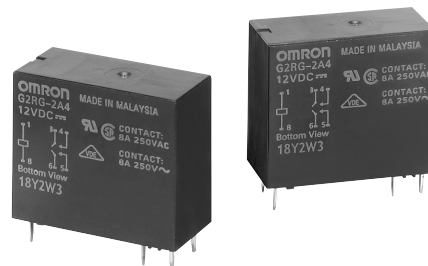


# PCB Relay G2RG

## Power Relay with 1.5mm Contact Gap

- Clearance between contact terminals of the same polarity: 1.5 mm min.
- Conforms to VDE0435 (VDE approval: C250 insulation grade). UL recognized / CSA certified.
- Meets VDE0700 requirements for household products according to VDE0110.
- Cadmium-free contacts ensuring environment-friendly use.
- Tracking resistance: CTI > 250 V.
- 10 kV impulse withstand voltage between coil and contacts.
- RoHS Compliant.



**NEW**



## 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	140% of rated voltage (at 23°C)	
Power consumption	Approx. 800 mW	

Note: 1. The rated current and coil resistance are for a coil temperature of 23°C and a tolerance of ±10%

### ■ Contact Data

Item	DPST-NO
Load	Resistive load (cosφ = 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 (See note)	10 mA at 5 VDC

Note: P level:  $\lambda_{60} = 0.1 \times 10^{-6}$  ops at a switching frequency of 120 operations/min.

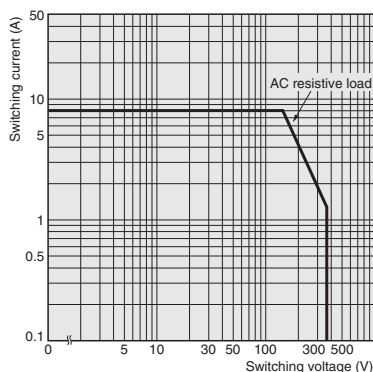
## Characteristics

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 <sup>2</sup> (approx. 100 G) Malfunction: 200 m/s <sup>2</sup> when energized (approx. 20 G); 100 m/s <sup>2</sup> 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

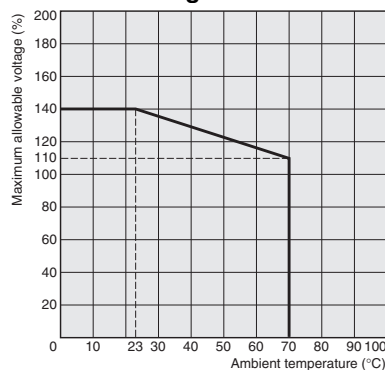
Note: Values in the above table are the initial values, measured at an ambient temperature of 23°C

## Engineering Data

Maximum Switching Capacity



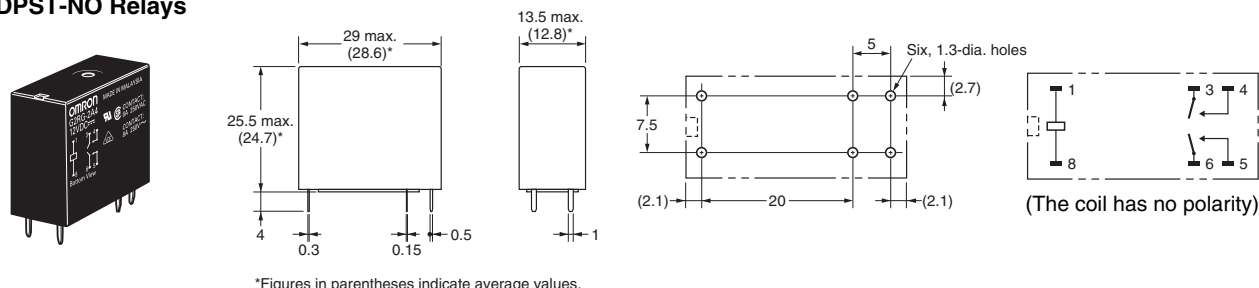
Ambient Temperature vs Maximum Allowable Voltage



## Dimensions

Unit: mm (inch)

### DPST-NO Relays



Note: The G2RG-2A4 has the same terminal arrangement as the G2R-2A4, but the switch capacity and electrical endurance are different. Confirm that correct operation is possible in the actual operating conditions before use.

## ■ Approvals

**UL Recognized (File No. E441643)**

**CSA Certified (File No. LR31928)**

Model	Contact Form	Coil Rating	Rating	Number of test operations
G2RG-2A4	DPST-NO	12 to 24 VDC	8A at 250 VAC (Resistive), 70°C	10 x10 <sup>3</sup>

**VDE0435 (Approval No. 6166)**

Model	Contact Form	Coil Rating	Rating
G2RG-2A4	DPST-NO	12, 24 VDC	250 VAC, 8 A, (resistive)

**Note:** The approved rated values for international standards are different from the individually specified characteristic values. Be sure to confirm that the required standards are satisfied before actual use.

MEMO

A large grid of dashed lines for writing notes, consisting of 20 columns and 30 rows of small squares.

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