# Automotive Plug-In / PCB Mini ISO Relay

**PC792B**



## FEATURES

- 40 Amps Continuus Carrying Current
- Internal Diode or Resistor Option
- Sockets Available
- Fully Automated Assembly

RoHS COMPLIANT

## CONTACT RATINGS

| | | |
|---|---|---|
| Contact Form | | 1A SPST N.O.<br>1C SPDT<br>1AA SPST N.O. (2 #87 Terminals) |
| Contact Rating | 1A | 40A @ 14VDC, resistive<br>20A @ 28VDC, resistive |
| | 1C | 40A @ 14VDC, resistive<br>20A @ 28VDC, resistive |
| | 1AA | 40A @ 14VDC, resistive<br>20A @ 28VDC, resistive |

## CONTACT DATA

| | | |
|---|---|---|
| Maximum Switching Power | | 560 W |
| Maximum Switching Voltage | | 75 VDC |
| Maximum Continuous Current | | 40 A |
| Material | | $AgSnO_2$ |
| Initial Contact Resistance | | 30 mΩ max. |
| Service Life | Mechanical | 1 x $10^7$ operations |
| | Electrical | 1 x $10^5$ operations |

## CHARACTERISTICS

| | |
|---|---|
| Insulation Resistance | 100 MΩ min. at 500 VDC |
| Dielectric Strength | 500 Vrms, 50 Hz, between contacts<br>750 Vrms, 50 Hz, between coil & contacts |
| Power Consumption | 1.6W, 1.9W, 2.3W |
| Terminal Strength | 8N quick connect |
| Solderability | 260°C 5 s ± 0.5 s |
| Operating Temperature | -40ºC to 125ºC |
| Storage Temperature | -40ºC to 155ºC |
| Shock Resistance | 147 $m/s^2$ 11 ms |
| Vibration Resistance | 10-40Hz; 1.5mm double amplitude |
| Weight | 31.0g |

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 applicaiton. 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.

## ORDERING INFORMATION

| Example | PC792B | -1C | -C | -12 | S | 1.9 | -D | N | -X |
|---|---|---|---|---|---|---|---|---|---|

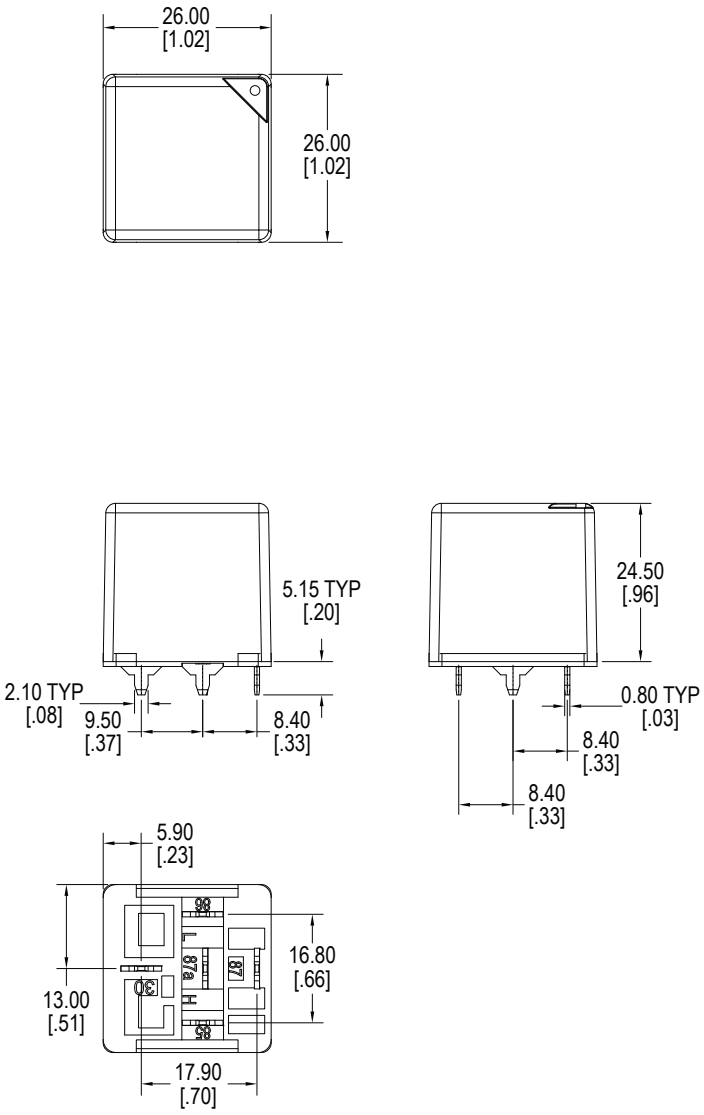
| | |
|---|---|
| Model: | PC792B |
| Contact Form: | 1A<br>1C<br>1AA |
| Mounting Version: | C = Plug-In<br>C1 = Plastic Bracket<br>C2 = Metal Bracket<br>C3 = Weatherproof Case with Metal Bracket *only available sealed*<br>P = PC Pins |
| Coil Voltage: | 6 = 6VDC<br>9 = 9VDC<br>12 = 12VDC<br>24 = 24VDC<br>48 = 48VDC |
| Enclosure: | C = Dust Cover<br>S = Sealed<br>S1 = Flux Tight (1) |
| Coil Power: | Nil = 1.6W<br>1.9 = 1.9W<br>2.3 = 2.3W (2) |
| Parallel Component: | Nil = None<br>D = Diode<br>D1 = Reverse Diode<br>R = Resistor |
| Terminal Plating: | Nil = PC Pin<br>N = Nickel Plated Terminals, standard on all Plug-In models |
| RoHS Compliant: | -X |

(1) Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT suitable for water wash cleaning.
(2) Special coil - minimum order quantities apply.

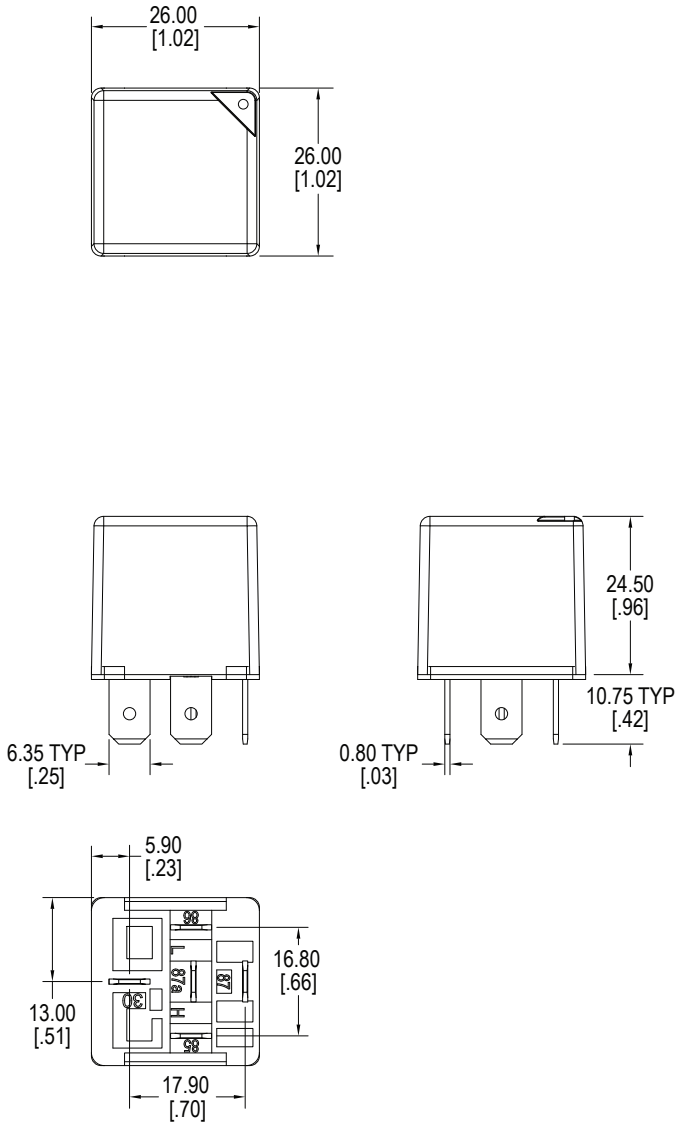
## COIL DATA

| Coil Voltage | | Resistance (Ohms ± 10%) | | | Pick Up Voltage Max. VDC | Release Voltage Min. VDC | Coil Power W | Operate Time ms | Release Time ms |
|---|---|---|---|---|---|---|---|---|---|
| Rated | Maximum | 1.6W | 1.9W | 2.3W | | | | | |
| 6 | 7.8 | 22.5 | 19 | 15.6 | 3.9 | 0.6 | 1.6<br>1.9<br>2.3 | ≤10 | ≤10 |
| 9 | 11.7 | 50.6 | n/a | n/a | 5.9 | 0.9 | | | |
| 12 | 15.6 | 90 | 75.8 | 62.6 | 7.8 | 1.2 | | | |
| 24 | 31.2 | 360 | 303.2 | 250.4 | 15.6 | 2.4 | | | |
| 48 | 62.4 | 1440 | n/a | n/a | 31.2 | 4.8 | | | |

## DIMENSIONS *mm (inches)*

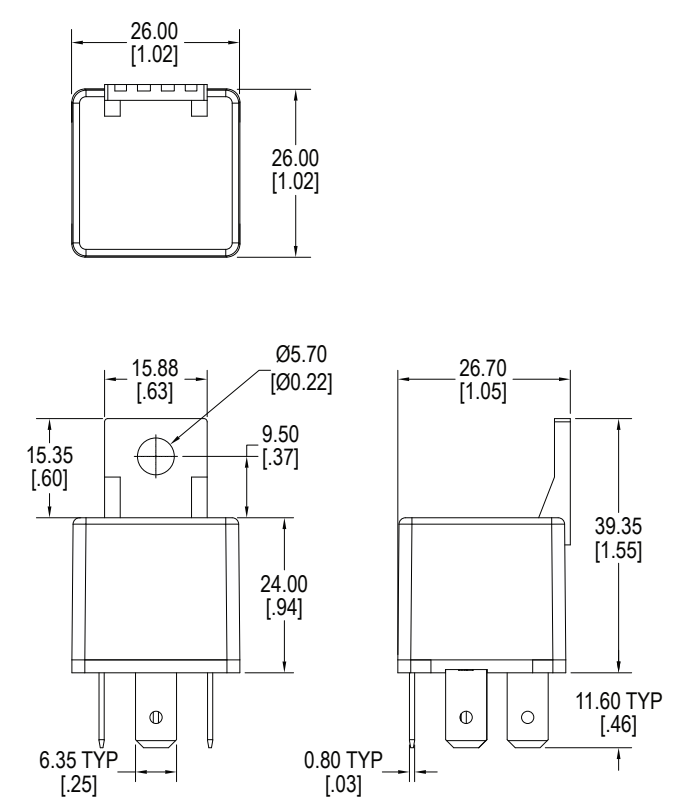



Standard with PC Pins (P)

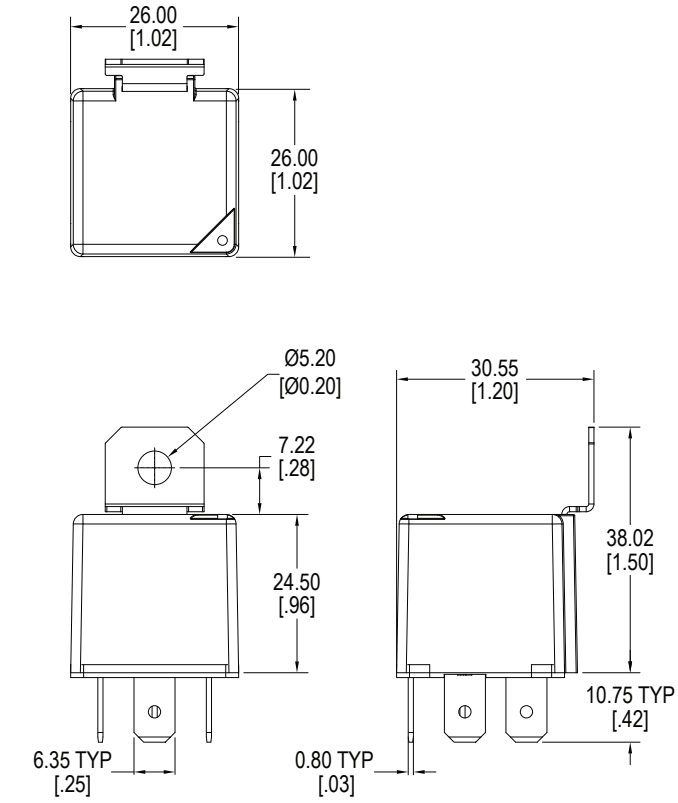



Standard with Quick Connect (C)

## DIMENSIONS *mm (inches)*

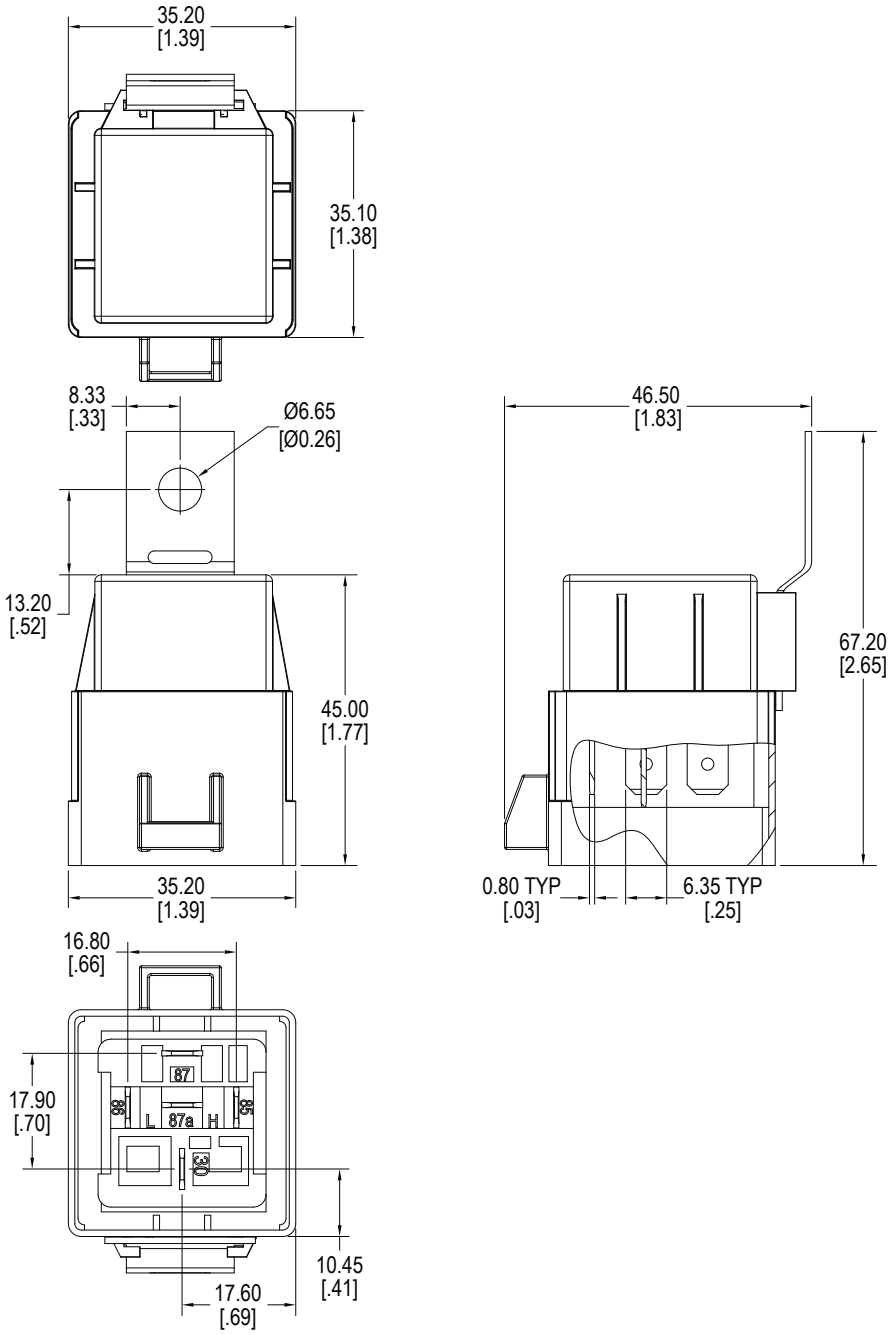



Quick Connect with Plastic Bracket (C1)



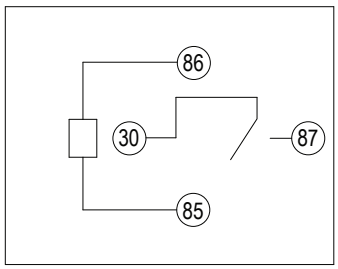

Quick Connect with Metal Bracket (C2)

## DIMENSIONS *mm (inches)*

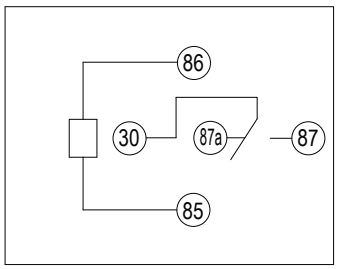



Quick Connect with Weatherproof Shroud (C3)

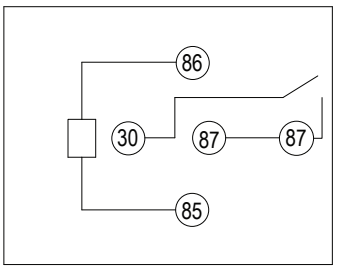
## SCHEMATICS *Bottom Views*



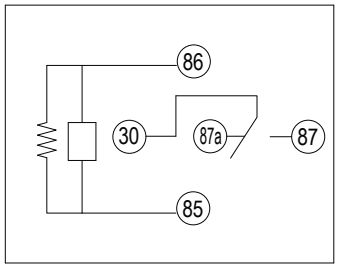

1A



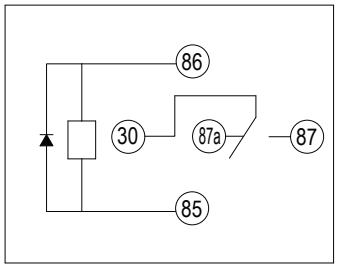

1C



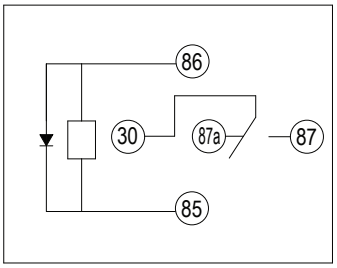

1AA




1C with Resistor




1C with Diode




1C with Reverse Diode

## PC LAYOUT

