

### DESCRIPTION

SRC Devices' MSS6 relay uses a standard 16-pin DIP package. All relays are completely sealed and made of plastic material that conforms to UL94 flammability standard. All types offer more than a billion operations, during which the contact resistance remains stable ( $\pm 5\text{m}\Omega$ ), regardless of load or temperature.

#### FEATURES

- Stable contact resistance over life
- 4000 Vac input-output isolation
- Bounce-free operation
- High insulation resistance
- Bounce-free operation
- Switching speed of 100Hz - 300Hz
- All position mounting

#### APPLICATIONS

- Industrial
- Signaling
- Metering

### SPECIFICATIONS

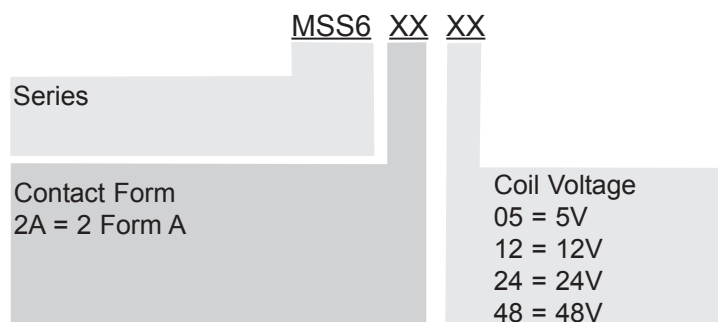
| Parameters                      | Conditions                                     | Min    | Typ | Max  | Units             |
|---------------------------------|------------------------------------------------|--------|-----|------|-------------------|
| <b>Contact Ratings</b>          |                                                |        |     |      |                   |
| Switching Voltage               | Max DC/Peak AC Resistive                       |        |     | 500  | Volts             |
| Switching Current               | Max DC/Peak AC Resistive                       |        |     | 1    | Amps              |
| Carry Current                   | Max DC/Peak AC Resistive                       |        |     | 3    | Amps              |
| Contact Rating                  | Max DC/Peak AC Resistive                       |        |     | 50   | Watts             |
| Life Expectancy                 | Signal Level 1.0V, 10mA                        | 200    | 300 |      | $\times 10^6$ Ops |
| Static Contact Resistance       | 50mV, 10mA                                     |        |     | 150  | mOhms             |
| Contact Material                |                                                |        | Hg  |      |                   |
| <b>Relay Specifications</b>     |                                                |        |     |      |                   |
| Insulation Resistance           | Between all isolated pins<br>500V, 25°C, 40%RH | $10^8$ |     |      | Ohms              |
| Capacitance                     | Across Open Contacts                           |        |     | 1.2  | pF                |
| Dielectric Strength             | Open Contact to Coil                           |        |     | 3.2  | pF                |
|                                 | Between Contacts                               | 1400   |     |      | VDC/Peak AC       |
| Operate Time, no bounce         | Contacts to Coil                               | 1400   |     |      | VDC/Peak AC       |
|                                 | At Nominal Coil Voltage                        |        | 1.2 | 1.75 | msec              |
| Release Time                    | 10Hz Square Wave                               |        |     |      |                   |
|                                 | Zener Diode Suppression                        |        | 1.2 | 1.7  | msec              |
| <b>Environmental Ratings</b>    |                                                |        |     |      |                   |
| Storage Temperature             |                                                | -40    |     | +105 | °C                |
| Operating Temperature           |                                                | -20    |     | +70  | °C                |
| Soldering Temperature           |                                                |        |     | +260 | °C                |
| Vibration Resistance (survival) | Applied to pins, 5 sec. max.<br>10Hz - 500Hz   |        |     | 10   | Gs                |
| Shock Resistance (survival)     | 11 $\pm$ 1ms, 1/2 Sine Wave                    |        |     | 30   | Gs                |
| Weight                          |                                                |        | 5   |      | grams             |

### COIL SPECIFICATIONS

|            | Contact Form | Coil Voltage |     |     | Coil Resistance |      |      | Operate Voltage        |     |      | Release Voltage        |     |     | Input Power |     |     |
|------------|--------------|--------------|-----|-----|-----------------|------|------|------------------------|-----|------|------------------------|-----|-----|-------------|-----|-----|
| Units      |              | Volts        |     |     | Ohms            |      |      | Volts                  |     |      | Volts                  |     |     | mW          |     |     |
| Conditions |              |              |     |     | +/- 10% (25°C)  |      |      | Must operate by (25°C) |     |      | Must release by (25°C) |     |     |             |     |     |
| Part #     |              | Min          | Typ | Max | Min             | Typ  | Max  | Min                    | Typ | Max  | Min                    | Typ | Max | Min         | Typ | Max |
| MSS62A05   | 2 Form A     |              | 5   | 9   | 72              | 80   | 88   |                        |     | 3.75 | 0.5                    |     |     |             | 313 |     |
| MSS62A12   | 2 Form A     |              | 12  | 20  | 387             | 430  | 473  |                        |     | 9    | 1                      |     |     |             | 335 |     |
| MSS62A24   | 2 Form A     |              | 24  | 42  | 1575            | 1750 | 1925 |                        |     | 18   | 2                      |     |     |             | 329 |     |
| MSS62A48   | 2 Form A     |              | 48  | 65  | 6210            | 6900 | 7590 |                        |     | 36   | 4                      |     |     |             | 334 |     |

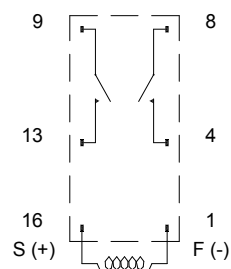
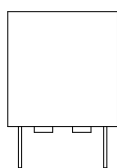
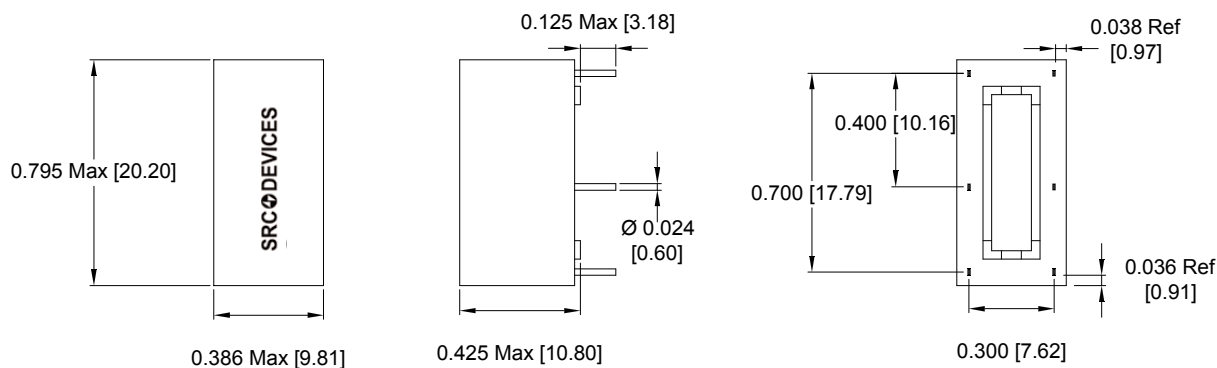
### ORDERING INFORMATION

A complete part number is represented by the digits below



### MECHANICAL DIMENSIONS

Dimensions in inches [mm]



WIRING DIAGRAM