



08002028070

E173485

R50108695

■ Features

- 10A switching capability
- Standard PC layout
- Sealed type available
- Surge resistance of 5000V
- Conform to RoHS,ELV directive

■ Ordering Code

| TRG1 | | D | 12VDC | | S | H |
|----------------|--------------------------------|---------------------------------------|--|--|---|---|
| 1 | | 2 | 3 | | 4 | 5 |
| 1. Relay Model | 2. Coil Power: D=0.45W, L=0.2W | | 3. Coil Nominal Voltage: 3, 5, 6, 9, 12, 18, 24VDC | | | |
| 4. S: Sealed | | 5. Contact Form: H: Form A, Z: Form C | | | | |

■ Coil Data (at 20°C)

| Nominal Voltage(VDC) | 3 | 5 | 6 | 9 | 12 | 18 | 24 | 0.2W |
|--------------------------------------|--|-------|-------|-------|-------|-------|-------|-------|
| Coil Resistance($\Omega \pm 10\%$) | 45 | 125 | 180 | 405 | 720 | 1620 | 2880 | |
| Rated Current(mA) | 66.67 | 40 | 33.33 | 22.22 | 16.67 | 11.11 | 8.33 | |
| Max Operate Voltage(VDC) | 2.25 | 3.75 | 4.5 | 6.75 | 9 | 13.5 | 18 | |
| Min Release Voltage(VDC) | 0.15 | 0.25 | 0.3 | 0.45 | 0.6 | 0.9 | 1.2 | |
| Nominal Voltage(VDC) | 3 | 5 | 6 | 9 | 12 | 18 | 24 | 0.45W |
| Coil Resistance($\Omega \pm 10\%$) | 20 | 56 | 80 | 180 | 320 | 720 | 1280 | |
| Rated Current(mA) | 150 | 89.28 | 75 | 50 | 37.5 | 25 | 18.75 | |
| Max Operate Voltage(VDC) | 2.25 | 3.75 | 4.5 | 6.75 | 9 | 13.5 | 18 | |
| Min Release Voltage(VDC) | 0.15 | 0.25 | 0.3 | 0.45 | 0.6 | 0.9 | 1.2 | |
| Max Applicable Voltage | 130% of nominal voltage at 70°C, 170% of nominal voltage at 23°C | | | | | | | |

■ Contact Data

| | |
|-----------------------|---|
| Contact Form | 1H/1Z |
| Contact Material | Silver Alloy |
| Load | Resistive Load(COS Φ 1) |
| Contact Ratings | 1H-D: 10A 125VAC 5A 250VAC/30VDC 1Z(1H-L): 3A 250VAC/30VDC |
| Minimum Load | 100mA 5VDC |
| Max Switching Voltage | 277VAC/30VDC |
| Max Switching Current | 1H-D:5A 1H-L:3A |
| Max Switching Power | 1H-D:1200VA/150W 1H-L: 600VA/90W |
| Contact Resistance | 100m Ω Max at 6VDC 1A |
| Life Expectancy | Electrical: 100,000 Operations (at 30 Operations/minute) |
| | Mechanical: 10,000,000 Operations (at 300 Operations/minute) |

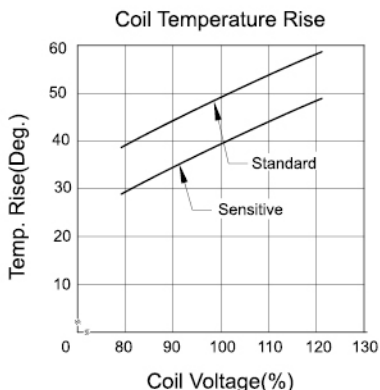
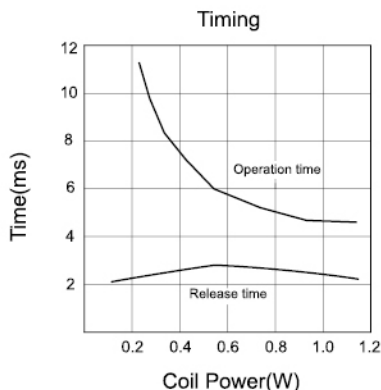
■ Characteristics Data

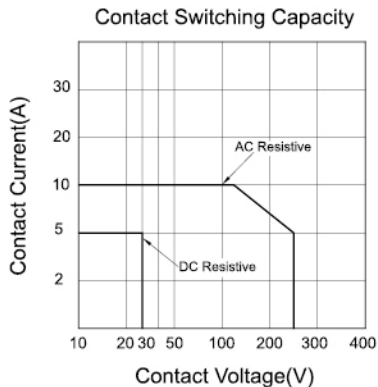
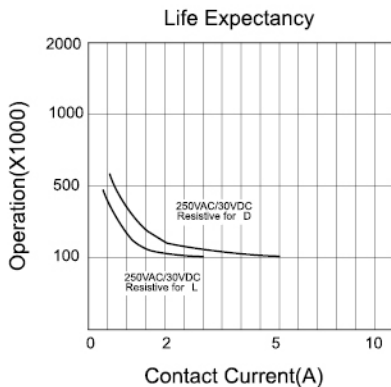
| | |
|---|---|
| Insulation Resistance | 100MΩMin at 500VDC |
| Dielectric Strength Between Open Contacts | 1000VAC (for one minute) |
| Between Contacts and Coil | 4000VAC (for one minute) |
| Operate Time | 1H-D:10ms 1H-L: 15ms |
| Release Time | 4ms |
| Temperature Range | -40°C to +85°C(No Freezing) |
| Shock Resistance | Operating Extremes: 10G Damage Limits: 100G |
| Vibration Resistance | 10-55Hz, Double amplitude of 1.5mm |
| Max. Switching Frequency | Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr |
| Humidity | 40-85% |
| Weight | Approx: 6g |
| Safety Standard | UL cUL TÜV CQC |

■ Approved Standards

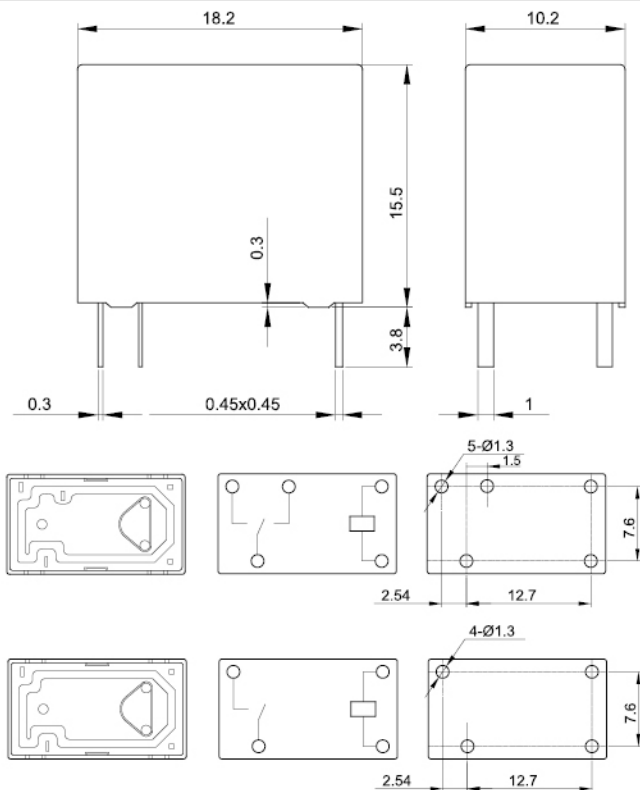
| Model | Coil Rating | Safety Standard | Contact Rating | |
|-------|-------------|-----------------|--|-------------------------------------|
| TRG1 | 3 to 24VDC | UL | 10A 120VAC 5A 240VAC 3A 240VAC 3A 30VDC | |
| | | CQC | 5A 240VAC | |
| | | TÜV | 1H-D | 5A 250VAC 10A 125VAC 5A 30VDC |
| | | | 1H-L 1Z | 3A 250VAC 3A 30VDC |

■ Engineering Data





■ Overall and Mounting Dimensions



Remark:

- 1). In case the tolerance is not shown in outline dimension, the tolerance should be $\pm 0.2\text{mm}$ for outline dimension $\leq 1\text{mm}$; $\pm 0.3\text{mm}$ for outline dimension: $1\sim 5\text{mm}$ and $\pm 0.4\text{mm}$ for outline dimension $> 5\text{mm}$.
- 2). The tolerance without indication is always $\pm 0.1\text{mm}$ for the dimension of PCB layout.

Disclaimer:

These specifications are just for customers' reference and subject to change without notice.