



10002048745

E173485

R50056406

■ Features

- Small size and low cost
- DIP standard terminals
- Surge Strength 1500V FCC68
- Sealed type available
- Conform to RoHS,ELV directive

■ Ordering Code

| | | | | | | | | | | | |
|---------|---|---|---|---|---|---|-------|---|---|---|---|
| HJR4102 | | | | | D | — | 12VDC | — | S | — | Z |
| 1 | 2 | 3 | 4 | 5 | | | | | | | |

1. Relay Model 2. Coil Power: N=0.45W, D=0.36W, L=0.2W 3. Coil Nominal Voltage: 3, 5, 6, 9, 12, 24, 48VDC
 4. S: Sealed 5. Contact Form: Z: Form C, H: Form A

■ Coil Data (at 20°C)

| Nominal Voltage(VDC) | 3 | 5 | 6 | 9 | 12 | 24 | 48 | |
|--------------------------------------|--|------|------|------|------|------|------|-------|
| Coil Resistance($\Omega \pm 10\%$) | 20 | 56 | 80 | 180 | 320 | 1280 | 5120 | 0.45W |
| Rated Current(mA) | 150 | 90 | 75 | 50 | 37.5 | 18.7 | 9 | |
| Max Operate Voltage(VDC) | 2.25 | 3.75 | 4.5 | 6.75 | 9 | 18 | 36 | |
| Min Release Voltage(VDC) | 0.3 | 0.5 | 0.6 | 0.9 | 1.2 | 2.4 | 4.8 | |
| Coil Resistance($\Omega \pm 10\%$) | 25 | 69 | 100 | 225 | 400 | 1600 | 6400 | 0.36W |
| Rated Current(mA) | 120 | 71.4 | 60 | 40 | 30 | 15 | 7.5 | |
| Max Operate Voltage(VDC) | 2.25 | 3.75 | 4.5 | 6.75 | 9 | 18 | 36 | |
| Min Release Voltage(VDC) | 0.3 | 0.5 | 0.6 | 0.9 | 1.2 | 2.4 | 4.8 | |
| Coil Resistance($\Omega \pm 10\%$) | 45 | 125 | 180 | 105 | 720 | 2880 | | 0.2W |
| Rated Current(mA) | 66.7 | 40 | 33.3 | 22.2 | 16.7 | 8.3 | | |
| Max Operate Voltage(VDC) | 2.25 | 3.75 | 4.5 | 6.75 | 9 | 18 | | |
| Min Release Voltage(VDC) | 0.3 | 0.5 | 0.6 | 0.9 | 1.2 | 2.4 | | |
| 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 | 3A 120VAC/24VDC ,1A 250VAC(TÜV) |
| Minimum Load | 1mA 5VDC |
| Max Switching Voltage | 240VAC/60VDC |
| Max Switching Current | 5A |
| Max Switching Power | 360VA/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) |

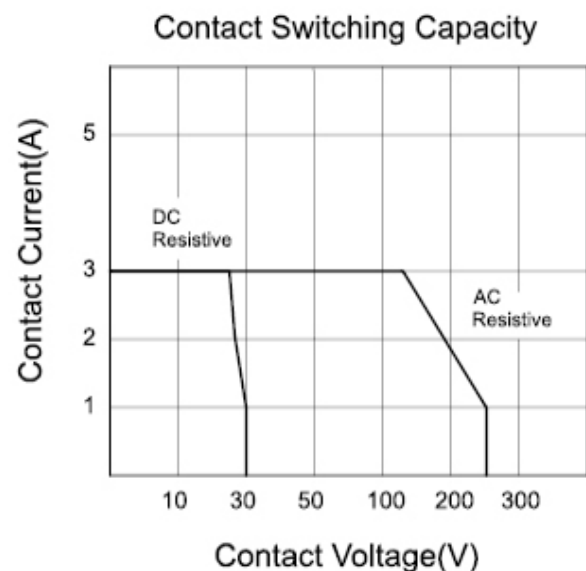
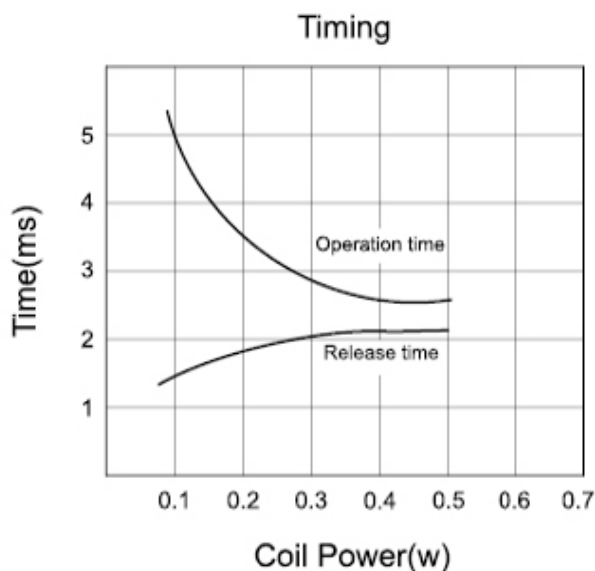
■ Characteristics Data

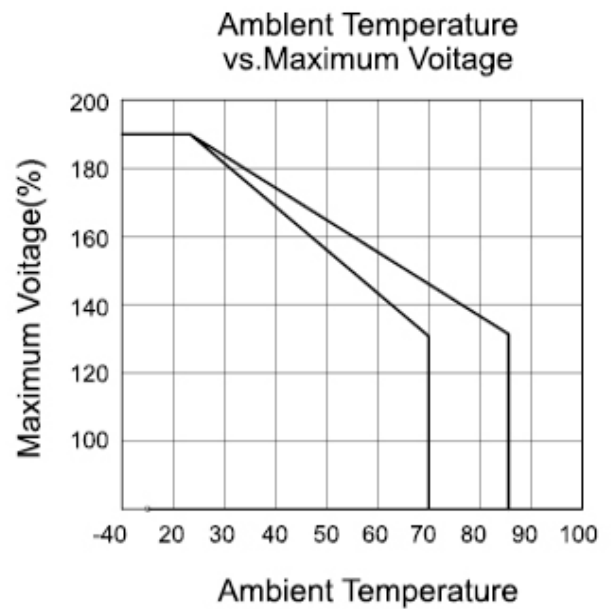
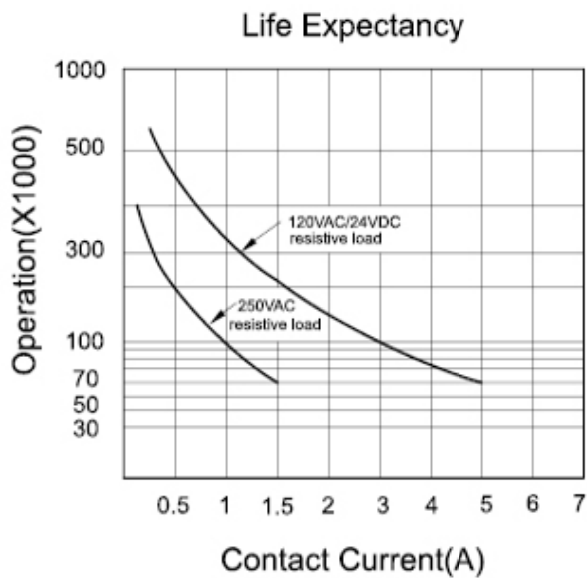
| | |
|---|---|
| Insulation Resistance | 100MΩMin at 500VDC |
| Dielectric Strength Between Open Contacts | 500VAC (for one minute) |
| Between Contacts and Coil | 1000VAC (for one minute) |
| Operate Time | 5ms |
| Release Time | 5ms |
| Temperature Range | -30°C to +85°C |
| Shock Resistance | Operating Extremes: 10G Damage Limits: 50G |
| Vibration Resistance | 10-55Hz, 1.5mm |
| Max. Switching Frequency | Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr |
| Humidity | 40-85% |
| Weight | Approx: 3.5g |
| Safety Standard | UL cUL TÜV CQC |

■ Approved Standards

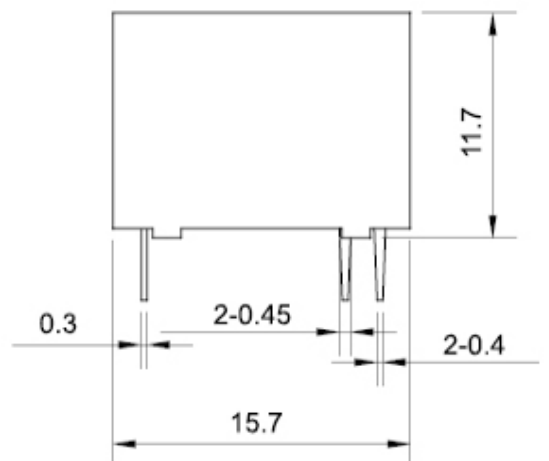
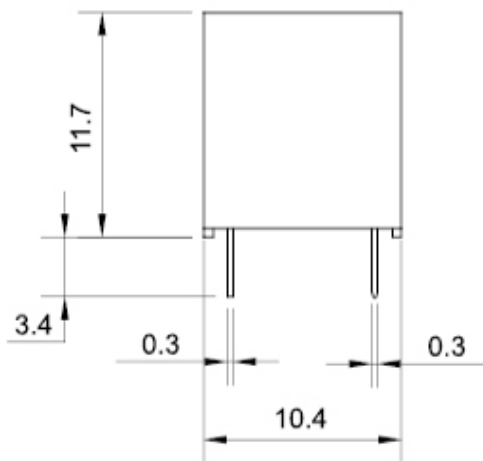
| Model | Coil Rating | Safety Standard | Contact Rating |
|---------|-------------|-----------------|------------------------|
| HJR4102 | 3 to 48VDC | TÜV | 3A 120VAC |
| | | | 3A 24VDC |
| | | | 1A 250VAC |
| | | UL/cUL | 3A 120VAC |
| | | | 3A 24VDC |
| | | CQC | 1A 250VAC 3A 120VAC |

■ Engineering Data

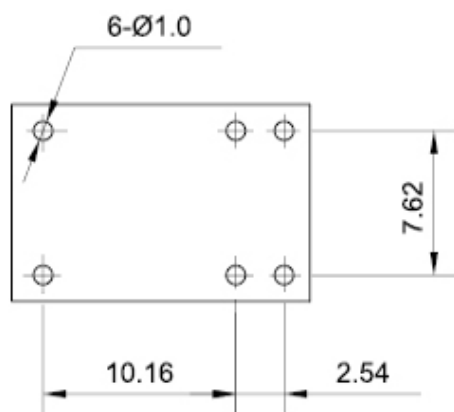




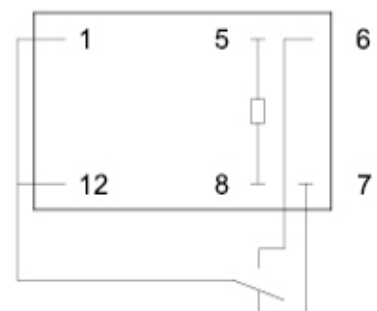
■ Overall and Mounting Dimensions



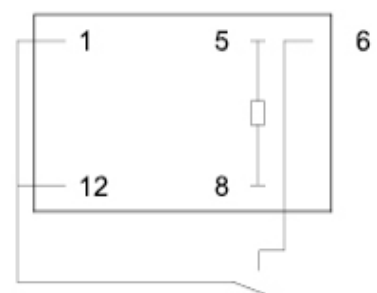
PCB Layout



Wiring Diagram



Form C



Form A

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: 1~5mm 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.