

PCB Relay G2RG

New Power Relay

- Clearance between contact terminals of the same polarity: 1.5 mm min.
- Conforms to VDE0435 (VDE approval: C250 insulation grade), UL508, CSA22.2
- Meets VDE0700 requirements for household products according to VDE0110.
- Cadmium-free contacts ensuring environment-friendly use.
- Dimensions and mounting holes same as G2R.
- Fully sealed type.
- Tracking resistance: $CTI > 250$ V.
- 10 kV impulse withstand voltage between coil and contacts.
- RoHS Compliant.



Ordering Information

To order: Select the part number and add the rated coil voltage to the part number. Example: G2RG-2A4 DC12.

Type	Contact material	Contact form	Construction	Model
Special contact gap	AgSnO	DPST-NO	Fully sealed	G2RG-2A4

Specifications

Coil Data

Item	Description	
Rated voltage	12 VDC	24 VDC
Rated current	66.6 mA	33.3 mA
Coil resistance	180 Ω	720 Ω
Must operate voltage	80% max. of rated voltage (DPST-NO)	
Must release voltage	10% min. of rated voltage	
Max. voltage	130% of rated voltage	
Power consumption	Approx. 800 mW	

Contact Data

Item	DPST-NO
Load	Resistive load ($\cos\phi = 1$)
Rated load	8 A at 250 VAC
Contact material	Silver alloy
Rated carry current	8 A
Max. switching voltage	380 VAC, 125 VDC
Max. switching current	8 A
Max. switching capacity	2,000 VA
Min. permissible load	10 mA at 5 VDC

Note: P level: $\lambda_{60} = 0.1 \times 10^{-6}$ ops

■ Characteristics

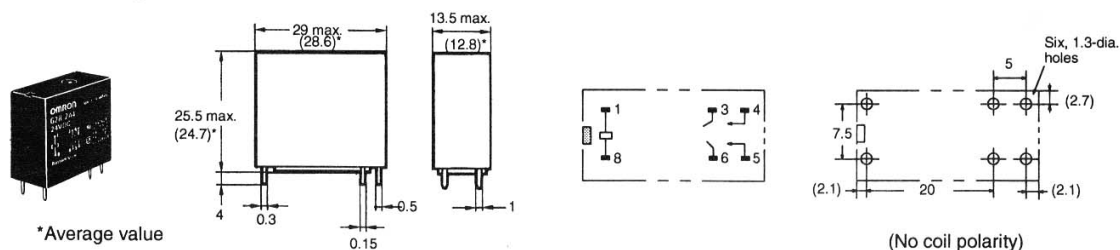
Contact resistance	100 mΩ max.
Operation time	15 ms max.
Release time	5 ms max.
Max. operating frequency	Mechanical: 18,000 operations/hr. Electrical: 1,800 operations/hr. (under rated load)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	5,000 VAC, 50/60 Hz for 1 min. between coil and contacts 3,000 VAC, 50/60 Hz for 1 min. between contacts of different polarity 1,000 VAC, 50/60 Hz for 1 min. between contacts of same polarity
Impulse withstand voltage	10,000 V (1.2 x 50 μS) between coil and contacts.
Vibration resistance	Destruction: 10 to 55 Hz, 1.5-mm double amplitude Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 1,000 m/s ² (approx. 100 G) Malfunction: 200 m/s ² when energized (approx. 20 G); 100 m/s ² when no energized (approx. 10 G)
Life expectancy	Mechanical: 1,000,000 operations min. (at 18,000 operations/hr.) Electrical: 10,000 operations min. (at 1,800 operations/hr. under rated load)
Ambient temperature	Operating: -40°C to 70°C (with no icing or condensation)
Ambient humidity	Operating: 5% to 85%
Weight	Approx. 17.2 g

Note: Values in the above table are the initial values.

Dimensions

Unit: mm (inch)

DPST-NO Relays



■ Approvals

UL508 (File No. E441643)

CSA C22.2 (No. 14) (File No. LR31928)

Model	Rating	Tested ambient	No. of operations tested
G2RG-2A4	250 VAC, 8 A, resistive	70°C	10,000

Omron Electronic Components, LLC

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