

# SONGLE RELAY

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



## 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.)

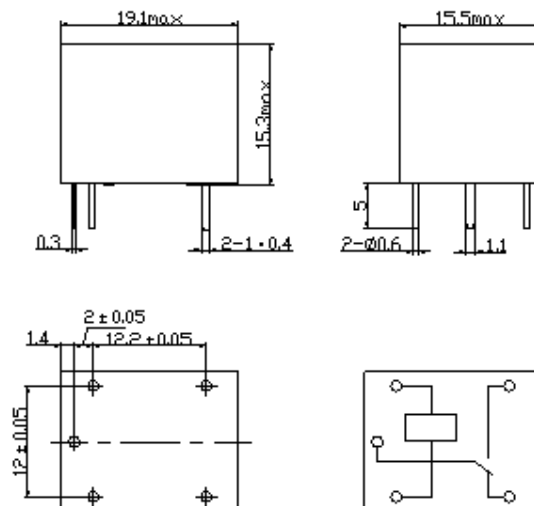
## 3. ORDERING INFORMATION

| 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 ( $\Omega$ ) $\pm 10\%$ | 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

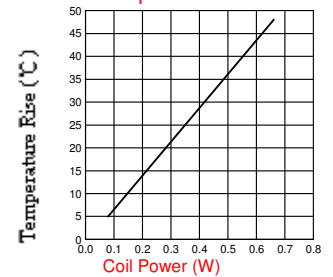
| Item                                                | Type | SRD                                 |                         |
|-----------------------------------------------------|------|-------------------------------------|-------------------------|
|                                                     |      | FORM C                              | FORM A                  |
| Contact Capacity<br>Resistive Load ( $\cos\Phi=1$ ) |      | 7A 28VDC<br>10A 125VAC<br>7A 240VAC | 10A 28VDC<br>10A 240VAC |
| Inductive Load<br>( $\cos\Phi=0.4$ L/R=7msec)       |      | 3A 120VAC<br>3A 28VDC               | 5A 120VAC<br>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)

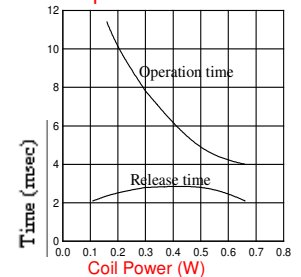
| Item                   | Type | SRD                                                      |
|------------------------|------|----------------------------------------------------------|
| Contact Resistance     |      | 100m $\Omega$ Max.                                       |
| Operation Time         |      | 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 $\Omega$ 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 <sup>7</sup> operations. Min. (no load)               |
| Electrically           |      | 10 <sup>5</sup> operations. Min. (at rated coil voltage) |
| Weight                 |      | abt. 10grs.                                              |

## 9. REFERENCE DATA

Coil Temperature Rise

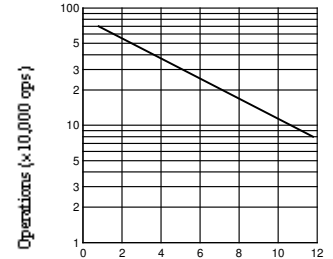


Operation Time



Life Expectancy

AC120V/DC24V  $\cos\Phi=1$



Life Expectancy

