Solid State Relay G3DZ

SSR Identical to the G6D in Size with a Maximum AC/DC Switching Current of 0.6 A

- Switching 0.6 A at 240 VAC or 100 VDC.
- 10-μA current leakage max. between open output terminals
- 2,500-VAC dielectric strength ensured between input and output terminals.
- Switching full- and half-wave rectified alternating currents.
- Approved by UL and CSA.





Ordering Information

To order: Select the part number and add the desired input voltage rating. (e.g., G3DZ-2R6PL DC5)

| Contact form | Insulation | Zero cross function | Indicator | Applicable output load | Rated input voltage | Model |
|--------------|-----------------------|------------------------|-----------|------------------------|---------------------|------------|
| SPST-NO | Photo-voltage coupler | No | No | 0.6 A at | 5 VDC | G3DZ-2R6PL |
| | | | | 5 to 240 VAC | 12 VDC | |
| | | | | 5 to 100 VDC | 24 VDC | |

■ Accessories (Order Separately)

See Dimensions for details.

| Connecting socket | P6D-04P |
|-------------------|---------|
|-------------------|---------|

Specifications

■ Ratings

Input

| Rated voltage | Operating voltage | Input impedance | Voltage level | |
|---------------|-------------------|-----------------|---------------|--------------|
| | | | Must operate | Must release |
| 5 VDC | 4 to 6 VDC | 830 Ω±20% | 4 VDC max. | 1 VDC min. |
| 12 VDC | 9.6 to 14.4 VDC | 2 kΩ±20% | 9.6 VDC max. | |
| 24 VDC | 19.2 to 28.8 VDC | 4 kΩ±20% | 19.2 VDC max. | |

Output

| Rated voltage | Load voltage | Load current | Inrush current |
|----------------------------|----------------------------|-----------------|----------------|
| 5 to 240 VAC, 5 to 100 VDC | 3 to 264 VAC, 3 to 125 VDC | 100 μA to 0.6 A | 6 A (ms) |

■ Characteristics

| Operate time (see note) | 6 ms max. |
|---------------------------------|----------------------------------------------------------|
| Release time (see note) | 10 ms max. |
| Output ON-resistance (see note) | 2.4Ω max. |
| Leakage current | 10 μA max. (at 125 VDC) |
| Insulation resistance | 100 MΩ min. (500 VDC) |
| Dielectric strength | 2,500 VAC, 50/60 Hz for 1 min between input and output |
| 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 85°C (with no icing or condensation) |
| | Storage: -30°C to 100°C (with no icing or condensation) |
| Approved standards | UL File No. E64562 |
| | CSA File No. LR35535 |
| Ambient humidity | Operating 45% to 85% |
| Weight | Approx. 3.1 g |

Note: These values are under the measurement conditions whereby rated voltages are applied to the input.

Engineering Data

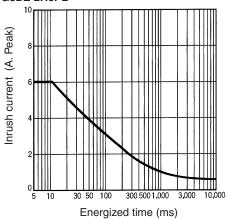
Load Current vs. Ambient Temperature Characteristics

G3DZ-2R6PL 0.8 Load current (A) 0.2 Ambient temperature (°C)

Inrush Current Resistivity

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

G3DZ-2R6PL



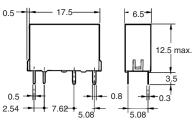
Dimensions

Note: 1. All units are in millimeters unless otherwise indicated.

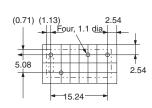
2. Orientation marks are indicated as follows:

G3DZ-2R6PL

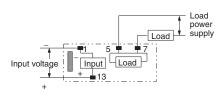




Mounting Holes (Bottom View)

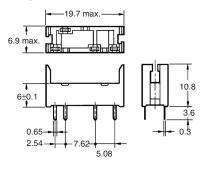


Terminal Arrangement/ **Internal Connections** (Bottom View)

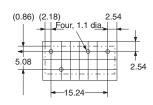


P6D-04P Connecting Socket

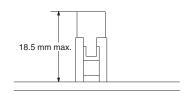




Mounting Holes (Bottom View)

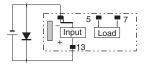


Socket Mounting Height



Precautions

If any reversed surge voltage is imposed on the input terminals, insert a diode in parallel to the input terminals as shown in the following circuit diagram and do not impose a reversed voltage value of 3 V or more.

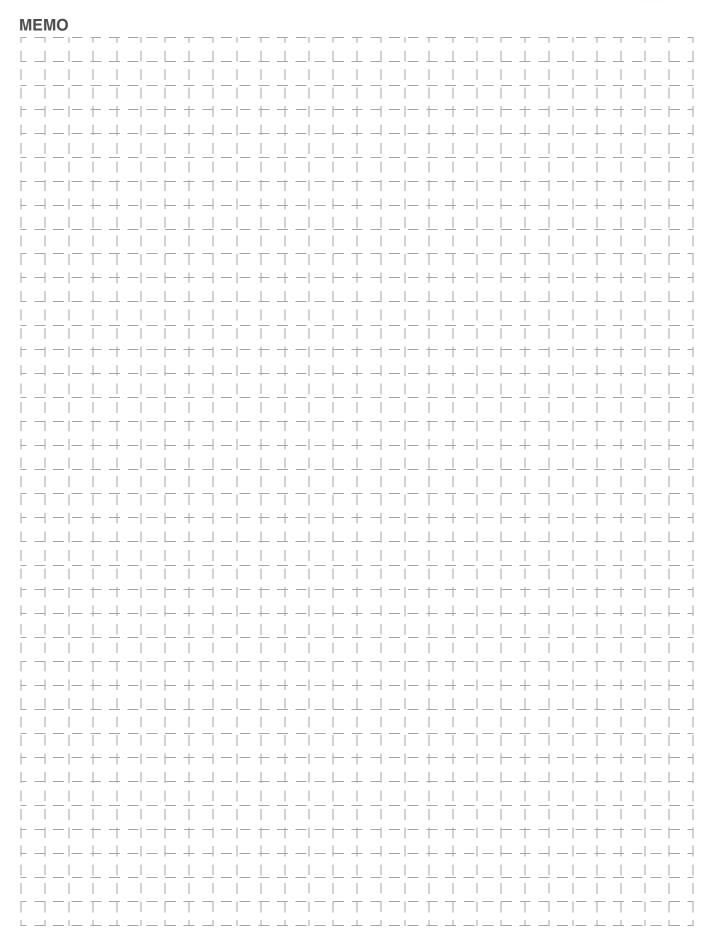


Terminals

Since terminals are made of materials with high heat conduction, complete soldering (automatic or manual) within 10 seconds at a temperature of 260°C.

When fitting with a Socket, match properly and push straight down vertically.





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