

2. Specifications

| Characteristics | Item | Specifications | |
|----------------------------|--|--|--|
| Contact | Arrangement | 1 Form A 1 Form B, 2 Form A | |
| | Contact material | Au-flashed AgSnO ₂ type | |
| | Contact resistance (Initial) | Max. 30 mΩ (By voltage drop 6 V DC 1A) | |
| Rating | Max. switching power (resistive load) | 3,040 VA, 150 W | |
| | Max. switching voltage | 380 V AC, 250 V DC | |
| | Max. switching current | 8 A | |
| | Nominal operating power | Approx. 240mW (Single side stable, 2 coil latching) | |
| | Min. switching capacity (Reference value)*1 | 100 mA 5V DC | |
| Electrical characteristics | Insulation resistance (Initial) (at 25°C, 50% relative humidity) | Min. 1,000MΩ (at 500V DC) Measurement at same location as "Breakdown voltage" section. | |
| | Breakdown voltage (Initial) | Between open contacts | 1,200 Vrms for 1 min. (Detection current: 10 mA) |
| | | Between contact sets | 2,000 Vrms for 1 min. (Detection current: 10 mA) |
| | | Between contact and coil | 3,750 Vrms for 1 min. (Detection current: 10 mA) |
| | Surge breakdown voltage (Initial)*2 | 6,000 V (Between contact and coil) | |
| | Operate time [Set time] (at 20°C 68°F) | Max. 15 ms [Max. 15 ms] (Nominal coil voltage applied to the coil, excluding contact bounce time.) | |
| | Release time [Reset time] (at 20°C 68°F) | Max. 10 ms [Max. 15 ms] (Nominal coil voltage applied to the coil, excluding contact bounce time.) (without diode) | |
| | Temperature rise (coil) (at 60°C 140°F) | Max. 55°C (By resistive method, nominal voltage applied to the coil; contact carrying current: 8A.) | |
| Mechanical characteristics | Shock resistance | Functional | Min. 196 m/s ² (Half-wave pulse of sine wave: 11 ms; detection time: 10μs.) |
| | | Destructive | Min. 980 m/s ² (Half-wave pulse of sine wave: 6 ms.) |
| | Vibration resistance | Functional | 10 to 55 Hz at double amplitude of 2 mm (Detection time: 10μs.) |
| | | Destructive | 10 to 55 Hz at double amplitude of 3 mm |
| Expected life | Mechanical | Min. 10 ⁷ (at 180 times/min.) | |
| | Electrical | Min. 10 ⁶ (8 A 250 V AC resistive) (ON : OFF = 1 s : 5 s) | |
| Conditions | Conditions for operation, transport and storage*3 | Ambient temperature: -40°C to +60°C -40°F to +140°F; Humidity: 5 to 85% R.H. (Not freezing and condensing at low temperature) | |
| | Max. operating speed | 30 cps | |
| Unit weight | | Approx. 10g .353 oz | |

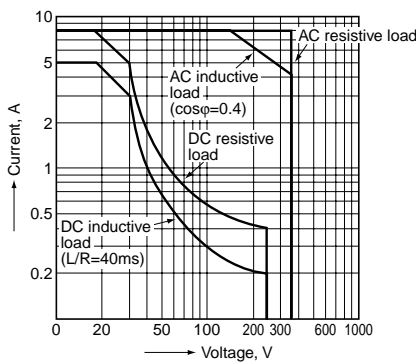
Notes: *1. This value can change due to the switching frequency, environmental conditions, and desired reliability level, therefore it is recommended to check this with the actual load.

*2. Wave is standard shock voltage of ±1.2×50μs according to JEC-212-1981

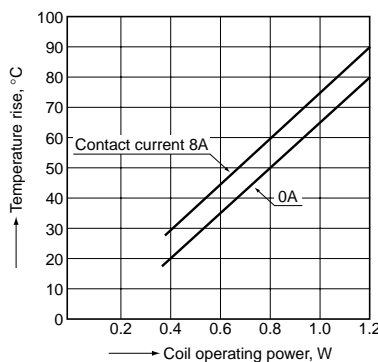
*3. The upper limit of the ambient temperature is the maximum temperature that can satisfy the coil temperature rise value. Refer to Usage, transport and storage conditions in NOTES.

REFERENCE DATA

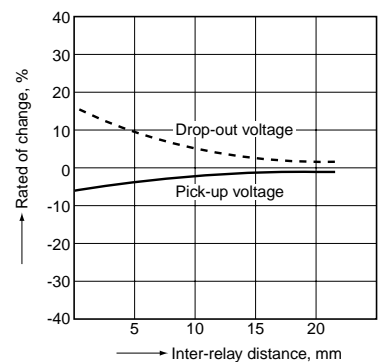
1. Max. switching power



2. Coil temperature rise



3. Influence of adjacent mounting



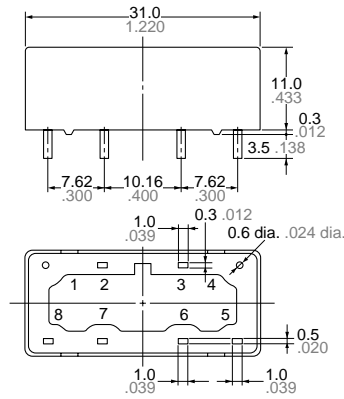
DIMENSIONS (mm inch)

The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://industrial.panasonic.com/ac/e/>

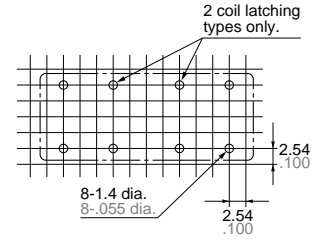
CAD Data



External dimensions



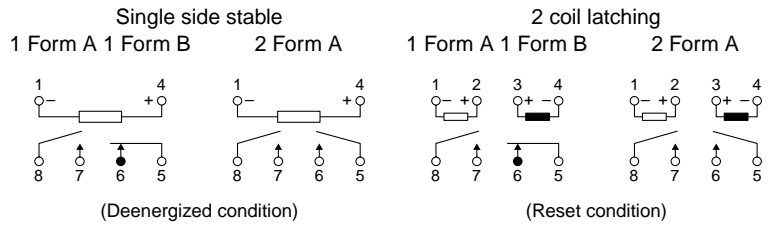
PC board pattern (Bottom view)



Tolerance: $\pm 0.1 \pm .004$

General tolerance: $\pm 0.5 \pm .020$

Schematic (Bottom view)

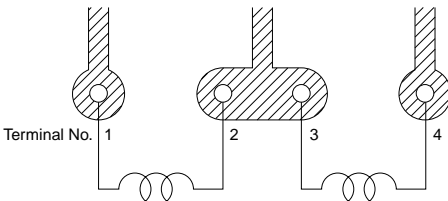


SAFETY STANDARDS

| UL/C-UL (Recognized) | | CSA (Certified) | | VDE (Certified) | | TV rating (UL/CSA) | |
|----------------------|---|-----------------|---|-----------------|---|----------------------------|--------|
| File No. | Contact rating | File No. | Contact rating | File No. | Contact rating | File No. | Rating |
| E43028 | 8A 250V AC 1/4HP 125, 250V AC 5A 30V DC | LR26550 etc. | 8A 250V AC 1/4HP 125, 250V AC 5A 30V DC | 1017 | 8A 250V AC ($\cos\phi=1.0$) 4A 250V AC ($\cos\phi=0.4$) 5A 30V DC | UL: E43028 CSA: LR26550 | — |

NOTES

- For cautions for use, please read "GENERAL APPLICATION GUIDELINES" on page B-1.
- PC board patterns for 2 coil latching types
When applying relays in power supply operation circuits for finished products regulated by the Electrical Appliance and Material Safety Law, use the pattern shown below.



- Soldering should be done under the following conditions:
 - 250°C 482°F within 10s
300°C 572°F within 5s
350°C 662°F within 3s
 - For automatic cleaning, the boiling method is recommended. Avoid ultrasonic cleaning which subjects the relays to high frequency vibrations, which may cause the contacts to stick. It is recommended that a fluorinated hydrocarbon or other alcoholic solvents be used.

- When using, please be aware that the a contact and b contact sides of 1 Form A 1 Form B type may go on simultaneously at operate time and release time.