

50/40 Amp Automotive Plug-In / PCB Mini ISO Relay

PC792E



FEATURES

- Most Popular Automotive Relay Footprint
- Contact Switching Capacity up to 150 Amps
- 50 Amps Continuous Carrying Current
- 125°C Operating Temperature
- Internal Diodes or Resistors Available
- >0.8 mm Contact Gap with 24 VDC
- Sockets Available
- Lead Free and RoHS Compliant

CONTACT RATINGS 14 VDC and 28 VDC AT 25° C

Contact Form		1 Form A	1 Form AA	1 Form B	1 Form C		1 Form U	
		SPST-NO	2-SPST-NO	SPST-NC	SPDT-NO	SPDT-NC	SPST-NO-DM	
Max Switching Current	14 VDC	Make 150 A ⁽¹⁾	Make 2 x 150 A ⁽¹⁾	Make 120 A ⁽¹⁾	Make 150 A ⁽¹⁾	Make 120 A ⁽¹⁾	Make 2 x 150 A ⁽¹⁾	
		Break 50 A	Break 2 x 50 A	Break 40 A	Break 50 A	Break 40 A	Break 2 x 50 A	
	28 VDC	Make 75 A ⁽¹⁾	Make 2 x 75 A ⁽¹⁾	Make 60 A ⁽¹⁾	Make 75 A ⁽¹⁾	Make 60 A ⁽¹⁾	Make 2 x 75 A ⁽¹⁾	
		Break 25 A	Break 2 x 25 A	Break 20 A	Break 25 A	Break 20 A	Break 2 x 25 A	
Max Continuous Current	14 VDC	50 A	2 x 50 A	40 A	50 A	40 A	2 x 25 A	
	28 VDC	25 A	2 x 25 A	20 A	25 A	20 A	2 x 15 A	
Max Switching Voltage	14 VDC	75 VDC						
	28 VDC	75 VDC						
Max. Switching Power	14 VDC	700 W						
	28 VDC	700 W						
Minimum Load	14 VDC	0.1A @ 12 VDC						
	28 VDC	0.1A @ 12 VDC						

⁽¹⁾With current load applied for a maximum of 10 milliseconds at a maximum duty cycle of 10%.

ORDERING INFORMATION

Example:	PC792E . -1C -C -12 S -R N -X
Contact Form:	1A, 1AA (1 Form 1 A with 2 #87 Terminals), 1B, 1C, or 1U (2 Form 1A with pins 87 and 87b isolated)
Case Style:	C: Plug-In; C1: Plastic Bracket; P: PC Pins
Coil Voltage:	6, 12, 24, 48
Enclosure:	C: Dust Cover; S: Sealed
Coil Power:	Nil: 1.6W*; 1.9: 1.9W; 2.3: 2.3W; 2.6: 2.6W
Parallel Component:	Nil: None; D: Diode; R: Resistor; DR: Diode and Resistor
Terminal Plating:	Nil: PC Pin Version; N: Nickel Plated Terminals Standard on all Plug-In Models
PoHS Compliant:	-X

Resistor Values (1/4 Watt):
6V -180 ohm
12V - 680 ohm
24V - 2,700 ohm
Diode: 1N4005

* 1.6W Industry Standard Coil

Box Quantity 400; Inner Box 100

COIL DATA

Coil Voltage (VDC)		Coil Power (W)				Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)
		Coil Resistance (Ohms ± 10%)					
Rated	Max	1.6 W*	1.9 W	2.3 W	2.6 W		
6	7.8	22.5	19.0	15.6	13.8	3.9	0.6
9	11.7	50.6	NA	NA	NA	5.9	0.9
12	15.6	90.0	75.8	62.6	55.4	7.8	1.8
24	31.2	360.0	303.2	250.4	221.5	15.6	2.4
48	62.4	1440.0	NA	NA	NA	31.2	4.8

*1.6 W Industry Standard Coil

NOTES:

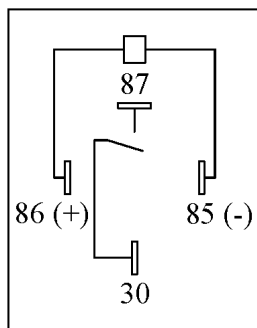
The use of any coil voltage less than the rated voltage will compromise the operation of the relays.
 Must Operate Voltage and Must Release Voltages are for test purposes only and are not to be used as design criteria.

CHARACTERISTICS

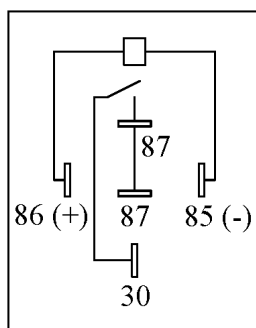
Operate Time	7 msec Typical
Release Time	5 msec Typical
Insulation Resistance	100 MΩ Min at 500VDC
Dielectric Strength	500 V 50 Hz Between Contacts 750 V 50 Hz Between Coil and Contact
Terminal Strength	8N 4N (PC type)
Shock Resistance	147 m/s ² 11ms
Vibration Resistance	10 Hz—40 Hz Double Amplitude 1.5 mm
Solderability	235°C ± 2°C 3 s ± 0.5 s
Operating Temperature	-40°C to 125°C
Storage Temperature	-40°C to 155°C
Weight	31 grams, C1 36 grams
Power Consumption	1.6 W, 1.9 W, 2.3 W, 2.6 W

CONTACT DATA

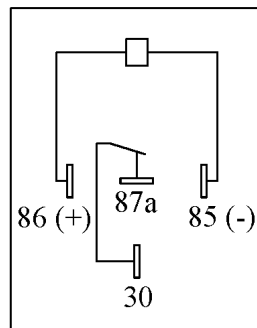
Material	AgSnO ₂	
Initial Contact Resistance	30 mΩ Max	
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations



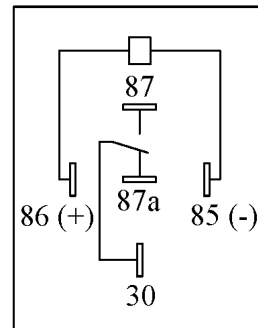
1A



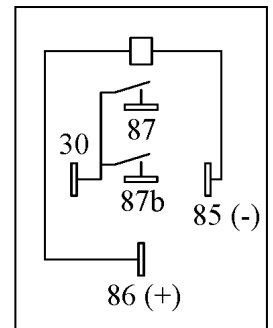
1AA



1B



1C



1U

Wire Diagrams



3220 Commander Drive, Suite 102 Carrollton, TX 75006
 Sales: (972) 713-6272 (888) 997-3933 Fax: (972) 735-0964

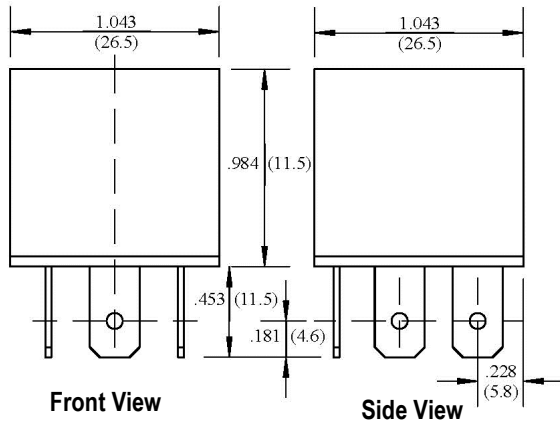
www.PickerComponents.com

e-mail: sales@pickercomponents.com

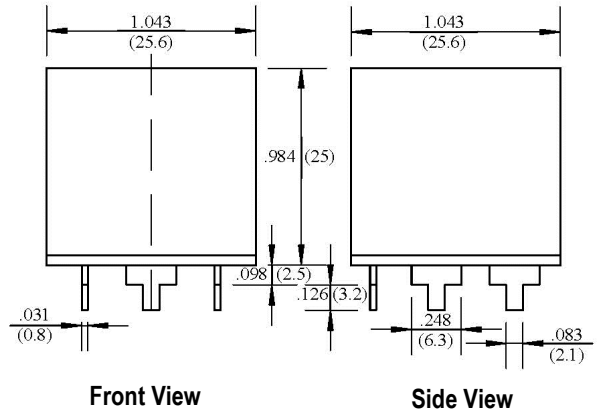
Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.

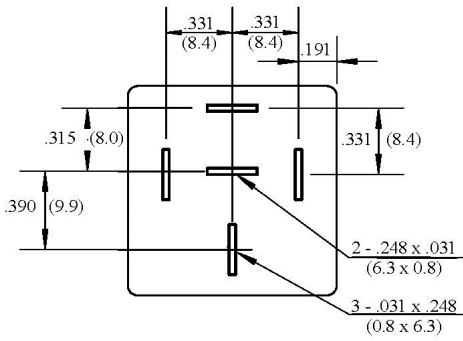
DIMENSIONS in Inches/mm



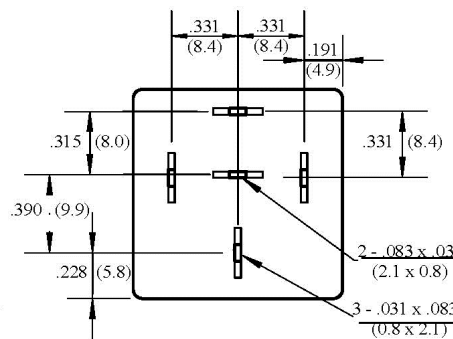
Relay (QC)



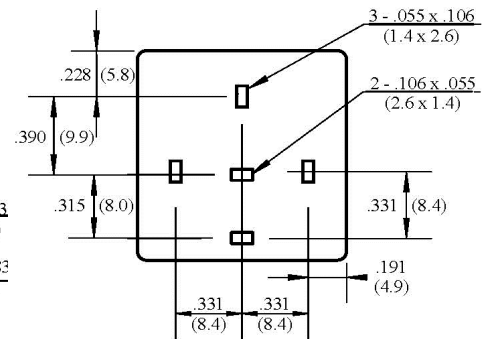
Relay (Pins)



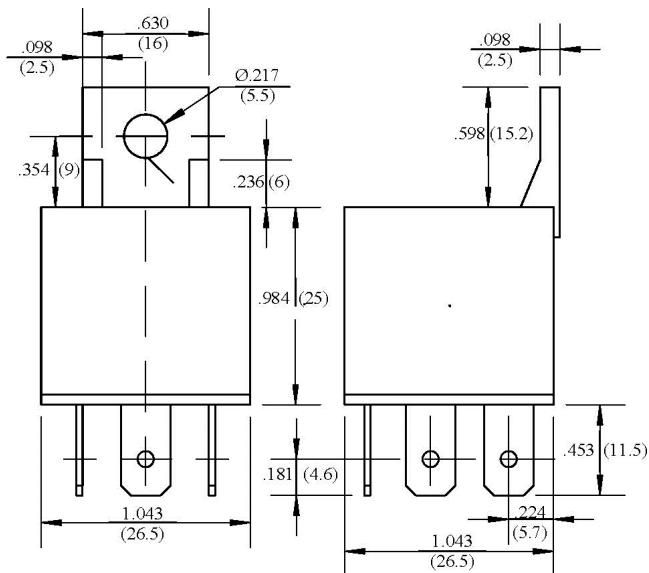
**Plug-In "C"
(Bottom View)**



**PC Pins "P"
(Bottom View)**



**PCB Board Layout
(Top View)**



Plastic Bracket "C1"

**Plu
g In
"C"**