

■ Contact Ratings

| | |
|--------------------------------|---|
| Load | Resistive load |
| Rated load | 3 A (NO)/3 A (NC) at 125 VAC 5 A (NO)/3 A (NC) at 125 VAC 5 A (NO) at 250 VAC 3 A (NC) at 250 VAC 5 A (NO)/3 A (NC) at 30 VDC |
| Contact material | Ag alloy |
| Rated carry current | 5 A (NO)/3 A (NC) |
| Max. switching voltage | 250 VAC, 30 VDC |
| Max. switching current | 5 A (NO)/3 A (NC) |
| Max. switching capacity | 1,250 VA, 150 W (NO) 750 VA, 30 W (NC) |
| Min. permissible load | 10 mA at 5 VDC |

Note: P level: $\lambda_{60}=0.1 \times 10^{-6}$ operation (with an operating frequency of 120 operations/min.)

■ Characteristics

| | |
|--|---|
| Contact resistance (See note 2.) | 100 mΩ max. initial |
| Operate time (See note 3.) | 10 ms max. |
| Release time (See note 3.) | 5 ms max. |
| Insulation resistance (See note 4.) | 1,000 MΩ min. |
| Dielectric strength | 4,000 VAC, 50/60 Hz for 1 min between coil and contacts 1,000 VAC, 50/60 Hz for 1 min between contacts of same polarity |
| Impulse withstand voltage | 8 kV (1.2 x 50 μs) |
| Vibration resistance | Destruction: 10 to 55 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) Malfunction: 10 to 55 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) |
| Shock resistance | Destruction: 1,000 m/s ² (approx. 100G) Malfunction: Energized: 100 m/s ² (approximately 10G) Non-energized: 100 m/s ² (approximately 10G) |
| Life expectancy (See note 5.) | Mechanical: 5,000,000 operations (18,000 operations per hour) Electrical: 200,000 operations: 3 A (NO)/3 A (NC) at 125 VAC resistive load 50,000 operations: 5 A (NO)/3 A (NC) at 125 VAC resistive load 50,000 operations: 5 A (NO) at 250 VAC resistive load 10,000 operations: 3 A (NC) at 250 VAC resistive load 10,000 operations: 5 A (NO)/3 A (NC) at 30 VDC resistive load Switching frequency: 1,800 operations per hour |
| Ambient temperature | Operating: -40° C to 70° C with no icing or condensation |
| Ambient humidity | Operating: 5% to 95% |
| Weight | Approx. 6.5 g |

Note: 1. The data shown above are initial values.

2. The contact resistance is possible with 1 A applied at 5 VDC using a fall-of-potential method.
3. The operating time is possible with the operating voltage imposed with no contact bounce at an ambient temperature of 23° C.
4. The insulation resistance is possible between coil and contacts and between contacts of the same polarity at 500 VDC.
5. The electrical life data items shown are possible at 23° C.

■ Approved Standards

UL508 (File No. E41515)

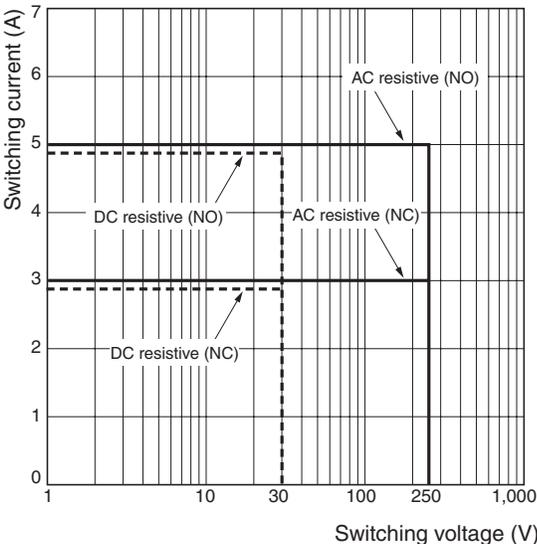
CSA C22.2 (No. 14) (File No. LR31928)

| Model | Coil ratings | Contact ratings | Number of test operations |
|-------|--------------|---|---------------------------|
| G5SB | 5 to 24 VDC | 3 A, 125 VAC (resistive) NC only 2 A, 125 VAC (resistive) NC only 5 A, 250 VAC (resistive) NO only 3 A, 250 VAC (resistive) NO only 5 A, 30 VDC (resistive) NO only | 6,000 |

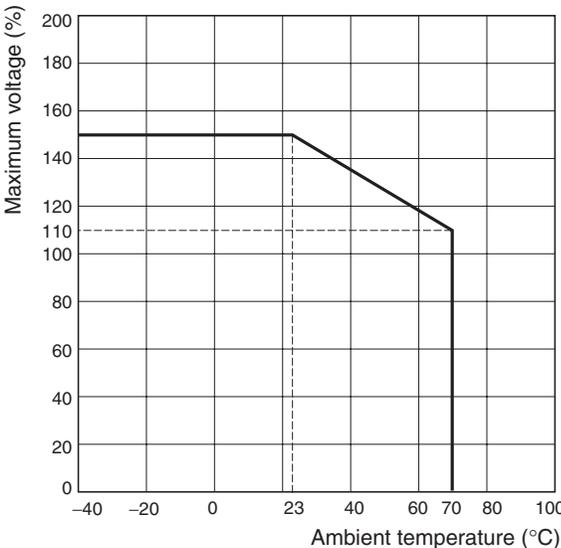
Note: Electrical durability tests are performed at 70°C.

Engineering Data

Max. Switching Capacity

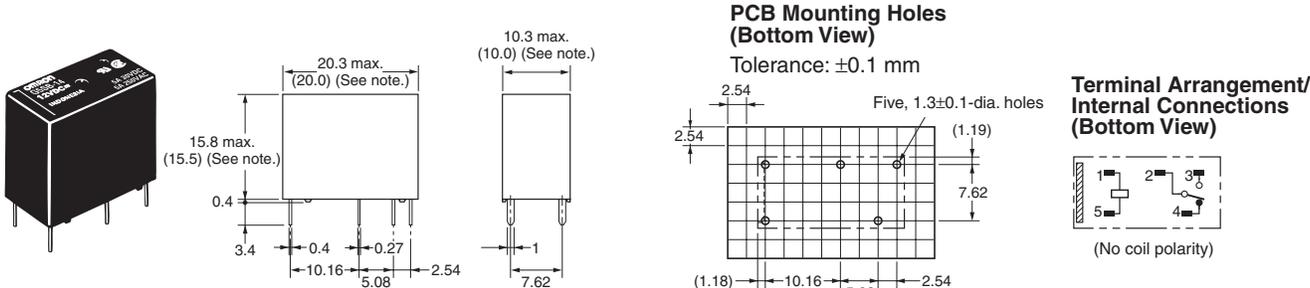


Ambient Temperature vs. Maximum Voltage



Dimensions

Unit: mm



Note: Values in parentheses are average values.