



12.5 x 7.5 x 10.0 mm





## **Features**

- Low coil power consumption
- · High sensitivity
- Conforms to FCC part 68
- · PC board mounting
- · Small size, light weight

#### Contact Data\*

| Contact Arrangement | 1C = SPDT  |  |  |
|---------------------|--|--|--|
| Contact Rating      | 0.5A @ 125VAC, Resistive, 50K cycles, 90°C ambient |  |  |
|                     | 1A @ 30VDC, Resistive, 50K cycles, 90°C ambient    |  |  |
|                     | 2A @ 120VAC, Resistive, 20K cycles, 90°C ambient   |  |  |
|                     | 2A @ 24VDC, Resistive, 20K cycles, 90°C ambient    |  |  |

| Contact Resistance        | < 50 milliohms initial |  |
|---------------------------|------------------------|--|
| Contact Material          | Ag + Au                |  |
| Maximum Switching Power   | 30W                    |  |
| Maximum Switching Voltage | 125VAC, 60VDC          |  |
| Maximum Switching Current | 2A                     |  |

## Coil Data\*

| Coil Voltage<br>VDC |      | Coil<br>Resistance<br>Ω +/- 10% |      | Pick Up Voltage<br>VDC (max) | Release Voltage<br>VDC (min) | Coil Power<br>W | Operate Time<br>ms | Release Time<br>ms |
|---------------------|------|---------------------------------|------|------------------------------|------------------------------|-----------------|--------------------|--------------------|
| Rated               | Max  | .15W                            | .20W | 75% of rated voltage         | 10% of rated voltage         |                 |                    |                    |
| 3                   | 3.9  | 60                              | 45   | 2.25                         | .3                           | .15             | 4.5                | 1.5                |
| 5                   | 6.5  | 167                             | 125  | 3.75                         | .5                           |                 |                    |                    |
| 6                   | 7.8  | 240                             | 180  | 4.50                         | .6                           |                 |                    |                    |
| 9                   | 11.7 | 540                             | 405  | 6.75                         | .9                           |                 |                    |                    |
| 12                  | 15.6 | 960                             | 720  | 9.00                         | 1.2                          |                 |                    |                    |
| 24                  | 31.2 | 3840                            | 2880 | 18.00                        | 2.4                          |                 |                    |                    |

## General Data\*

| Electrical Life @ rated load         | 100K cycles, average               |  |  |
|--------------------------------------|------------------------------------|--|--|
|                                      | , ,                                |  |  |
| Mechanical Life                      | 5M cycles, min.                    |  |  |
| Insulation Resistance                | 100M Ω min. @ 500VDC initial       |  |  |
| Dielectric Strength, Coil to Contact | 1500V rms min. @ sea level initial |  |  |
| Contact to Contact                   | 1000V rms min. @ sea level initial |  |  |
| Shock Resistance                     | 100m/s <sup>2</sup> for 11 ms      |  |  |
| Vibration Resistance                 | 3.30mm double amplitude 10~40Hz 5N |  |  |
| Terminal (Copper Alloy) Strength     |                                    |  |  |
| Operating Temperature                | -40°C to +85°C                     |  |  |
| Storage Temperature                  | -40°C to +155°C                    |  |  |
| Solderability                        | 260°C for 5 s                      |  |  |
| Weight                               | 2.2g                               |  |  |

<sup>\*</sup> Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

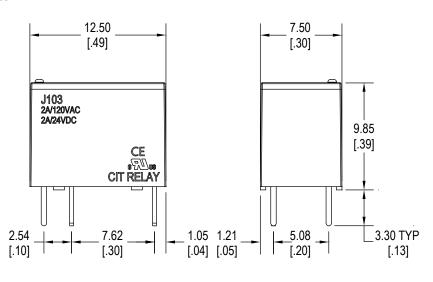


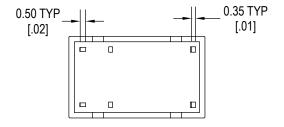
# **Ordering Information**

| 1. Series                                       | J103  | 1C | 12VDC | .20 | S |
|---|-------|----|-------|-----|---|
| J103  |       |    |       |     |   |
| 2. Contact Arranger<br>1C = SPDT                | ment  |    |       |     |   |
| 3. Coil Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 24VDC |       |    |       |     |   |
| 4. Coil Power<br>.15 = .15W<br>.20 = .20W       |       |    |       |     |   |
| 5. Sealed<br>S = Sealed (stand                  | dard) |    |       |     |   |

## **Dimensions**

#### Units = mm





# Schematics & PC Layouts

### **Bottom Views**

