

# 150/100 Amp Automotive Plug-In / PCB Maxi ISO Relay

# PC7150



## FEATURES

- Popular Maxi ISO Automotive Relay Footprint
- 1A and 1C Contact Forms Available
- Contact Switching Capacity up to 450 Amps
- 150 Amps Continuous Carrying Current
- Up to 125°C Operating Temperature
- Internal Diodes or Resistors Available
- Plain Case, Metal Mounting Bracket and PC Pins
- Sockets Available
- Lead Free and RoHS Compliant

## CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 450 A <sup>(1)</sup>	Make 300 A <sup>(1)</sup>
	Break 150 A	Break 100 A
Max Continuous Current	150 A @ 25°C	100 A @ 25°C
	112.5 A @ 85°C	75 A @ 85°C
Max Switching Voltage	75 VDC	
Max. Switching Power	1800 W	
Minimum Load	0.5A @ 12 VDC	

## CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 225 A <sup>(1)</sup>	Make 150 A <sup>(1)</sup>
	Break 75 A	Break 50 A
Max Continuous Current	75 A @ 25°C	50 A @ 25°C
	56.25 A @ 85°C	37.5 A @ 85°C
Max Switching Voltage	75 VDC	
Max. Switching Power	1800 W	
Minimum Load	0.5A @ 24 VDC	

## CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	2 msec Typical
Insulation Resistance	100 MΩ Min @ 500VDC
Dielectric Strength	50 Hz 1000 V Between Contact and Coil
	50 Hz 750 V Between Contacts
Shock Resistance	147 m/s <sup>2</sup> 11 msec
Vibration Resistance	10-40 Hz Double Amplitude 1.5mm
Terminal Strength	30 N
Solderability	260°C for 5 seconds
Power Consumption	2.9 W

## CONTACT DATA

Material	AgSnO <sub>2</sub>	
Initial Contact Resistance	100 MΩ Max @ 0.1 A, 6 VDC	
Service Life	Electrical	1 x 10 <sup>5</sup> Operations
	Mechanical	1 x 10 <sup>7</sup> Operations

## CHARACTERISTICS Continued

Operating Temperature	-40°C to 125°C
Storage Temperature	-40°C to 155°C
Relative Humidity	85% at 40°C
Weight	60 grams
Flammability	UL-94-VO Meets FMVSS 302

<sup>(1)</sup>With current load applied for a maximum of 3 seconds at a maximum duty cycle of 10%

## ORDERING INFORMATION

Example:	PC7150	-1C	-C2	-12	C	-R	N	-X
Model:	<b>PC7150</b>							
Contact Form:	<b>1A, 1C</b>							
Case Style:	<b>C: Plug-In; C2: Metal Bracket; P: PC Pins</b>							
Coil Voltage:	<b>12, 24, 48</b>							
Enclosure:	<b>C: Dust Cover, S1: Flux Tight<sup>(2)</sup></b>							
Parallel Component:	<b>Nil: None; D: Diode; R: Resistor</b>							
Terminal Plating:	<b>N: Nickel Plated Terminals Standard on all Plug In Models; Nil: PC PIN Version</b>							
RoHS Compliant:	<b>-X</b>							

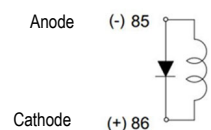
<sup>(2)</sup> Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT Suitable for water wash cleaning.

Box Quantity: 200; Inner Box:100

### Coil Options

Resistor Values:  
6V - 180 ohm  
12V - 680 ohm  
24V - 2,700 ohm  
Diode: 1N4005

### Orientation of Optional Diode



\*Contact Picker if You Require the Opposite Polarity or a Dual Diode

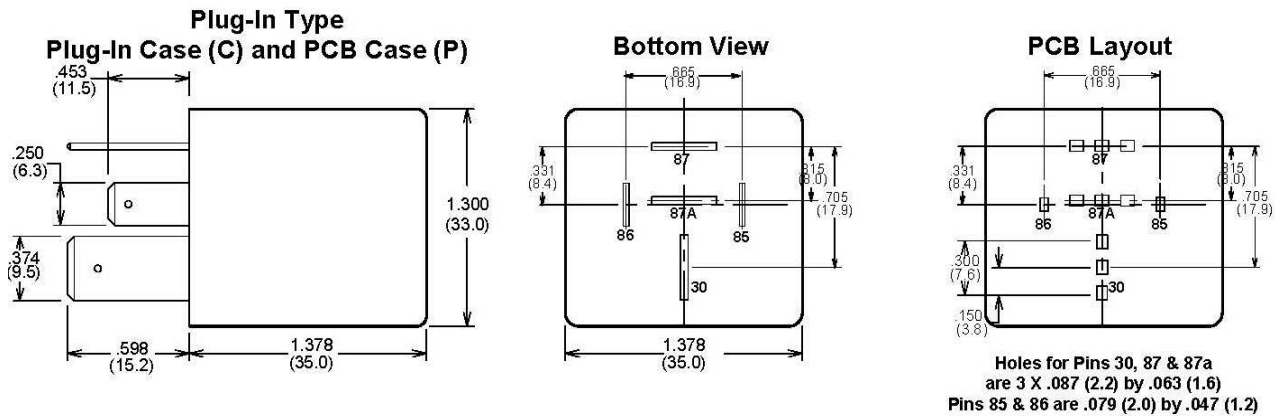
**COIL DATA**

Coil Voltage (VDC)		Must Operate Voltage Max (VDC)	Must Release Voltage Min (VDC)	Resistor Values (Ohms ± 10%)	Coil Resistance (Ohms ± 10%)		Rated Current (mA)		Coil Power (W)	
Rated	Max				Without Resistor	With Resistor	Without Resistor	With Resistor	Without Resistor	With Resistor
12	15.6	7.8	1.2	680	50	47	240	258	2.9	3.2
24	31.2	15.6	2.4	2700	195	182	123	132		
48	62.4	31.2	4.8	10000	794	736	60	65		

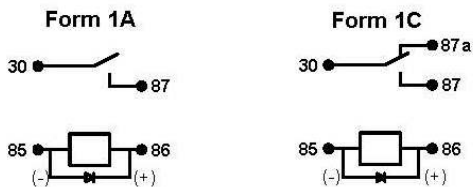
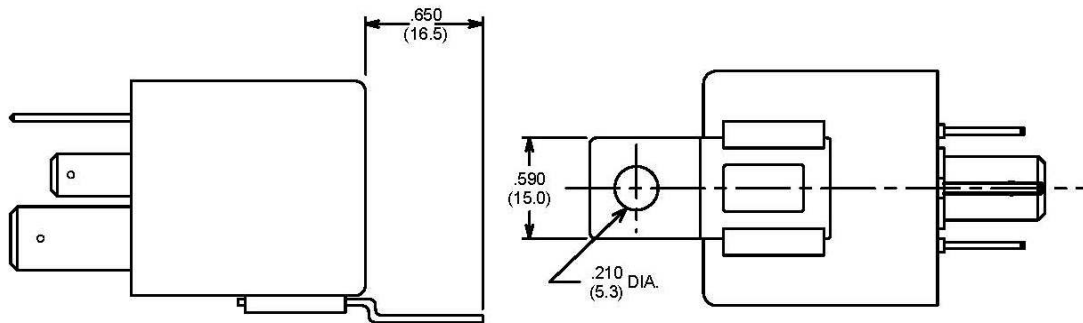
**NOTES:**

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 are in mm, Inches are listed for reference only.

**DIMENSIONS (inches/mm)**



**Metal Bracket Type**



**Wiring Diagrams**

Notes:

Tolerances ± .010 unless otherwise noted  
 Maximum make current refers to inrush of a lamp load

