

# 25/20 Amp Automotive Plug-In Micro ISO Relay

**PC780**



## FEATURES

- 25/20 Amps at 14 VDC Rating
- 75 Amps Switching Current
- Miniature Package - 22.6 mm x 15.2 mm x 16.2 mm
- Reduced Footprint
- Micro ISO Terminal
- 105° C Operating Temperature
- RoHS Compliant

## CONTACT RATINGS 14 VDC

|                        |               |
|------------------------|---------------|
| Contact Form           | 1 Form A      |
|                        | Normally Open |
| Max Switching Current  | Make 75 A     |
|                        | Break 25 A    |
| Max Switching Power    | 350 Watts     |
| Max Switching Voltage  | 75 VDC        |
| Max Continuous Current | 25 A          |

## CONTACT DATA

|                            |                    |                                |
|----------------------------|--------------------|--------------------------------|
| Material                   | AgSnO <sub>2</sub> |                                |
| Initial Contact Resistance | 50 mΩ max          |                                |
| Service Life               | Electrical         | 1 x 10 <sup>5</sup> Operations |
|                            | Mechanical         | 1 x 10 <sup>7</sup> Operations |

## CHARACTERISTICS

|                       |   |
|-----------------------|---|
| Operate Time          | 10 ms max                                   |
| Release Time          | 10 ms max                                   |
| Insulation Resistance | 20 MΩ min at 500VDC,                        |
| Dielectric Strength   | 500 Vrms, 50 Hz. between Contacts           |
|                       | 500 Vrms, 50 Hz. between contact and coil   |
| Shock Resistance      | Function: 100 m/s <sup>2</sup> 11 ms        |
|                       | Survival: 1000 m/s <sup>2</sup> 11 ms       |
| Vibration Resistance  | Function: 10-100 Hz; 44.1 m/s <sup>2</sup>  |
|                       | Survival: 100-500 Hz; 44.1 m/s <sup>2</sup> |
| Power Consumption     | 800 mW                                      |

## CHARACTERISTICS Continued

|                       |              |
|-----------------------|--------------|
| Terminal Strength     | 10N          |
| Operating Temperature | -40 to 105°C |
| Relative Humidity     | 95%          |
| Weight                | 15 grams     |

## ORDERING INFORMATION

|                     |                                 |     |     |   |    |    |
|---------------------|---------------------------------|-----|-----|---|----|----|
| Example:            | PC780                           | -1C | -12 | S | -R | -X |
| Model:              | <b>PC780</b>                    |     |     |   |    |    |
| Contact Form:       | <b>1A</b>                       |     |     |   |    |    |
| Mounting Version :  | <b>Nil: Plug-In</b>             |     |     |   |    |    |
| Coil Voltage:       | <b>12</b>                       |     |     |   |    |    |
| Enclosure:          | <b>C: Dust Cover, S: Sealed</b> |     |     |   |    |    |
| Parallel Component: | <b>Nil: None; R: Resistor</b>   |     |     |   |    |    |
| RoHS Compliant:     | <b>-X</b>                       |     |     |   |    |    |

See SC782 for Available Sockets

Box Quantity: 500; Inner Box: 50

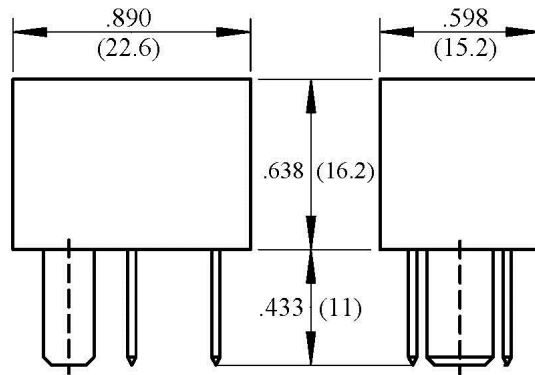
**COIL DATA**

| Coil Voltage (VDC) |     | Resistance (Ohms ± 10%) | Must Operate Voltage Max (VDC) | Must Release Voltage Min. (VDC) | Coil Power (mW) |
|--------------------|-----|-------------------------|--------------------------------|---------------------------------|-----------------|
| Rated              | Max |                         |                                |                                 |                 |
| 12                 | 16  | 180                     | 7.0                            | 0.6                             | 800             |

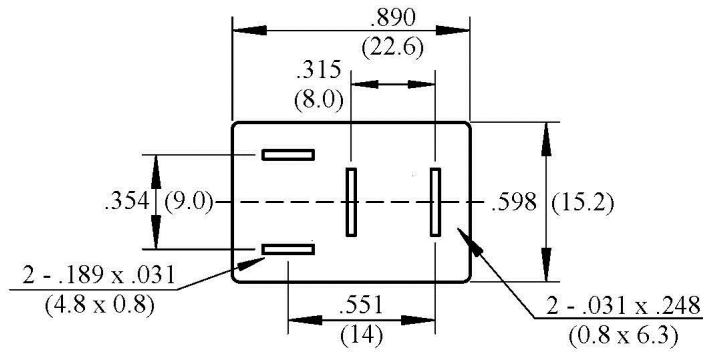
**NOTES:**

The use of any coil voltage less than the rated voltage will compromise the operation of the relays.  
 Must Operate Voltage is listed for test purposes only and is not to be used as design criteria.  
 Pickup and release voltages are for test purposes only and are not to be used as design criteria.

**DIMENSIONS Inches/mm**

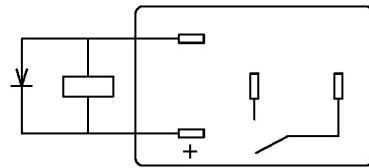


**Relay**



**1A**

**Terminal Layout (Bottom View)**



**1A**

**Wiring Diagram**