAIWAN
PS8802-1, -2	–	–	–	–	–	–	–	–	–	–
PS9113	–	–	–	–	–	–	–	–	–	–
PS9117A	–	–	–	–	–	–	–	–	–	–
PS9122	–	–	–	–	–	–	–	–	–	–
PS9123	–	–	–	–	–	–	–	–	–	–
PS9124	–	–	–	–	–	–	–	–	–	–
PS9151	–	–	–	–	–	–	–	–	–	–
PS9303L, PS9303L2	–	–	–	–	–	–	–	–	–	–
PS9307AL, PS9307AL2	•R	–	–	–	–	–	–	–	–	–
PS9309L, PS9309L2	•R	–	–	–	–	–	–	–	–	–
PS9313L, PS9313L2	•R	–	–	–	–	–	–	–	–	–
PS9317L, PS9317L2	•R	–	–	–	–	–	–	–	–	–
PS9324L, PS9324L2	•R	–	–	–	–	–	–	–	–	–
PS9331L, PS9331L2	•R	–	–	–	–	–	–	–	–	–
PS9332L, PS9332L2	•R	–	–	–	–	–	–	–	–	–
PS9351L, PS9351L2	–	–	–	–	–	–	–	–	–	–
PS9402	–	–	–	–	–	–	–	–	–	–
PS9506, PS9506L1 PS9506L2, PS9506L3	•R	–	–	–	–	–	–	–	–	–
PS9513, PS9513L1 PS9513L2, PS9513L3	•R	–	•R	–	•R	–	•R	–	–	–
PS9531, PS9531L1 PS9531L2, PS9531L3	•R	–	–	–	–	–	–	–	–	–
PS9551AL4	•R	–	–	–	–	–	–	–	–	–
PS9587, PS9587L1 PS9587L2, PS9587L3	•R	–	•R	–	•R	–	•R	–	–	–
PS9817A-1, -2	–	–	–	–	–	–	–	–	–	–
PS9821-1, -2	–	–	–	–	–	–	–	–	–	–
PS9822-1, -2	–	–	–	–	–	–	–	–	–	–
PS9851-1, -2	–	–	–	–	–	–	–	–	–	–
PS9905	•R	–	–	–	–	–	–	–	–	–
PS9924	•R	–	–	–	–	–	–	–	–	–

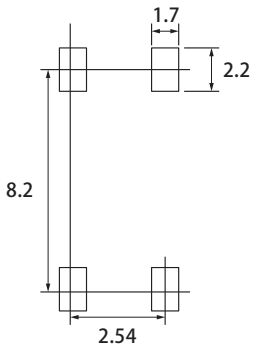
RECOMMENDED LAND PATTERN

Unit : mm

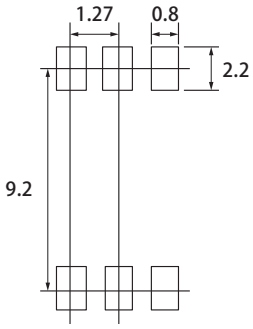
LSO5



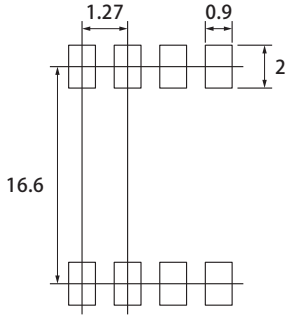
DIP4 (L)



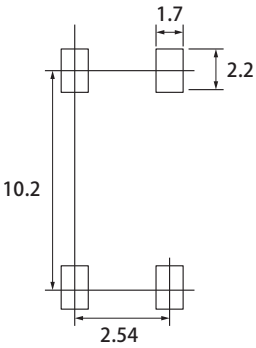
SDIP6



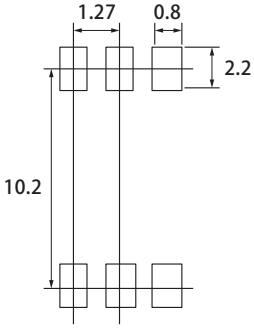
LSDIP8



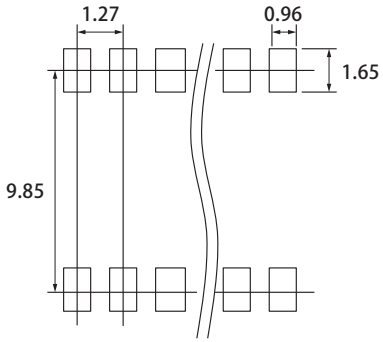
DIP4 (L2)



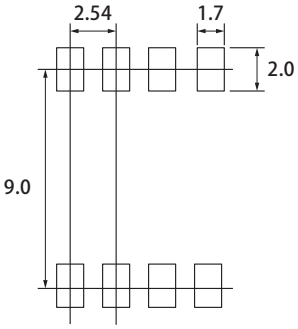
SDIP6 (L2)



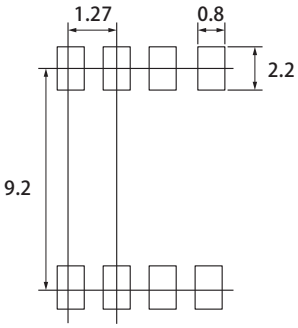
SO16



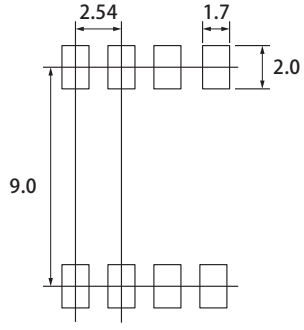
DIP8 (L3)



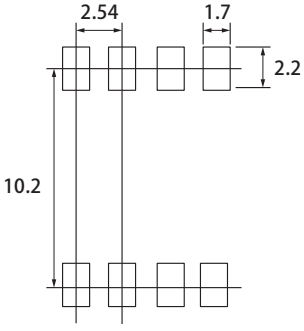
SDIP8 (L)



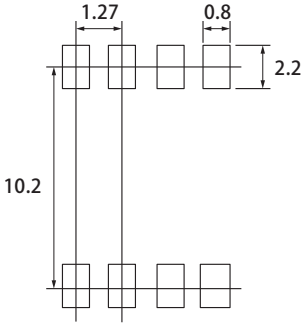
DIP8 (L4)



DIP8 (L2)

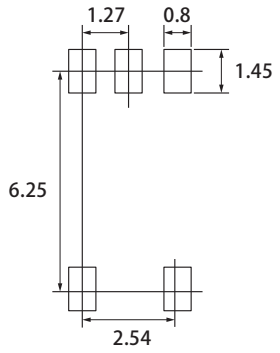


SDIP8 (L2)

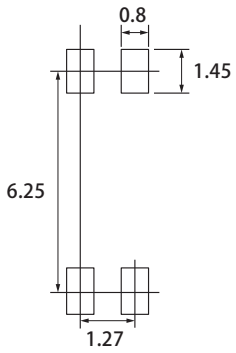


Unit : mm

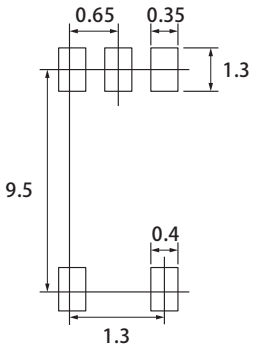
SO5



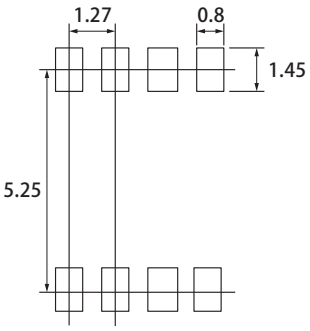
SSOP4



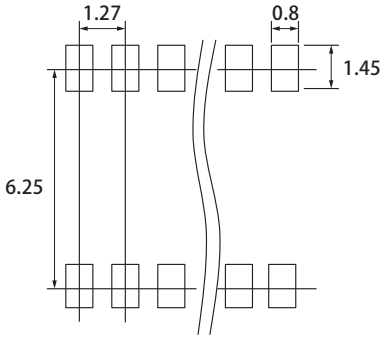
LSSO5



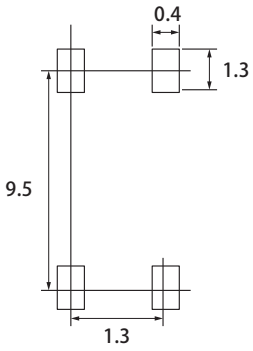
SO8



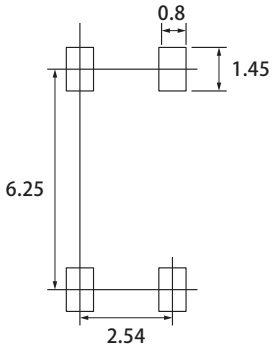
SSOP16



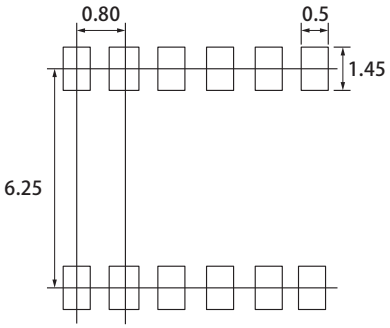
LSSOP



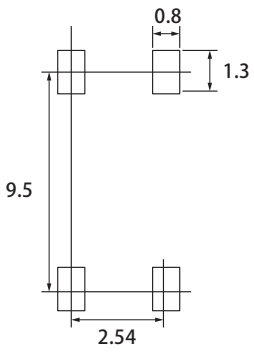
SOP



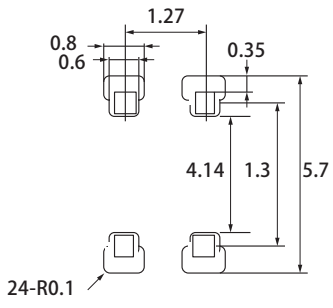
SSOP12



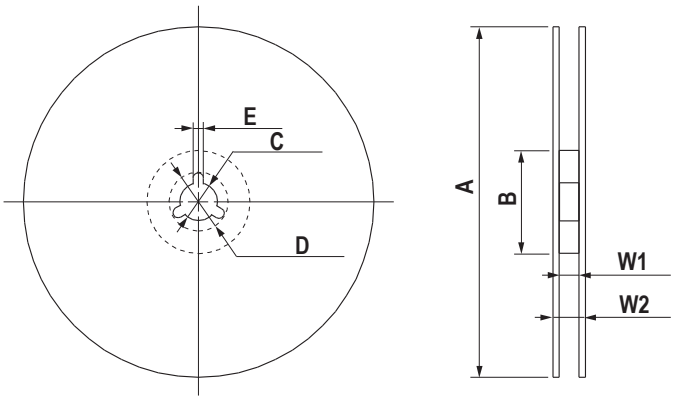
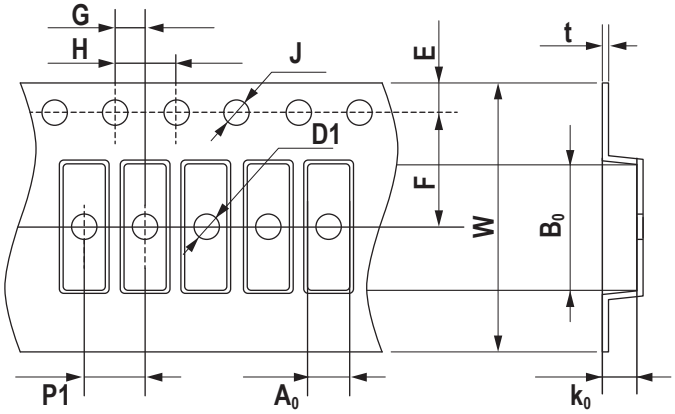
LSOP



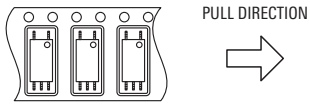
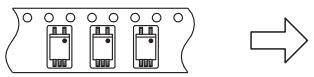
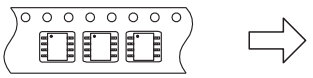
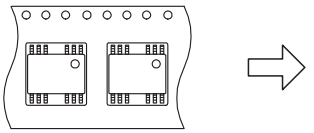
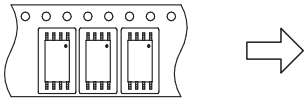
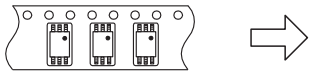
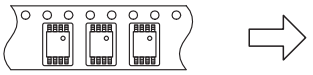
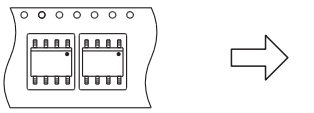
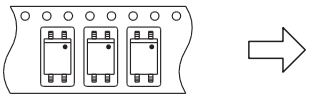
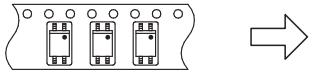
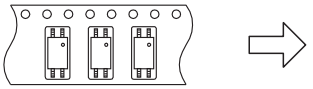
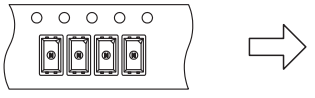
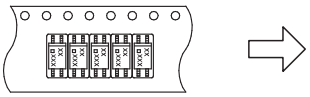
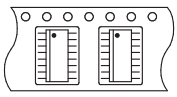
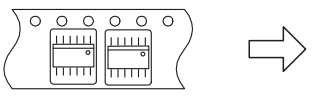
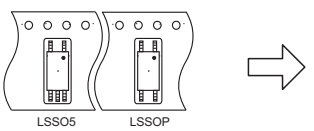
Flat lead



TAPING & REEL SPECIFICATIONS

Reel	Tape
	 x : Number / Reel

Direction of Product Inserted in Tape

LSO5	SO5	SO8	SO16
			
LSDIP	**SDIP6 (L,L2)**	**SDIP8 (L,L2)**	**DIP8 (L2,L3,L4)**
			
DIP (L,L2)	**SOP**	**LSOP**	**Flat lead**
			
SSOP4	**SSOP16**	**SSOP12**	**LSSO5 / LSSOP**
			

Reel Dimensions					
Symbol	Unit	Tape Width (W)			
		12 mm	16 mm	16 mm	24 mm
A	mm	Ø330±2.0	Ø330±2.0	Ø330±2.0	Ø330±2.0
W1	mm	13.4±1.0	17.4±1.0	17.4±1.0	25.4±1.0
W2	mm	17.4±1.0	21.4±1.0	21.4±1.0	29.4±1.0
B	mm	Ø100±1.0	Ø100±1.0	Ø80±1.0	Ø100±1.0
C	mm	Ø13.0±0.2	Ø13.0±0.2	Ø13.0±0.2	Ø13.0±0.2
D	mm	Ø21.0±0.8	Ø21.0±0.8	Ø21.0±0.8	Ø21.0±0.8
E	mm	2.0±0.5	2.0±0.5	2.0±0.5	2.0±0.5
Package (IC output coupler)		SO5 SO8	DIP8 (L3) DIP8 (L4) SDIP6 (L) SDIP8 (L) LSO5 LSSO5		DIP8 (L2) SDIP6 (L2) SDIP8 (L2) LSDIP8 SO16
Package (Tr. output coupler)		SOP Flat leads SSOP12	DIP4 (L) LSOP LSSOP SSOP4	SSOP16	DIP4 (L2)

Tape Dimensions (IC Output Coupler)														
Symbol	Unit	SO5	SO8	DIP8 (L3)	DIP8 (L4)	SDIP6 (L)	SDIP8 (L)	LSO5	LSSO5	DIP8 (L2)	SDIP6 (L2)	SDIP8 (L2)	LSDIP8	SO16
A0	mm	3.9±0.1	6.4±0.1	10.3±0.1	9.95±0.1	5.08±0.1	6.35±0.1	4.3±0.1	2.85±0.1	10.4±0.1	5.08±0.1	6.35±0.1	7.2±0.1	10.9±0.1
B0	mm	7.4±0.1	5.56±0.1	10.4±0.1	10.55±0.1	10.2±0.1	10.2±0.1	10.7±0.1	10.7±0.1	12.5±0.1	12.0±0.1	12.0±0.1	17.2±0.1	10.8±0.1
K0	mm	3.0±0.1	3.6±0.1	4.75±0.1	4.2±0.1	4.05±0.1	4.05±0.1	2.3±0.1	2.1±0.1	4.1±0.1	4.05±0.1	4.05±0.1	4.05±0.1	3.8±0.1
P1	mm	8.0±0.1	8.0±0.1	12.0±0.1	12.0±0.1	8.0±0.1	8.0±0.1	8.0±0.1	4.0±0.1	12.0±0.1	8.0±0.1	8.0±0.1	12.0±0.1	16.0±0.1
D1	mm	Ø1.55±0.1	Ø1.7±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø2.05±0.05	Ø2.05±0.1	Ø2.05±0.1	Ø2.0±0.2	Ø1.55±0.1
J	mm	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0
H	mm	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
E	mm	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
G	mm	2.0±0.05	2.0±0.05	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1
F	mm	5.5±0.1	5.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	11.5±0.1	11.5±0.1	11.5±0.1	11.5±0.1	11.5±0.1
W	mm	12.0±0.2	12.0±0.2	16.0±0.3	16.0±0.3	16.0±0.3	16.0±0.3	16.0±0.3	16.0±0.3	24.0±0.3	24.0±0.3	24.0±0.3	24.0±0.3	24.0±0.3
t	mm	0.3±0.05	0.3	0.35	0.3	0.35	0.35	0.3	0.3	0.3±0.05	0.35	0.35	0.35	0.4
x	pcs	2500	1500	1000	1000	2000	2000	3000	3500	1000	2000	2000	1000	850

Tape Dimensions (Tr. Output Coupler)									
Symbol	Unit	SOP	Flat Leads	SSOP12	DIP4 (L)	LSOP	LSSOP	SSOP4	SSOP16	DIP4 (L2)
A0	mm	4.4±0.1	2.9±0.1	6.0±0.1	5.3±0.1	4.3±0.1	2.85±0.1	2.85±0.1	8.3±0.1	5.3±0.1
B0	mm	7.4±0.1	5.3±0.1	7.4±0.1	10.3±0.1	10.7±0.1	10.7±0.1	7.55±0.1	10.7±0.1	12.5±0.1
K0	mm	2.4±0.1	2.4±0.1	2.85±0.1	4.0±0.1	2.3±0.1	2.1±0.1	2.3±0.1	2.3±0.1	4.05±0.1
P1	mm	8.0±0.1	4.0±0.1	8.0±0.1	8.0±0.1	8.0±0.1	4.0±0.1	4.0±0.1	12.0±0.1	8.0±0.1
D1	mm	Ø1.55±0.1	Ø1.55±0.05	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø1.55±0.1	Ø2.05±0.1
J	mm	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0	Ø1.5+0.1/-0
H	mm	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
E	mm	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
G	mm	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1
F	mm	5.5±0.05	5.5±0.05	5.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	7.5±0.1	11.5±0.1
W	mm	12.0±0.2	12.0±0.2	12.0±0.2	16.0±0.3	16.0±0.3	16.0±0.3	16.0±0.3	16.0±0.3	24.0±0.3
t	mm	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.25	0.4
x	pcs	3500	3500	2500	2000	3000	3500	3500	2500	1000

LABEL PRINT EXAMPLES

OUTER PACKING BOX

REAL

LABEL on OUTER PACKING BOX

Assembly in JAPAN

Marking of Safety Standards

D/N PS2861B1YVF3A/0118B/R2
SPN PS2861B-1Y-V-F3-A 002G116NR2
CTR rank

MC:JPJPJP
MADE IN JAPAN

PN PS2861B-1-V-F3
PID 124446105V-001
QTY 7000 Quantity (ex. 2reels)
PCD 0000184865
T/C 1402 123QA4567
S.LOT YL2209K801

2014/01/10

Assembly in TAIWAN

Marking of Safety Standards

D/N PS2861B1YVF3A/0118B/R2
SPN PS2861B-1Y-V-F3-A 002G116NR2
CTR rank

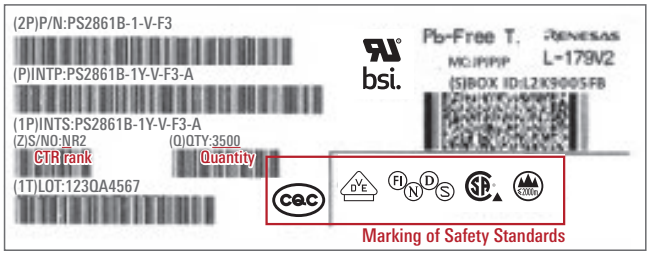
MC:JPTWTW
ASSEMBLED IN TAIWAN
FROM WAFERS OF JAPAN

PN PS2861B-1-V-F3
PID 124446105V-001
QTY 7000 Quantity (ex. 2reels)
PCD 0000184865
T/C 1402 123WB4567
S.LOT YL2209K801

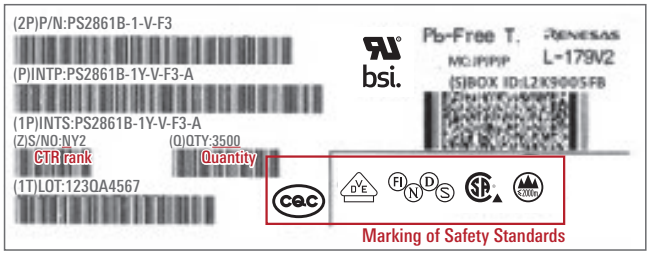
2014/01/10

LABEL on TAPING REEL

Assembly in JAPAN



Assembly in TAIWAN



MEMO

PART NUMBER GUIDE

Part number guide = P/N starting with "RV1S" =

R V 1 S 2 2 1 1 A C CSP – 1 0 Y V # K C 0 /L

Photocoupler

Model Number

Version (A→B→)*)

Internal Code

Channel (1/2/4)

■ Output Form

2	Tr. Output
8	IC Output / Analog
9	IC Output / Digital

■ Package

	Tr. Output	IC Output
0	-	LSO5
1	-	SO5
2	LSSOP4	LSSO5
3	LSOP4	SDIP6/8
4	-	SO16
5	DIP4	DIP8
6	-	-
7	SOP4	-
8	SSOP4/12/16	SO8
9	Flat leads	LSDIP8

■ Quality Identifier

A	High Quality Level1: Q1A
B	High Quality Level2: Q1B
C	Standard Level1 : Q2A
D	Standard Level2 : Q2B
E	Standard Level3 : Q2C

■ Package Group

CDD	DIP type
CSP	SOP/SSOP type
CNS	SON type

■ Lead Bending

0	Gull Wing
D	Pin Insertion type
F	SON / Flat Lead

■ Lead Bending only for DIP type Package

L	7mm Creepage SMT	(for DIP/SDIP)
1	8mm Creepage Insertion type	(for DIP/SDIP)
2	8mm Creepage SMT	(for DIP/SDIP)
3	7mm Creepage SMT	(for DIP8)
4	8mm Creepage SMT	(for DIP8)

■ Halogen Free

0	Contains Halogen
Y	Halogen Free

■ Safety Standard

0	No Standard
C	With Standard
V	VDE Option

■ Packing Type

K	Embossed Taping/reel
S	Cut Tape : for sample

■ Pb Free

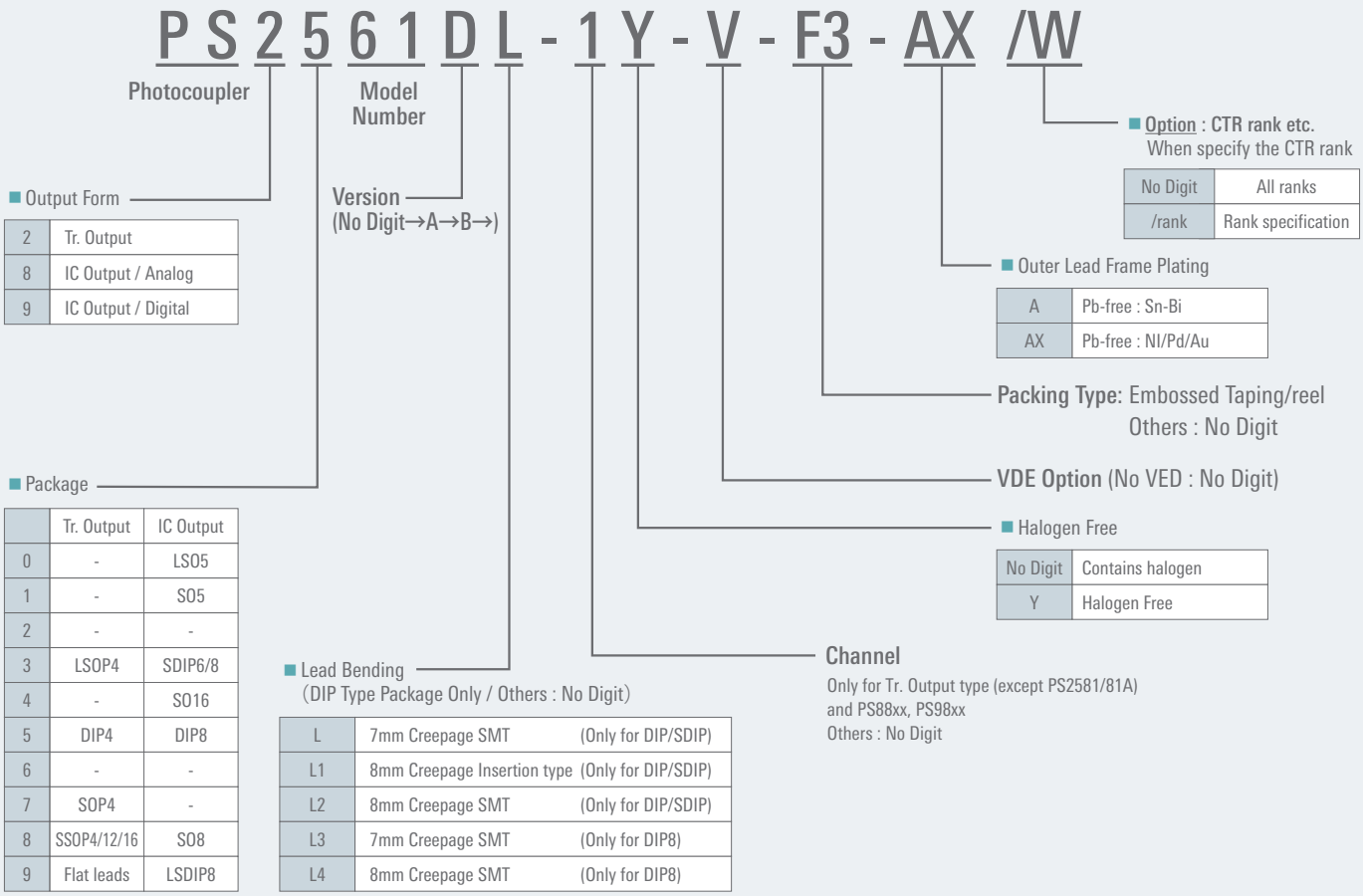
C	Pb-free

■ Option : CTR rank etc.
When specify the CTR rank

No Digit	All ranks
/rank	Rank specification

*) P/N with "Q" at "Version" indicates products for automotive use. In this case, there are digits that do not follow the definition on this page.

Part number guide = P/N starting with "PS" =



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