

RoHS Compliant

CIT RELAY & SWITCH™
Division of Circuit Interruption Technology, Inc.

# J152

E197851

27.0 x 21.0 x 35.0 mm

## Features

- Switching capacity up to 10A
- Small size and light weight
- Low coil power consumption, High contact load
- Strong resistance to shock and vibration

## Contact Data*

| | |
|---|---|
| Contact Arrangement | 2C = DPDT<br>3C = 3PDT<br>4C = 4PDT |
| Contact Rating | |
| UL | 2 & 3 Pole : 10A @ 220VAC & 28VDC, General Purpose<br>4 Pole : 5A @ 220VAC & 28VDC, General Purpose |
| TÜV | 2 Pole : 5A @ 220VAC & 28VDC, 100K cycles, 70°C |

| | |
|---|---|
| Contact Resistance | < 50 milliohms initial |
| Contact Material | AgCdO |
| Max Switching Power | 2C, & 3C : 280W, 2200VA<br>4C : 140W, 110VA |
| Max Switching Voltage | 300VAC |
| Max Switching Current | 10A |

## Coil Data DC Parameters*

| Coil Voltage VDC | | Coil Resistance Ω +/- 10% | Pick Up Voltage VDC (max) 75% of rated voltage | Release Voltage VDC (min) 10% of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
|---|---|---|---|---|---|---|---|
| Rated | Max | | | | | | |
| 12 | 13.2 | 160 | 9.00 | 1.2 | .90 | 25 | 25 |
| 24 | 26.4 | 640 | 18.00 | 2.4 | | | |
| 110 | 121.0 | 11000 | 82.50 | 11.0 | | | |

## Coil Data AC Parameters*

| Coil Voltage VAC | | Coil Resistance Ω +/- 10% | Pick Up Voltage VAC (max) 80% of rated voltage | Release Voltage VAC (min) 30% of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
|---|---|---|---|---|---|---|---|
| Rated | Max | | | | | | |
| 12 | 13.2 | 46 | 9.60 | 3.6 | 1.20 | 25 | 25 |
| 24 | 26.4 | 184 | 19.20 | 7.2 | | | |
| 110 | 121.0 | 3750 | 88.00 | 33.0 | | | |
| 120 | 132.0 | 4550 | 96.00 | 36.0 | | | |
| 220 | 252.0 | 14400 | 176.00 | 66.0 | | | |



*Dimensions shown in mm. Dimensions are shown for reference purposes only.*

*Specifications and availability subject to change without notice.*




## General Data*

| | |
|---|---|
| Electrical Life @ rated load | 100K cycles, average |
| Mechanical Life | 20M cycles (2 pole), 10M cycles (3 & 4 pole), average |
| Insulation Resistance | 100M Ω min. @ 500VDC initial |
| Dielectric Strength, Coil to Contact | 1500V rms min. @ sea level initial |
| Contact to Contact | 1500V rms min. @ sea level initial |
| Shock Resistance | 100m/s$^2$ for 11 ms |
| Vibration Resistance | 1.27mm double amplitude 10~40Hz |
| Terminal (Copper Alloy) Strength | 10N |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -40°C to +155°C |
| Solderability | 260°C for 5 s |
| Weight | 32g |

* *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

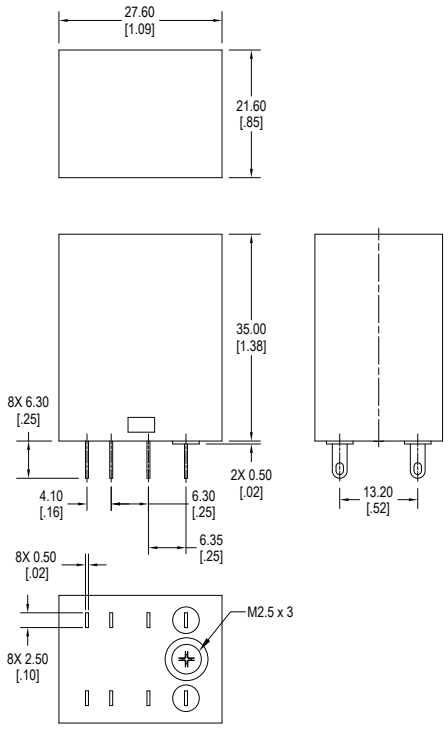
| 1. Series | J152 | 3C | T | 12VDC | | | |
|---|---|---|---|---|---|---|---|
| J152 | | | | | | | |
| 2. Contact Arrangement<br>2C<br>3C<br>4C | | | | | | | |
| 3. Termination<br>T = Solder lugs / Plug-in<br>F = Solder lugs / Plug-in with Flange<br>P = PCB Pins | | | | | | | |
| 4. Coil Voltage<br>12VDC<br>24VDC<br>110VDC | 12VAC<br>24VAC<br>110VAC<br>120VAC<br>220VAC | | | | | | |
| 5. Optional LED<br>Blank = No indicator LED<br>D = With indicator LED | | | | | | | |
| 6. Gold Option<br>Blank = Standard contacts<br>G = Gold over standard contacts | | | | | | | |
| 7. Push to Test Option<br>Blank = Without push to test button<br>T = With push to test button | | | | | | | |



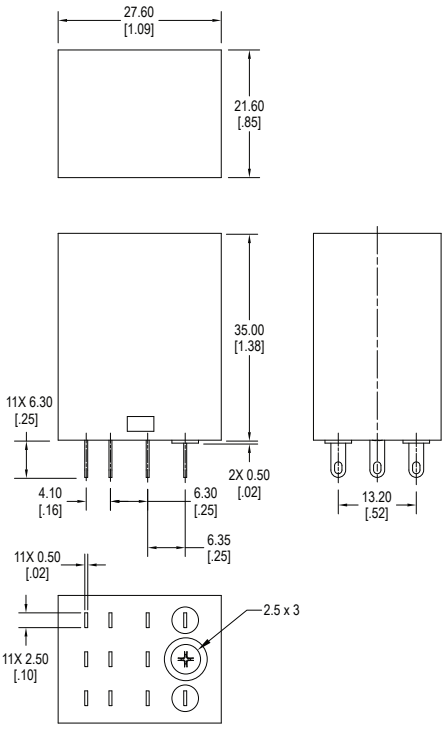
*Dimensions shown in mm. Dimensions are shown for reference purposes only.* *Specifications and availability subject to change without notice.*

# Dimensions

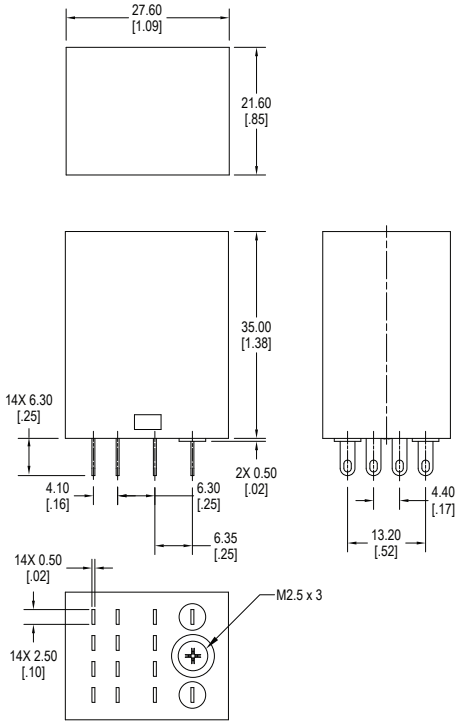
***Units = mm***



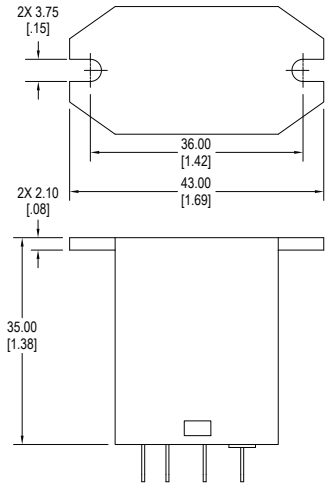

***2 Pole***




***3 Pole***




***4 Pole***




***Flange Mount with Solder Lugs***



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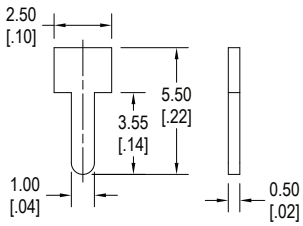
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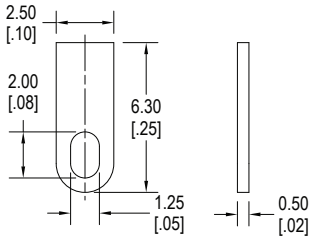
# J152



## Termination Options



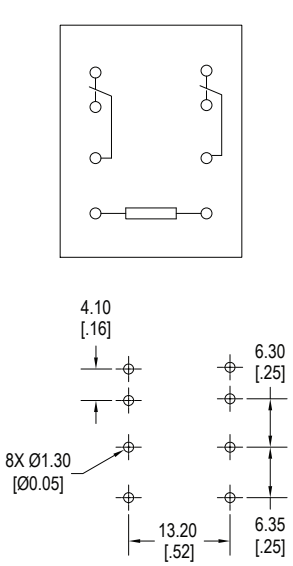

***PC Pins***



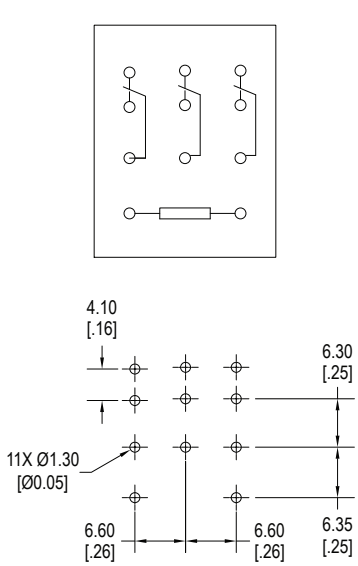

***Solder Lugs***

## Schematics & PC Layouts

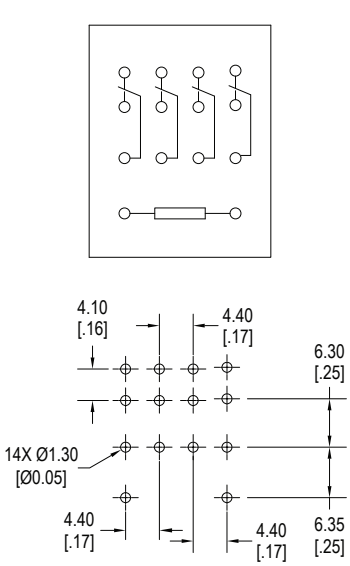
### *Bottom Views*




***2C***




***3C***




***4C***



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