

# 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.
- 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	

**Note:** To keep the relay engaged the battery voltage (9.5-14 volt) will be maintained across the relay coil.

### ■ Contact Data

Item	DPST-NO
Load	Resistive load ( $\cos\phi = 1$ )
Rated load	8 A at 250 VDC
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

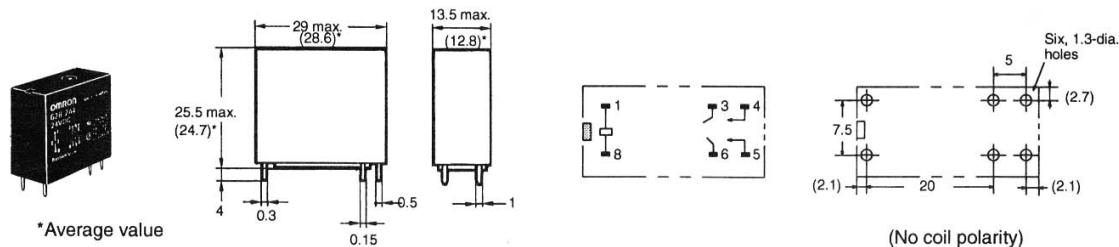
<b>Contact resistance</b>	100 mΩ max.
<b>Operation time</b>	15 ms max.
<b>Release time</b>	5 ms max.
<b>Max. operating frequency</b>	Mechanical: 18,000 operations/hr. Electrical: 1,800 operations/hr. (under rated load)
<b>Insulation resistance</b>	1,000 MΩ min. (at 500 VDC)
<b>Dielectric strength</b>	5,000 VAC, 50/60Hz for 1 min between coil and contacts 3,000 VAC, 50/60Hz for 1 min between contacts of different polarity 1,000 VAC, 50/60Hz for 1 min between contacts of same polarity
<b>Vibration resistance</b>	Destruction: 10 to 55 Hz, 1.5-mm double amplitude Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
<b>Shock resistance</b>	Destruction: 1,000 m/s <sup>2</sup> (approx. 100G) Malfunction: 200 m/s <sup>2</sup> when energized (approx. 20G); 100 m/s <sup>2</sup> when no energized (approx. 10G)
<b>Life expectancy</b>	Mechanical: 1,000,000 operations min. (at 18,000 operations/hr.) Electrical: 10,000 operations min. (at 1,800 operations/hr. under rated load)
<b>Ambient temperature</b>	Operating: -40°C to 70°C (with no icing) Storage: -40°C to 70°C (with no icing)
<b>Ambient humidity</b>	Operating: 35% to 85% Storage: 35% to 85%
<b>Weight</b>	Approx. 17g

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

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COMPONENTS LLC**

55 E. Commerce Drive, Suite B  
Schaumburg, IL 60173

**847-882-2288**

**OMRON CANADA, INC.**

885 Milner Avenue  
Toronto, Ontario M1B 5V8

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