



## Features

- UL F class rated standard
- Small size and light weight
- PC board mounting
- UL/CUL certified



## Contact Data\*

|                           |                                               |
|---------------------------|-----------------------------------------------|
| Contact Arrangement       | 1A = SPST N.O.<br>1B = SPST N.C.<br>1C = SPDT |
| Contact Resistance        | < 50 milliohms initial                        |
| Contact Material          | AgSnO <sub>2</sub>                            |
| Maximum Switching Power   | 2500VA, 420W                                  |
| Maximum Switching Voltage | 380VAC, 110VDC                                |
| Maximum Switching Current | 20A                                           |

| UL Contact Ratings |  |                                                                                    |  |  |  |
|--------------------|--|------------------------------------------------------------------------------------|--|--|--|
| 20A Contact        |  | 20A @ 16VDC / 125VAC gp<br>10A @ 250VAC general purpose<br>1/3hp @ 125VAC / 277VAC |  |  |  |
| 20A Contact N.O.   |  | 10A @ 250VAC 85C, 100K cycles general purpose                                      |  |  |  |
| 15A Contact        |  | 15A @ 125VAC general purpose<br>6A @ 277VAC general purpose                        |  |  |  |
| 15A Contact N.O.   |  | 15A @ 125VAC resistive, 30K cycles<br>4FLA, 40LRA @ 24VDC DC motor, 1000 cycles    |  |  |  |
| 12A Contact        |  | 12A @ 125VAC general purpose<br>12A @ 28VDC general purpose                        |  |  |  |

| TÜV Contact Ratings – .36W coil power only |  |                           |  |
|--------------------------------------------|--|---------------------------|--|
| N.O.                                       |  | 6A @ 250VAC<br>6A @ 28VDC |  |
| N.C.                                       |  | 6A @ 250VAC<br>6A @ 28VDC |  |

## Coil Data\*

| Coil Voltage<br>VDC |      | Coil Resistance<br>Ω +/- 10% |      |      | Pick Up Voltage<br>VDC (max)<br><br>75% of rated<br>voltage | Release Voltage<br>VDC (min)<br><br>10% of rated<br>voltage | Coil Power<br>W   | Operate Time<br>ms | Release Time<br>ms |
|---------------------|------|------------------------------|------|------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------|--------------------|--------------------|
| Rated               | Max  | .36W                         | .45W | .80W |                                                             |                                                             |                   |                    |                    |
| 3                   | 3.9  | 25                           | 20   | 11   | 2.25                                                        | .3                                                          | .36<br>.45<br>.80 | 10                 | 5                  |
| 5                   | 6.5  | 70                           | 56   | 31   | 3.75                                                        | .5                                                          |                   |                    |                    |
| 9                   | 11.7 | 225                          | 180  | 101  | 6.75                                                        | .9                                                          |                   |                    |                    |
| 12                  | 15.6 | 400                          | 320  | 180  | 9.00                                                        | 1.2                                                         |                   |                    |                    |
| 24                  | 31.2 | 1600                         | 1280 | 720  | 18.00                                                       | 2.4                                                         |                   |                    |                    |
| 48                  | 62.4 | 6400                         | 5120 | 2880 | 36.00                                                       | 4.8                                                         |                   |                    |                    |

**General Data\***

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| Electrical Life @ rated load         | 100K cycles, average                |
| Mechanical Life                      | 10M cycles, average                 |
| Insulation Resistance                | 100M $\Omega$ min. @ 500VDC initial |
| Dielectric Strength, Coil to Contact | 1500V rms min. @ sea level initial  |
| Contact to Contact                   | 750V rms min. @ sea level initial   |
| Shock Resistance                     | 100m/s <sup>2</sup> for 11 ms       |
| Vibration Resistance                 | 1.50mm double amplitude 10~40Hz     |
| Operating Temperature                | -55°C to +125°C                     |
| Storage Temperature                  | -55°C to +155°C                     |
| Solderability                        | 260°C for 5 s                       |
| Weight                               | 9.5g                                |

\* 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.

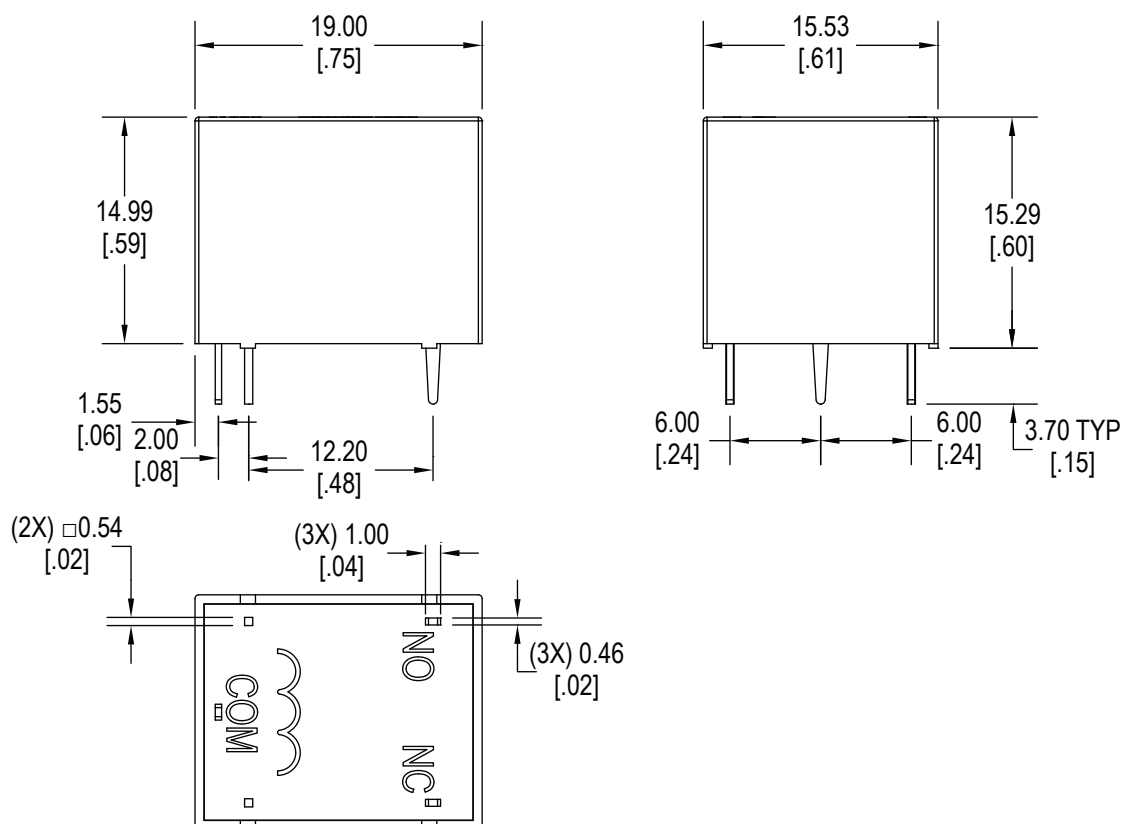
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## Ordering Information

|                                                         |       |    |   |    |       |     |
|---------------------------------------------------------|-------|----|---|----|-------|-----|
| 1. Series                                               | J107F | 1C | S | 12 | 12VDC | .36 |
| J107F                                                   |       |    |   |    |       |     |
| 2. Contact Arrangement                                  |       |    |   |    |       |     |
| 1A = SPST N.O.                                          |       |    |   |    |       |     |
| 1B = SPST N.C.                                          |       |    |   |    |       |     |
| 1C = SPDT                                               |       |    |   |    |       |     |
| 3. Sealing Option                                       |       |    |   |    |       |     |
| S = Sealed                                              |       |    |   |    |       |     |
| 4. Contact Rating                                       |       |    |   |    |       |     |
| 12 = 12A                                                |       |    |   |    |       |     |
| 15 = 15A                                                |       |    |   |    |       |     |
| 20 = 20A (20Amp available in .45 or .80 watt coil only) |       |    |   |    |       |     |
| 5. Coil Voltage                                         |       |    |   |    |       |     |
| 3VDC                                                    |       |    |   |    |       |     |
| 5VDC                                                    |       |    |   |    |       |     |
| 9VDC                                                    |       |    |   |    |       |     |
| 12VDC                                                   |       |    |   |    |       |     |
| 24VDC                                                   |       |    |   |    |       |     |
| 48VDC                                                   |       |    |   |    |       |     |
| 6. Coil Power                                           |       |    |   |    |       |     |
| .36 = .36W                                              |       |    |   |    |       |     |
| .45 = .45W                                              |       |    |   |    |       |     |
| .80 = .80W                                              |       |    |   |    |       |     |

## Dimensions

Units = mm



## Schematics & PC Layouts

Bottom Views

