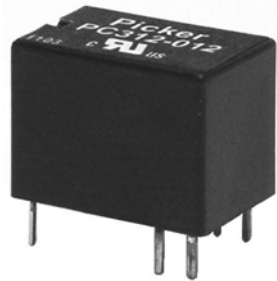


# Subminiature PCB Telecom Relay

# PC312B



## FEATURES

- Subminiature design
- PC Terminals on .1 in. grid pattern
- Contact capacity from 1 mA to 5A
- Meets FCC part 68 voltage surge
- Class "B" insulation standard
- Three coil sensitivities available
- Sealed, immersion cleanable
- **Now available Lead Free & RoHS Compliant**



File # E86876

## UL/CSA RATINGS

|                            |                      |
|----------------------------|----------------------|
| Contact Form               | 1 Form C SPDT        |
| Rated Load                 | 3A @ 125VAC / 30 VDC |
| Rated Load (Special)       | 5A @ 120VAC / 30VDC  |
| Max. Switching Current     | 3 Amps               |
| Max. Switching Current (S) | 5 Amps               |
| Minimum Load (Gold Plated) | 1 mA @ 1 VDC         |

## CONTACT DATA

|                            |                                                                                                       |                                |
|----------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------|
| Material                   | Ag (Fine Silver), Ag+Au (Fine Silver Gold Clad)<br>AgNi (Silver Nickel), AgCdO (Silver Cadmium Oxide) |                                |
| Initial Contact Resistance | 100 milliohms max @ 0.1A, 6VDC (with Gold Plate)                                                      |                                |
| Service Life               | Mechanical                                                                                            | 1 X 10 <sup>7</sup> Operations |
|                            | Electrical                                                                                            | 1 X 10 <sup>5</sup> Operations |

## CHARACTERISTICS

|                           |                                                                                                                      |
|---------------------------|----------------------------------------------------------------------------------------------------------------------|
| Operate Time              | 5 ms. Max.                                                                                                           |
| Release Time              | 5 ms. Max.                                                                                                           |
| Insulation Resistance     | 100 megohms min, at 500VDC, 50%RH                                                                                    |
| Dielectric Strength       | 1250 Vrms, 1 min. between coil and contacts<br>500 Vrms, 1 min. between open contacts: 750 Vrms, 1 min for S version |
| Surge Resistance          | 1500 V, between coil and contacts (FCC Part 68)                                                                      |
| Shock Resistance          | 10 g, 11ms, functional; 100 g, destructive                                                                           |
| Vibration Resistance      | DA 1.5 mm, 10 - 55 Hz                                                                                                |
| Power Consumption         | 0.45 W, 0.36 W or 0.2 W                                                                                              |
| Ambient Temperature Range | -25 to 70 C operating, -30 to 130 storage                                                                            |
| Weight                    | 3.5 grams approx.                                                                                                    |

## ORDERING INFORMATION

|                                        |        |     |   |   |    |
|----------------------------------------|--------|-----|---|---|----|
| Example:                               | PC312B | -12 | H | S | -X |
| Model                                  |        |     |   |   |    |
| Coil Voltage                           |        |     |   |   |    |
| Coil Sensitivity                       |        |     |   |   |    |
| Nil: 0.36 W; B: 0.45 W; H: 0.2 W       |        |     |   |   |    |
| Current Rating                         |        |     |   |   |    |
| Nil: Standard, 3 Amp; S: Special 5 Amp |        |     |   |   |    |
| RoHS Compliant                         |        |     |   |   |    |
| Nil: Not Rohs, -X: RoHS Compliant      |        |     |   |   |    |

**COIL DATA**

| Coil Voltage | Resistance ohms $\pm$ 10%    |                                |                             | Must Operate Voltage Max. (VDC) | Must Release Voltage Min. (VDC) |
|--------------|------------------------------|--------------------------------|-----------------------------|---------------------------------|---------------------------------|
|              | Sensitivity Code B<br>0.45 W | Standard Sensitivity<br>0.36 W | Sensitivity Code H<br>0.2 W |                                 |                                 |
| 3            | 20                           | 25                             | 45                          | 2.25                            | 0.3                             |
| 5            | 56                           | 70                             | 120                         | 3.75                            | 0.5                             |
| 6            | 80                           | 100                            | 180                         | 4.50                            | 0.6                             |
| 9            | 180                          | 220                            | 440                         | 6.75                            | 0.9                             |
| 12           | 320                          | 400                            | 700                         | 9.00                            | 1.2                             |
| 18           | 720                          | 900                            | 1620                        | 13.5                            | 1.8                             |
| 24           | 1280                         | 1600                           | 2800                        | 18.00                           | 2.4                             |

Note: Custom coil voltages within the ranges shown are available on special order.

**Dimensions in Inches (millimeters)**

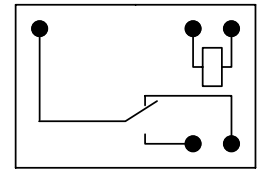
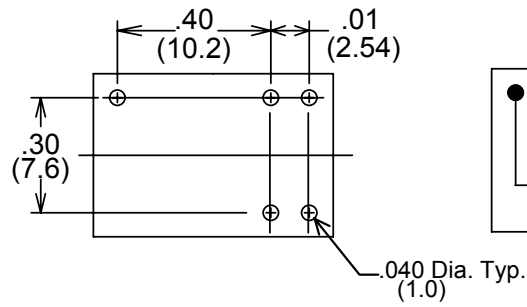
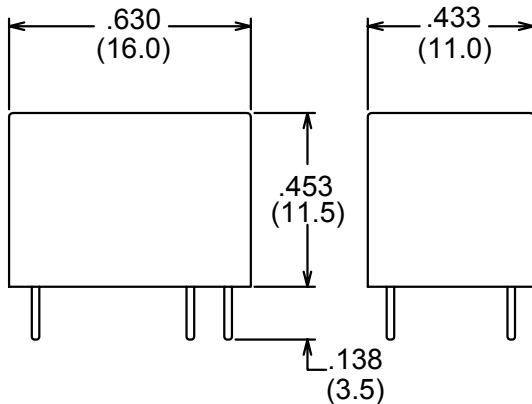
**Drawings are 2X actual size**

**Side View**

**End View**

**Bottom View  
PC Board Layout**

**Wiring Diagram**



**Notes:**

Tolerances  $\pm$  .010 unless otherwise noted



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