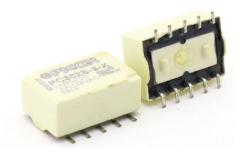


# **Microminiature 1 Amp Signal Relay**



# UL / CUL Ratings

| Contact Form               | 2 Form C, DPDT bifurcated contacts |      |  |
|----------------------------|------------------------------------|------|--|
| Rated Load                 | Voltage                            | Amps |  |
| Resistive, 6K cycles, 40°C | 30VDC                              | 1A   |  |
| Resistive, 6K cycles, 40°C | 125VAC                             | .5A  |  |

## CONTACT DATA

| Maximum Switching Power    |            | 30W                            |  |
|----------------------------|------------|--------------------------------|--|
| Maximum Switching Voltage  |            | 250VAC, 48VDC                  |  |
| Maximum Switching Current  |            | 1A                             |  |
| Material                   |            | AgPd, Au Plated                |  |
| Initial Contact Resistance |            | 50 mΩ max.                     |  |
| Service Life               | Mechanical | 1 x 10 <sup>7</sup> operations |  |
|                            | Electrical | 1 x 10 <sup>5</sup> operations |  |

# **c Su**s E86876

## FEATURES

- Microminiature Design
- DIL Package for PC Board or Socket
- Low 5mm Profile
- Meets FCC Part 68 Voltage Surge
- Bifurcated Contacts for High Sensitivity
- .300" 10 Pin DIL Socket Footprint

### **CHARACTERISTICS**

| Insulation Resistance | 100M $\Omega$ min. at 500 VDC                      |  |  |
|-----------------------|--|--|--|
| Dielectric Strength   | 1500V rms, between coil & contacts                 |  |  |
|                       | 1000V rms, between contacts                        |  |  |
|                       | 1000V rms, between poles                           |  |  |
| Initial Surge Voltage | 2500V (Telcordia, 2X10us), between coil & contacts |  |  |
|                       | 1500V (FCC part 68, 10x60us), between contacts     |  |  |
| Power Consumption     | .14W, .20W, .30W, .40W                             |  |  |
| Terminal Strength     | 5N   |  |  |
| Solderability         | 260°C 5 s ± 0.5 s                                  |  |  |
| Operating Temperature | -40°C to 85°C                                      |  |  |
| Storage Temperature   | -40°C to 155°C                                     |  |  |
| Shock Resistance      | 500 m/s² 11 ms                                     |  |  |
| Vibration Resistance  | 10-40 Hz double amplitude 3mm                      |  |  |
| Weight                | 1.5g   |  |  |

#### **ORDERING INFORMATION**

| Example            | PC302S   | -12 | -X |
|--------------------|--|-----|----|
| Model:             | PC302S   |     |    |
| Coil Voltage:      | 5 = 5VDC<br>9 = 9VDC<br>12 = 12VDC<br>24 = 24VDC | _   |    |
| Type of Operation: | Nil = Single Side Stable                         |     |    |
| RoHS Compliant:    | X = RoHS Compliant                               |     |    |

Values can change due to the switching frequency, desired reliability levels, environmental conditions, and in-rush current levels. It is recommended to test to actual load conditions for the application. It is the users 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.





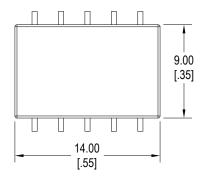
**PC302S** 

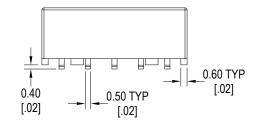
# Microminiature 1 Amp Signal Relay

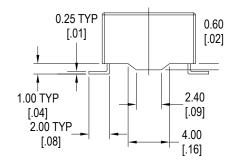
### COIL DATA - Single Side Stable

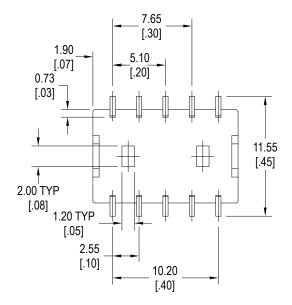
|              | <u> </u> |              |                      |                      |            |              |              |
|--------------|----------|--------------|----------------------|----------------------|------------|--------------|--------------|
| Coil Voltage |          | Resistance   | Pick Up Voltage Max. | Release Voltage Min. | Coil Power | Operate Time | Release Time |
| Rated        | Maximum  | (Ohms ± 10%) | VDC                  | VDC                  | W          | ms           | ms           |
| 5            | 6.5      | 178          | 3.75                 | .5                   |            |              |              |
| 9            | 11.7     | 579          | 6.75                 | .9                   | .14        | 4            | 4            |
| 12           | 18.0     | 1028         | 9.00                 | 1.2                  |            | 4            | 4            |
| 24           | 36.0     | 2880         | 18.00                | 2.4                  | .20        |              |              |

# DIMENSIONS mm (inches)











PC302S

# SCHEMATICS & PC LAYOUT Top Views

