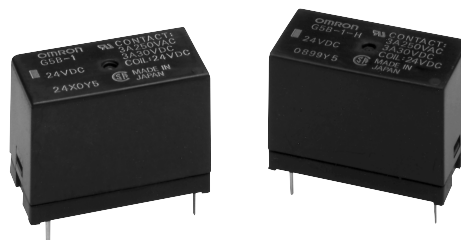


## Miniature Power Relay

## G5B

- Miniature: 22.10 L x 11.43 W x 13.97 H mm  
(0.87 L x 0.45 W x 0.55 in)
- Surge withstand voltage of 10,000 V
- 4,000 V dielectric strength between coil and contacts
- Low power consumption (200 mW)
- Ideal for appliance, HVAC and security market
- Semi-sealed construction



## Ordering Information

To Order: Select the part number and add the desired coil voltage rating, (e.g., G5B-1-DC12).

Type	Contact form	Part number
Standard	SPST-NO	<b>G5B-1</b>
High-capacity		<b>G5B-1-E</b>
High-sensitivity		<b>G5B-1-H</b>

## Specifications

### CONTACT DATA

Load	Standard, high-sensitivity	High-capacity
	Resistive load (p.f. = 1)	
Rated load	3 A at 125 VAC, 3 A at 30 VDC	8 A at 125 VAC, 8 A at 30 VDC
Contact material	Ag	AgCdO
Carry current	3 A	8 A
Max. operating voltage	250 VAC, 30 VDC	
Max. operating current	3 A	8 A
Max. switching capacity	750 VA, 90 W	2,000 VA, 240 W
Min. permissible load	10 mA at 5 VDC	

## ■ COIL DATA

### Standard/high-capacity

Rated voltage (VDC)	Rated current (mA)	Coil resistance (Ω)	Pick-up voltage % of rated voltage	Dropout voltage	Maximum voltage	Power consumption (mW)
3	120	25	70% max.	5% min.	110% at 70°C (158°F)	Approx. 360
5	72	69.4	75% (high-capacity)			
6	60	100				
12	30	400				
18	20	900				
24	15	1600				

### High-sensitivity

Rated voltage (VDC)	Rated current (mA)	Coil resistance (Ω)	Pick-up voltage % of rated voltage	Dropout voltage	Maximum voltage	Power consumption (mW)
3	66.6	45	75% max.	5% min.	130% at 70°C (158°F)	200
5	40.0	125				
6	33.3	180				
12	16.7	720				
24	8.3	2880				

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with a tolerance of ±10%.  
 2. The operating characteristics are measured at a coil temperature of 23°C (73°F).

## ■ CHARACTERISTICS

Contact resistance		100 mΩ max.
Operate time		10 ms max. (mean value: approx. 2.6 ms)
Release time		10 ms max. (mean value: approx. 5.6 ms)
Bounce time	Operate	Mean value: approx. 1.8 ms
Operating frequency	Mechanical	18,000 operations/hour
	Electrical	1,800 operations/hour standard/high-sensitivity 1,200 operations/hour high-capacity
Insulation resistance		1,000 MΩ min (at 500 VDC)
Dielectric strength		4,000 VAC, 50/60 Hz for 1 minute between coil and contacts 1,000 VAC, 50/60 Hz for 1 minute between contacts of same polarity
Vibration	Mechanical durability	10 to 55 Hz, 1.52 mm (0.06 in) double amplitude
	Malfunction durability	10 to 55 Hz, 1.52 mm (0.06 in) double amplitude
Shock	Mechanical durability	1,000 m/s <sup>2</sup> (approx. 100 G)
	Malfunction durability	100 m/s <sup>2</sup> (approx. 10 G)
Ambient temperature	Operating/storage	-40° to 70°C (-40° to 158°F)
Humidity		35% to 85% RH
Service life	Mechanical	5,000,000 operations min. (at operating frequency of 15,000 operations/hour)
	Electrical	See "Characteristic Data"
Weight		Approx. 7 g (25 oz)

Note: Data shown are of initial value.



NOTE: DIMENSIONS ARE SHOWN IN MILLIMETERS. To convert millimeters to inches divide by 25.4.



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