50/40 Amp Automotive Plug-In / PCB Mini ISO Relay — PC792C

FEATURES

- Most Popular Automotive Relay Footprint
- 1A, 1C and 1U Contact Forms Available
- Contact Switching Capacity up to 150 Amps
- 50 Amps Continuous Carrying Current
- Up to 125°C Operating Temperature
- Internal Diodes or Resistors Available
- Plain Case, Plastic Bracket, Metal Bracket or PC Pins
- Compatible with Socket SC792
- Lead Free and RoHS Compliant
- Fully Automated Assembly

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 150 A(1)	Make 120 A(1)
	Break 50 A	Break 40 A
Max Continuous Current	50 A @ 25°C	40 A @ 25°C
	37.5 A @ 85°C	30 A @ 85°C
Max Continuous Current 1 Form U	2 X 30 Amps (at 20°C) 2 X 25 Amps (at 85°C)	
Max Switching Voltage	75 VDC	
Max. Switching Power	1,120 W	
Minimum Load	0.1A @ 12VDC	

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 75 A(1)	Make 60 A(1)
	Break 25 A	Break 20 A
Max Continuous Current	25 A @ 25°C	20 A @ 25°C
	18.75 A @ 85°C	15 A @ 25°C
Max Continuous Current 1 Form U	2 X 15 Amps (at 20°C) 2 X 12.5 Amps (at 85°C)	
Max Switching Voltage	75 VDC	
Max. Switching Power	1,120 W	
Minimum Load	0.1A @ 12VDC	

CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	2 msec Typical
Insulation Resistance	100 MΩ Min @ 500VDC
Dielectric Strength	50 Hz 500V_{RMS} 1 min. Between Contact and Coil
	50 Hz 500V_{RMS} 1 min. Between Contacts
Shock Resistance	147 m/s² 11 msec
Vibration Resistance	10-40 Hz Double Amplitude 1.5mm
Terminal Strength	8 N, 4N (PC Type)
Solderability	260°C for 5 seconds
Power Consumption	1.8 W Standard, 2.3 W & 2.6 W Optional

CONTACT DATA

Material		AgSnO2
Initial Contact Resistance		100 MΩ Max @ 0.1 A, 6 VDC
Service Life	Electrical	1 x 10^5 Operations
	Mechanical	1 x 10^7 Operations

CHARACTERISTICS Continued

Operating Temperature	-40°C to 125°C
Storage Temperature	-40°C to 155°C
Relative Humidity	85% at 40°C
Weight	46 grams, 48 grams w/Metal Bracket
Flammability	UL-94-VO Meets FMVSS 302

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

ORDERING INFORMATION

Example: PC792C -1C -C1 -12 C 2.3 -D N -X

- Model: **PC792C**
- Contact Form: **1A (SPST-NO), 1C (SPDT)** or **1U** (2 X 1A, 87 & 87b Isolated)
- Case Style: **C**: Plug-In; **C1**: Plastic Bracket; **C2**: Metal Bracket; **P**: PC Pins
- Coil Voltage: **6, 12, 24**
- Enclosure: **C**: Dust Cover
- Coil Power: **Nil**: 1.8 W; **2.3**: 2.3 W(2)
- Parallel Component: **Nil**: None; **D**: Diode; **D1:** Reverse Diode; **R**: Resistor
- Terminal Plating: **N**: Nickel Plated Terminals Standard on all Plug In Models; **Nil**: PC Pin Version
- RoHS Compliant: **-X**

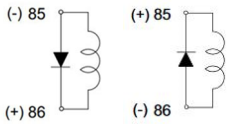
(2) Special coil, Minimum Order Quantities Apply

See SC792 for available sockets

Coil Options
Resistor Values:
6V - 180 ohm
12V - 680 ohm
24V - 2,700 ohm

Orientation of Optional Diode

Diode (D) Reverse Diode (D1)



*Contact Picker if you require a dual diode

Box Quantity: 400; Inner Box:100

14680 James Road, Rogers, MN 55374 USA
Sales: (763) 535-2339
www.PickerComponents.com
e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.

COIL DATA

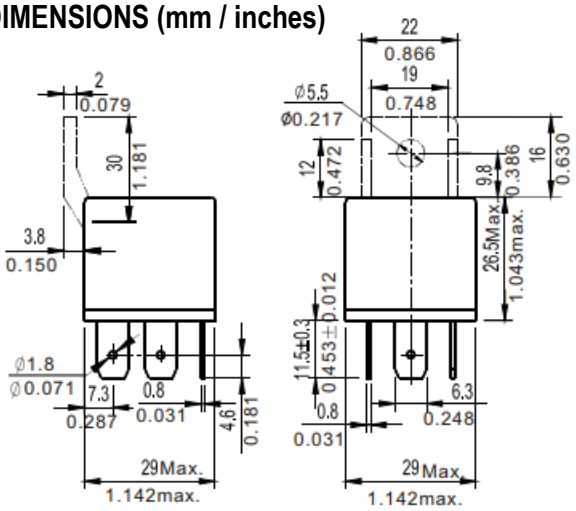
Coil Voltage (VDC)		Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Resistor Values (Ohms ± 10)	Rated Current (mA)		Coil Resistance (Ohms ± 10%)		Coil Power (W)	
Rated	Max				Without Resistor	With Resistor	Without Resistor	With Resistor	Without Resistor	With Resistor
6	7.8	3.9	0.6	180	300	333	20	18	1.8	2
12	15.6	7.8	1.2	680	150	168	80	71.6		
24	31.2	15.6	2.4	2700	75	84	320	286.1		

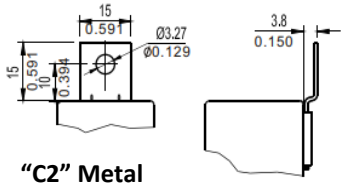
NOTES:

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.

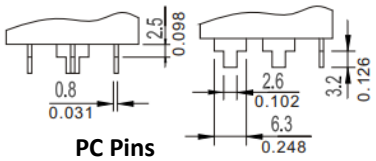
Dimensions are in mm, Inches are listed for reference only.

DIMENSIONS (mm / inches)

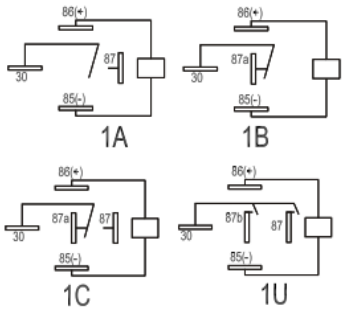




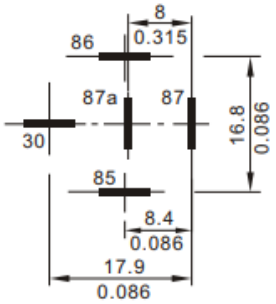
"C2" Metal



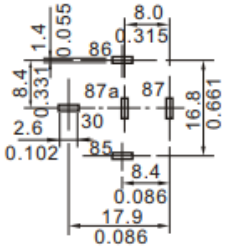
PC Pins



Wiring diagram

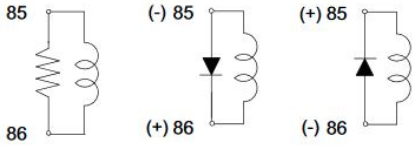


Plug in type



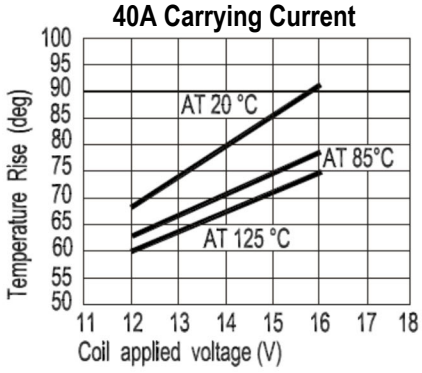
PC Pins

Parallel Component Options

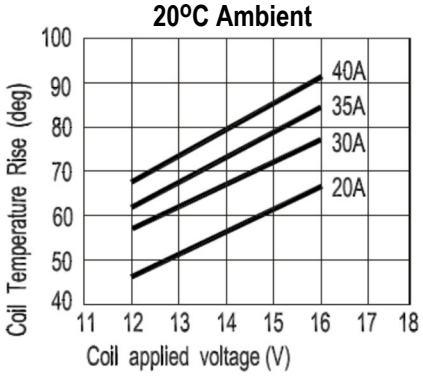


Resistor (R) Diode (D) Reverse Diode (D1)

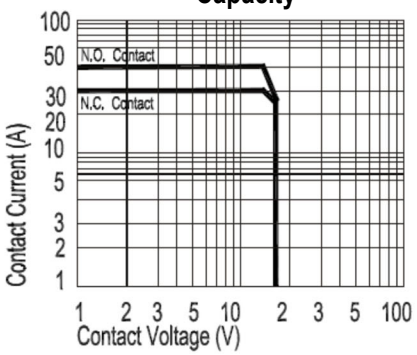
Coil Temperature Rise @ 40A Carrying Current



Coil Temperature Rise 20ºC Ambient



Max Value for Switching Capacity



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