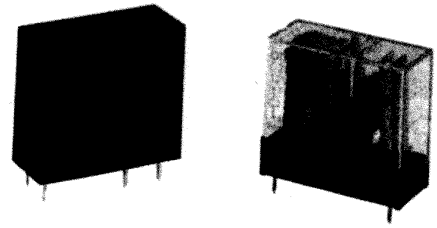


## G2R

## Power PCB Relay

### Features

- Slim-styled power relay – available in both latching and non-latching types
- Creepage distance of 7.874 mm (.31 in.) min. between coil and contact
- Single and dual-winding latching types available
- Plug-in and Quick-connect terminals available
- High-sensitivity (360mW), high capacity (16 A) and bifurcated contact types available
- Highly stable magnetic circuit for latching endurance and excellent resistance to vibration and shock
- Safety-oriented design assuring high surge resistance (15,000 V min. between coil and contact with the single-winding type; 10,000 V min. between coil and contact with the dual coil type)



### Contact Data

#### Contact ratings

##### One-pole:

*General purpose:* 10 A, 250 VAC, 30 VDC (Resistive); 7.5 A, 250 VAC, 5 A, 30 VDC (Inductive); 3 A, 120 VAC, Tungsten (TV-3); 1/3HP, 120 VAC; 1/2HP, 250 VAC; 1/2HP, 277 VAC

*High-capacity:* 16 A, 250 VAC, 30 VDC (Resistive); 8 A, 250 VAC, 30VDC (Inductive);

3 A, 120 VAC, Tungsten (TV-3); 1/3HP, 120 VAC; 1/2HP, 250 VAC

*High-sensitivity:* 5 A, 250 VAC, 30 VDC (Resistive); 2 A, 250 VAC, 3 A, 30 VDC (Inductive)

*Latching:* 5 A, 250 VAC, 30 VDC (Resistive); 3.5 A, 250 VAC, 2.5 A, 30 VDC (Inductive);

3 A, 120 VAC, Tungsten (TV-3); 1/6HP, 120 VAC; 1/2HP, 250 VAC

##### Two-pole:

*General purpose:* 5 A, 250 VAC, 30 VDC (Resistive); 2 A, 250 VAC, 3 A, 30 VDC (Inductive);

3 A, 120 VAC, Tungsten (TV-3); 1/6HP, 120 VAC; 1/3HP, 240 VAC

*High-sensitivity:* 3 A, 250 VAC, 30 VDC (Resistive); 1 A, 250 VAC, 1.5 A, 30 VDC (Inductive)

*Latching:* 3 A, 250 VAC, 30 VDC (Resistive); 1.5 A, 250 VAC, 2 A, 30 VDC (Inductive);

3 A, 120 VAC, Tungsten (TV-3); 1/6HP, 120 VAC; 1/3HP, 250 VAC

**Contact material** AgCdO

**Maximum operating voltage** 380 VAC, 125 VDC

#### Maximum operating current

##### One-pole:

*General purpose:* 10 A

*High-capacity:* 16 A

*High-sensitivity:* 5 A

*Latching:* 5 A

##### Two-pole:

*General purpose:* 5A

*High-sensitivity:* 3A

*Latching:* 3A

#### Maximum switching capacity

##### One-pole:

*General purpose, Resistive:* Unsealed – 2,500 VA, 300 W; Sealed – 2,000 VA, 240 W

*High-capacity, Resistive:* Unsealed – 4,000 VA, 480 W

*High-sensitivity, Resistive:* Unsealed/Sealed – 1,250 VA, 150 W

*Latching, Resistive* – 1,250 VA, 150 W

##### Two-pole:

*General purpose, Resistive:* Unsealed – 1,250 VA, 150 W; Sealed – 1,000 VA, 120 W

*High-sensitivity, Resistive:* Unsealed/Sealed – 750 VA, 90 W

*Latching, Resistive* – 750 VA, 90 W

#### Minimum permissible load

##### One-pole:

100 mA at 5 VDC

##### Two-pole:

10 mA at 5 VDC

### Coil Data [% of rated voltage]

**Pickup voltage** 70% max. (DC & High-Sensitivity DC); 80% max. (AC)

**Dropout voltage** 15% min. (DC & High-Sensitivity DC); 30% min. (AC)

**Set voltage** 70% max.

**Reset voltage** 70% max.

**Maximum voltage** 110% at 70°C

### Characteristic Data

#### Initial contact resistance

*One-pole:* 30mΩ max.

*Two-pole:* 50mΩ max.

**Operate time** 15ms max.

#### Release time

*AC coil:* 10ms max.

*DC coil:* 5ms max.

**Set time – Latching** 20ms max.

**Reset time – Latching** 20ms max.

**Insulation resistance** 1,000MΩ min. (at 500 VDC)

#### Dielectric strength

##### One-pole:

*Between coil and contacts:* 5,000 VAC, 50/60 Hz for 1 minute

*Across open contacts of same pole:* 1,000 VAC, 50/60 Hz for 1 minute

##### Two-pole:

*Between coil and contacts:* 5,000 VAC, 50/60 Hz for 1 minute

*Between contact sets:* 3,000 VAC, 50/60 Hz for 1 minute

*Across open contacts of same pole:* 1,000 VAC, 50/60 Hz for 1 minute

##### Latching:

*Between set and reset coils:* 1,000 VAC, 50/60 Hz for 1 minute

**Ambient temperature** -40° to 70°C

#### Service life

##### Mechanical:

*AC coil:* 10,000,000 operations min.

*DC coil:* 20,000,000 operations min.

**Electrical:** 100,000 operations min. for all resistive and inductive ratings with the following exceptions: *One-pole, General purpose, Sealed:* 8 A, 250 VAC, 30 VDC

*Two-pole, General purpose, Sealed:* 4 A, 250 VAC, 30 VDC

### Construction Data

**Termination** Plug-in, Quick Connect, and PCB terminals

**Construction** Semi-sealed and Fully-sealed

**Weight** .6 oz (17 g), Latching, Quick Connect Type: .71 oz (20 g)

**Packaging method** Trays