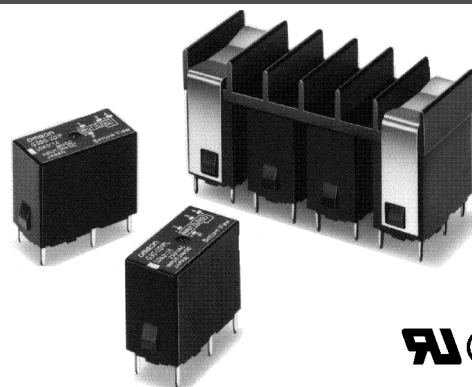


Solid State Relay G3S/G3SD

Ultra-small Relay Breaks up to 1 A

- Ultra-small, dual in-line package (DIP) SSR.
- Terminals compatible with G6B Electromagnetic Relay's. Mix with G6Bs as the application requires.
- Close side-by-side mounting possible. In addition, heat sink dedicated to this mounting style also available.
- Both AC- and DC-load versions available.
- High isolation of 2,500 VAC between input and output freeing inputs from noise surge generated in the load.
- Approved by UL and CSA.



Ordering Information

To order: Select the part number and add the desired input voltage (Ex: G3SD-Z01P-PD-US DC12)

Isolation	Zero cross function	Indicator	Rated output load (applicable output load)	Rated input voltage	Model
Phototriac	No	No	1 A at 100 to 240 VAC (1 A at 75 to 264 VAC) (see note 1)	5 VDC	G3S-201PL-US
				12 VDC	
				24 VDC	
			1.2 A at 100 to 240 VAC (1.2 A at 75 to 264 VAC) (see note 1)	5 VDC	G3S-201PL-PD-US
				12 VDC	
				24 VDC	
Photocoupler			1 A at 4 to 24 VDC (1 A at 3 to 26 VDC) (see note 2)	5 VDC	G3SD-Z01P-US
				12 VDC	
				24 VDC	
			1.1 A at 4 to 24 VDC (1.1 A at 3 to 26 VDC) (see note 2)	5 VDC	G3SD-Z01P-PD-US
				12 VDC	
				24 VDC	

- Note:** 1. Product is labelled "250 VAC"
2. Product is labelled "24 VDC"

■ Accessories (Order Separately)

Heat Sink

Heat Sink	Y92B-S08N
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See *Dimension* for details.

Connecting Socket

Connecting socket	P6D-04P
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See *Dimensions* for details.

Specifications

■ Ratings (at an Ambient Temperature of 25°C)

Input

Rated voltage	Operating voltage	Impedance		Voltage level	
		G3S-201PL/201PL-PD	G3S-Z01PL/Z01P-PD	Must operate	Must release
5VDC	4 to 6 VDC	450 $\Omega \pm 20\%$	630 $\Omega \pm 20\%$	4 VDC max.	1 VDC min.
12 VDC	9.6 to 14.4 VDC	1.1 k $\Omega \pm 20\%$	1.5 k $\Omega \pm 20\%$	9.6 VDC max.	
24 VDC	19.2 to 28.8 VDC	2.2 k $\Omega \pm 20\%$	2.8 k $\Omega \pm 20\%$	19.2 VDC max.	

Output

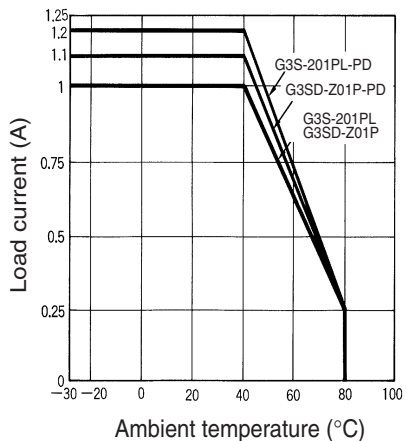
Model	Applicable load			
	Rated load voltage	Rated load voltage range	Load current	Inrush current
G3S-201PL	100 to 240 VAC	75 to 264 VAC	0.1 to 1A	15 A (60 Hz, 1 cycle)
G3S-201PL-PD			0.1 to 1.2 A	
G3SD-Z01PL	4 to 24 VDC	3 to 26 VDC	0.01 to 1A	3 A (10 ms)
G3SD-Z01PL-PD			0.01 to 1.1 A	

■ Characteristics

Item	G3S-201PL/201PL-PD	G3SD-Z01PL/Z01P-PD
Operate time	1 ms max.	
Release time	1/2 of load power source cycle + 1 ms. max.	1 ms. max.
Output ON voltage drop	1.6 V (RMS) max.	1.5 V max.
Leakage current	2 mA max.	0.1 mA max. (at 26 VDC)
Insulation resistance	100 M Ω min. (500 VDC)	
Dielectric strength	2,500 VAC, 50/60 Hz for 1 min	
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude	
Shock resistance	Malfunction: 1,000 m/s ²	
Ambient temperature	Operating: -30°C to 80°C (with no icing or condensation) Storage: -30°C to 100°C (with no icing or condensation)	
Ambient humidity	Operating: 45% to 85%	
Approved standards	UL File No. E64562/CSA File No. LR35535	
Weight	Approx. 13 g	

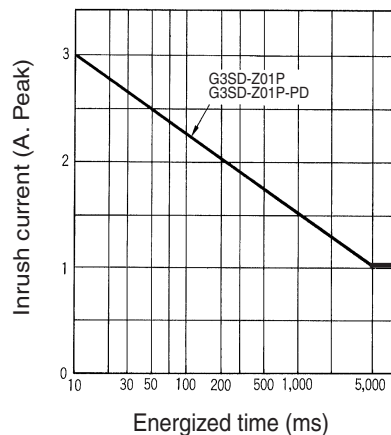
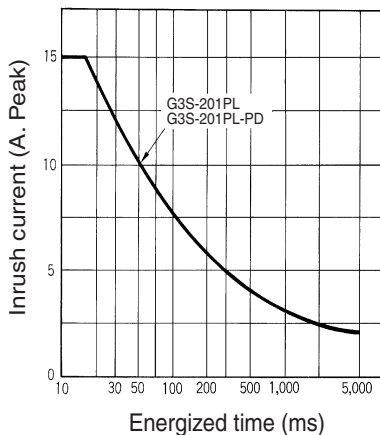
Engineering Data

Load Current vs. Ambient Temperature Characteristics



Inrush Current Resistivity

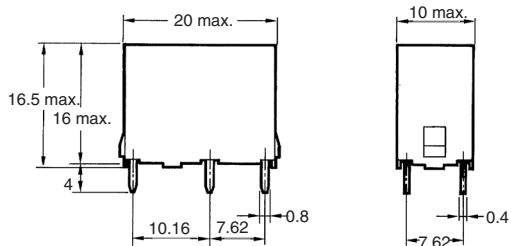
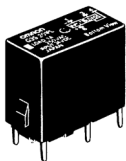
Non-repetitive (Keep the inrush current to half the rated value if it occurs repetitively.)



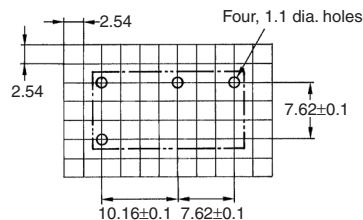
Dimensions

Note: All units are in millimeters unless otherwise indicated.

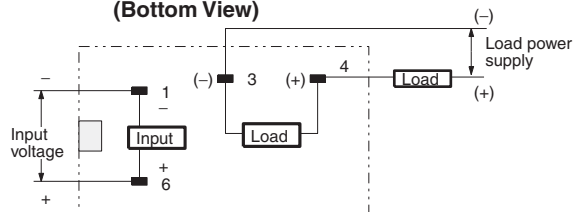
G3S/G3SD



PCB Dimensions (Bottom View)



Terminal Arrangement/ Internal Connections (Bottom View)



Note: Values in parentheses apply to the DC-load versions.



All sales are subject to Omron Electronic Components LLC standard terms and conditions of sale, which can be found at http://www.components.omron.com/components/web/webfiles.nsf/sales_terms.html

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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