

SONGLE RELAY

| | | |
|---|----------------------|-------------------|
|  | <p>RELAY ISO9002</p> | <p>SRD</p> |
|---|----------------------|-------------------|



1. MAIN FEATURES

- Switching capacity available by 10A in spite of small size design for highdensity P.C. board mounting technique.
- UL,CUL,TUV recognized.
- Selection of plastic material for high temperature and better chemical solution performance.
- Sealed types available.
- Simple relay magnetic circuit to meet low cost of mass production.

2. APPLICATIONS

- Domestic appliance, office machine, audio, equipment, automobile, etc.
(Remote control TV receiver, monitor display, audio equipment high rushing current use application.)

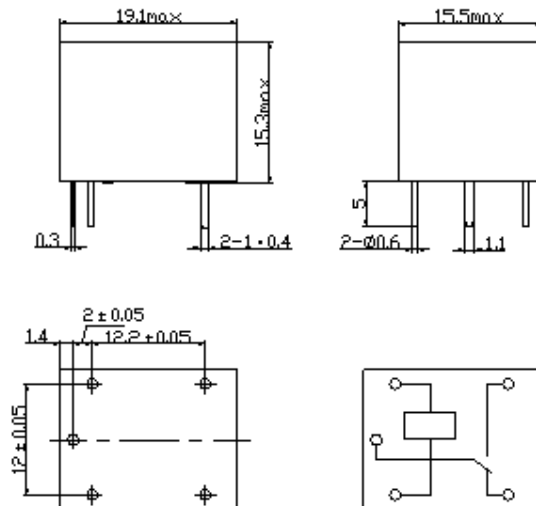
3. ORDERING INFORMATION

| SRD | XX VDC | S | L | C |
|----------------|-------------------------|------------------|------------------|--------------------------|
| Model of relay | Nominal coil voltage | Structure | Coil sensitivity | Contact form |
| SRD | 03、05、06、09、12、24、48VDC | S:Sealed type | L:0.36W | A:1 form A |
| | | F:Flux free type | D:0.45W | B:1 form B C:1 form C |

4. RATING

| | | |
|--------|----------------------------|------------------|
| CCC | FILE NUMBER:CH0052885-2000 | 7A/240VDC |
| CCC | FILE NUMBER:CH0036746-99 | 10A/250VDC |
| UL/CUL | FILE NUMBER: E167996 | 10A/125VAC 28VDC |
| TUV | FILE NUMBER: R9933789 | 10A/240VAC 28VDC |

5. DIMENSION (unit:mm) DRILLING (unit:mm) WIRING DIAGRAM



6. COIL DATA CHART (AT20°C)

| Coil Sensitivity | Coil Voltage Code | Nominal Voltage (VDC) | Nominal Current (mA) | Coil Resistance (Ω) $\pm 10\%$ | Power Consumption (W) | Pull-In Voltage (VDC) | Drop-Out Voltage (VDC) | Max-Allowable Voltage (VDC) |
|---------------------------|-------------------|-----------------------|----------------------|---|-----------------------|-----------------------|------------------------|-----------------------------|
| SRD (High Sensitivity) | 03 | 03 | 120 | 25 | abt. 0.36W | 75%Max. | 10% Min. | 120% |
| | 05 | 05 | 71.4 | 70 | | | | |
| | 06 | 06 | 60 | 100 | | | | |
| | 09 | 09 | 40 | 225 | | | | |
| | 12 | 12 | 30 | 400 | | | | |
| | 24 | 24 | 15 | 1600 | | | | |
| | 48 | 48 | 7.5 | 6400 | | | | |
| SRD (Standard) | 03 | 03 | 150 | 20 | abt. 0.45W | 75% Max. | 10% Min. | 110% |
| | 05 | 05 | 89.3 | 55 | | | | |
| | 06 | 06 | 75 | 80 | | | | |
| | 09 | 09 | 50 | 180 | | | | |
| | 12 | 12 | 37.5 | 320 | | | | |
| | 24 | 24 | 18.7 | 1280 | | | | |
| | 48 | 48 | 10 | 4500 | abt. 0.51W | | | |

7. CONTACT RATING

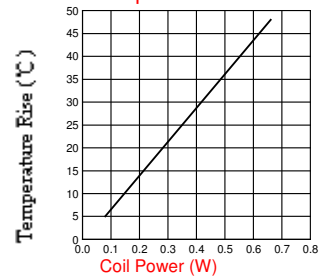
| Item | Type | SRD | |
|---|------|-------------------------------------|-------------------------|
| | | FORM C | FORM A |
| Contact Capacity Resistive Load ($\cos\Phi=1$) | | 7A 28VDC 10A 125VAC 7A 240VAC | 10A 28VDC 10A 240VAC |
| Inductive Load ($\cos\Phi=0.4$ L/R=7msec) | | 3A 120VAC 3A 28VDC | 5A 120VAC 5A 28VDC |
| Max. Allowable Voltage | | 250VAC/110VDC | 250VAC/110VDC |
| Max. Allowable Power Force | | 800VAC/240W | 1200VA/300W |
| Contact Material | | AgCdO | AgCdO |

8. PERFORMANCE (at initial value)

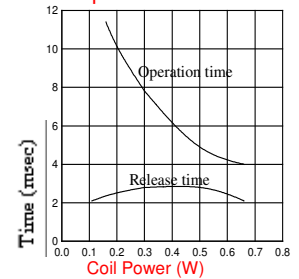
| Item | Type | SRD |
|------------------------|------|--|
| Contact Resistance | | 100m Ω Max. |
| Operation Time | | 10msec Max. |
| Release Time | | 5msec Max. |
| Dielectric Strength | | |
| Between coil & contact | | 1500VAC 50/60HZ (1 minute) |
| Between contacts | | 1000VAC 50/60HZ (1 minute) |
| Insulation Resistance | | 100 M Ω Min. (500VDC) |
| Max. ON/OFF Switching | | |
| Mechanically | | 300 operation/min |
| Electrically | | 30 operation/min |
| Ambient Temperature | | -25°C to +70°C |
| Operating Humidity | | 45 to 85% RH |
| Vibration | | |
| Endurance | | 10 to 55Hz Double Amplitude 1.5mm |
| Error Operation | | 10 to 55Hz Double Amplitude 1.5mm |
| Shock | | |
| Endurance | | 100G Min. |
| Error Operation | | 10G Min. |
| Life Expectancy | | |
| Mechanically | | 10 ⁷ operations. Min. (no load) |
| Electrically | | 10 ⁵ operations. Min. (at rated coil voltage) |
| Weight | | abt. 10grs. |

9. REFERENCE DATA

Coil Temperature Rise

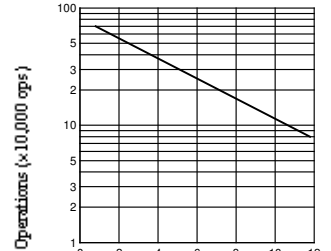


Operation Time



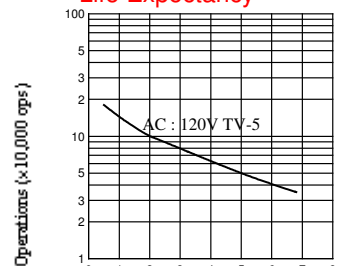
Life Expectancy

AC120V/DC24V $\cos\Phi=1$



Current of Load (A)

Life Expectancy



Current of Load (A)