



## Features

- Switching capacity up to 10A
- Small size and light weight
- Low coil power consumption
- High contact load

## Contact Data\*

|                     |   |
|---------------------|---|
| Contact Arrangement | 1A = SPST N.O.<br>1C = SPDT   |
| Contact Rating      | N.O.<br>10A @ 120VAC, Resistive, 10K cycles, 85°C ambient<br>10A @ 277VAC, Resistive, 10K cycles, 40°C ambient<br>5A @ 240VAC, Resistive, 10K cycles, 85°C ambient<br>3A @ 30VDC, Resistive, 10K cycles, 85°C ambient<br>TV-5 @ 120VAC, 25K cycles, 40°C ambient<br>¼ hp @ 120/240/277VAC, 6K cycles, 40°C ambient<br>N.C.<br>10A @ 120VAC, Resistive, 10K cycles, 85°C ambient<br>5A @ 240VAC, Resistive, 10K cycles, 85°C ambient<br>3A @ 30VDC, Resistive, 6K cycles, 40°C ambient<br>¼ hp @ 120/240/277VAC, 6K cycles, 40°C ambient |

|                           |                        |
|---------------------------|------------------------|
| Contact Resistance        | < 50 milliohms initial |
| Contact Material          | AgSnO <sub>2</sub>     |
| Maximum Switching Power   | 2770VA                 |
| Maximum Switching Voltage | 277VAC                 |
| Maximum Switching Current | 10A                    |

## Coil Data\*

| Coil Voltage VDC |      | Coil Resistance Ω +/- 10% |      | Pick Up Voltage VDC (max)<br>75% of rated voltage | Release Voltage VDC (min)<br>10% of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
|------------------|------|---------------------------|------|---|---|--------------|-----------------|-----------------|
| Rated            | Max  | .20W                      | .45W |   |   |              |                 |                 |
| 3                | 3.9  | 45                        | 20   | 2.25  | 0.3   | .20 or .45   | 10              | 10              |
| 5                | 6.5  | 125                       | 55   | 3.75  | 0.5   |              |                 |                 |
| 6                | 7.8  | 180                       | 80   | 4.50  | 0.6   |              |                 |                 |
| 9                | 11.7 | 405                       | 180  | 6.75  | 0.9   |              |                 |                 |
| 12               | 15.6 | 720                       | 320  | 9.00  | 1.2   |              |                 |                 |
| 18               | 22.8 | 1620                      | 720  | 13.50   | 1.8   |              |                 |                 |
| 24               | 31.2 | 2880                      | 1280 | 18.00   | 2.4   |              |                 |                 |
| 48               | 62.4 | n/a                       | 5120 | 36.00   | 4.8   |              |                 |                 |

# J105D

## General Data\*

|                              |   |
|------------------------------|---|
| Electrical Life @ rated load | 100K cycles, average  |
| Mechanical Life              | 10M cycles, average   |
| Insulation Resistance        | 1000M Ω min. @ 500VDC, initial  |
| Dielectric Strength          | Coil to Contact 4000V rms min. @ sea level, initial<br>Contact to Contact 1000V rms min. @ sea level, initial |
| Shock Resistance             | 100m/s <sup>2</sup> for 11 ms   |
| Vibration Resistance         | 1.50mm double amplitude 10~55Hz   |
| Operating Temperature        | -55°C to +125°C   |
| Storage Temperature          | -55°C to +125°C   |
| Solderability                | 260°C for 5 s   |
| Weight                       | 7g  |

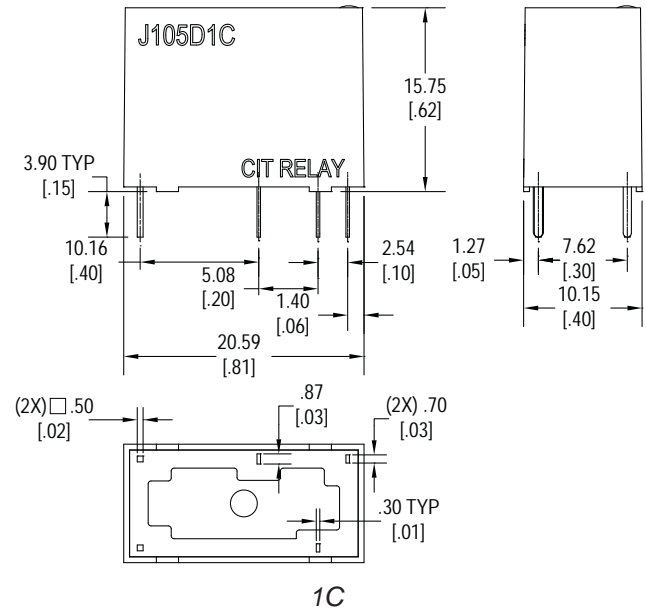
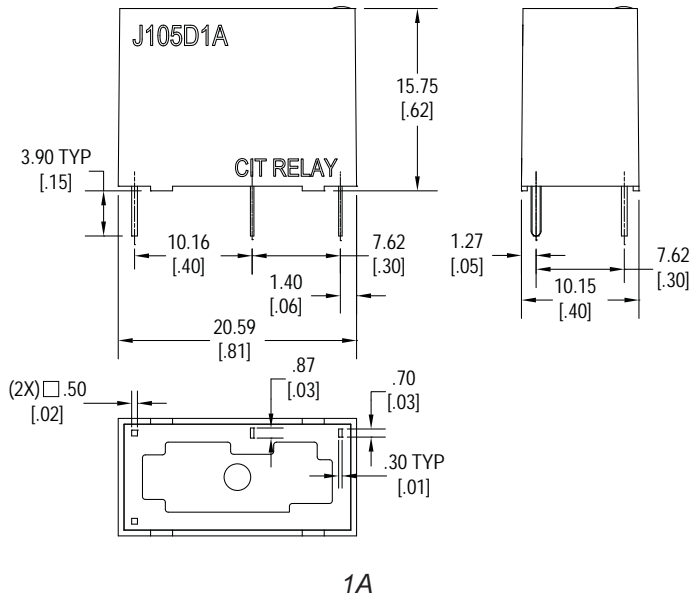
\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

## Ordering Information

|                        |  |    |   |       |     |
|------------------------|--|----|---|-------|-----|
| 1. Series              | J105D  | 1A | S | 12VDC | .45 |
| J105D                  |  |    |   |       |     |
| 2. Contact Arrangement | 1A = SPST N.O.<br>1C = SPDT **only available with .45W coil power                                      |    |   |       |     |
| 3. Sealing Option      | S = Sealed, Standard   |    |   |       |     |
| 4. Coil Voltage        | 3VDC<br>5VDC<br>6VDC<br>9VDC<br>12VDC<br>18VDC<br>24VDC<br>48VDC **only available with .45W coil power |    |   |       |     |
| 5. Coil Power          | .20 = .20W<br>.45 = .45W   |    |   |       |     |

## Dimensions

Units = mm



## Schematics & PC Layouts

Bottom Views

