



Features

- High sensitivity
- Super light weight
- Low coil power consumption
- PC board mounting
- Ideal for high density mounting

UL
E197851



Contact Data*

| | | | |
|---------------------------|---|----------------|---|
| Contact Arrangement | 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT | Contact Rating | |
| Contact Resistance | < 50 milliohms initial | AgNi | 3A & 5A @125VAC, general use, 20k cycles for N.O., 10k cycles for N.C. 3A & 5A @ 30VDC, resistive use, 50k cycles for N.O., 30k cycles for N.C. |
| Contact Material | AgNi + Au, Ag + Au | Ag | 1A & 3A @125VAC, general use 1A & 3A @ 30VDC, resistive use Pilot Duty 270VA, 120VAC, N.O., 30k cycles Pilot Duty 270VA, 120VAC, N.C., 6k cycles |
| Maximum Switching Power | 150W | | |
| Maximum Switching Voltage | 300VAC, 150VDC | | |
| Maximum Switching Current | 5A | | |

Coil Data*

| Coil Voltage VDC | | Coil Resistance Ω +/- 10% | | | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W | Operate Time ms | Release Time ms |
|------------------|------|----------------------------------|------|------|---------------------------|---------------------------|-------------------|-----------------|-----------------|
| Rated | Max | .20W | .36W | .45W | 75% of rated voltage | 10% of rated voltage | | | |
| 3 | 3.9 | 45 | 25 | 20 | 2.25 | .3 | .20 .36 .45 | 5 | 5 |
| 5 | 6.5 | 125 | 75 | 56 | 3.75 | .5 | | | |
| 6 | 7.8 | 180 | 100 | 80 | 4.50 | .6 | | | |
| 9 | 11.7 | 405 | 225 | 180 | 6.75 | .9 | | | |
| 12 | 15.6 | 720 | 400 | 320 | 9.00 | 1.2 | | | |
| 24 | 31.2 | 2880 | 1600 | 1280 | 18.00 | 2.4 | | | |

General Data*

| | |
|--------------------------------------|-------------------------------------|
| Electrical Life @ rated load | 100K cycles, average |
| Mechanical Life | 10M cycles, average |
| Insulation Resistance | 100M Ω min. @ 500VDC initial |
| Dielectric Strength, Coil to Contact | 1250V rms min. @ sea level initial |
| Contact to Contact | 500V rms min. @ sea level initial |
| Shock Resistance | 100m/s ² for 11 ms |
| Vibration Resistance | 1.50mm double amplitude 10~40Hz |
| Terminal (Copper Alloy) Strength | 5N |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +155°C |
| Solderability | 260°C for 5 s |
| Weight | 3.5g |

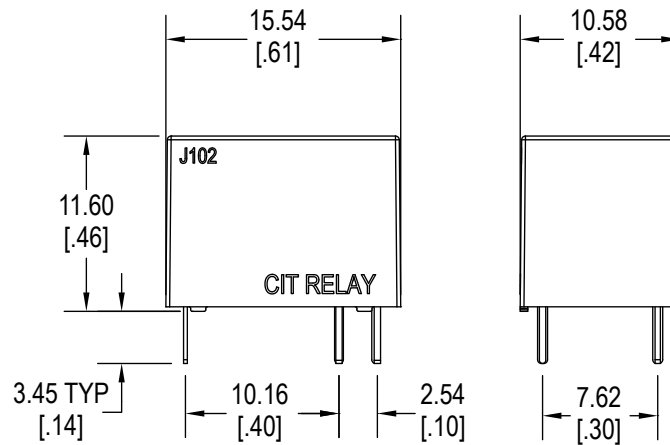
* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

Ordering Information

| | | | | | | |
|---|------|----|---|---|-------|-----|
| 1. Series | J102 | 1C | S | 3 | 12VDC | .45 |
| J102 J102K | | | | | | |
| 2. Contact Arrangement | | | | | | |
| 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT | | | | | | |
| 3. Sealing Options | | | | | | |
| S = Sealed | | | | | | |
| 4. Contact Options | | | | | | |
| 1 = 1amp Ag (requires .2, .36 or .45 watt coil) | | | | | | |
| 3 = 3amp AgNi (requires .2, .36 or .45 watt coil) | | | | | | |
| 3P = 3amp Ag (requires .2, .36 or .45 watt coil) | | | | | | |
| 5 = 5amp AgNi (requires .45 watt coil) | | | | | | |
| 5. Coil Voltage | | | | | | |
| 3VDC | | | | | | |
| 5VDC | | | | | | |
| 6VDC | | | | | | |
| 9VDC | | | | | | |
| 12VDC | | | | | | |
| 24VDC | | | | | | |
| 6. Coil Power | | | | | | |
| .20 = .20W | | | | | | |
| .36 = .36W | | | | | | |
| .45 = .45W | | | | | | |

Dimensions

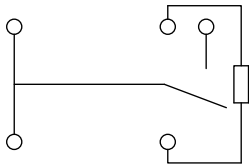
Units = mm



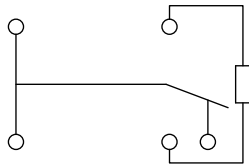
Schematics & PC Layouts

Bottom Views

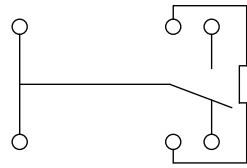
J102



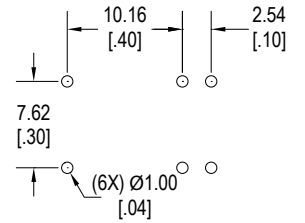
1A



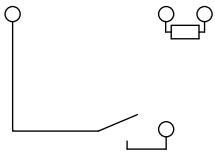
1B



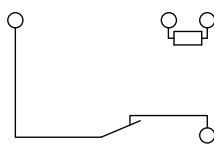
1C



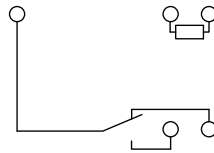
J102K



1A



1B



1C

