

30 Amp Micro ISO Automotive Plug In / PCB - Ignition Protected PC782



FEATURES

- Ignition Protected* | SAE J1171 | UL 1500 | ISO 8846
- Micro Size Plug-in Design
- 1A (SPST-NO) and 1C (SPDT) Contact Forms Available
- Contact Switching Capacity up to 35 Amps
- -40°C to 125°C Operating Temperature
- PC Board Version Available
- See SC782 for Available Sockets
- Internal Diodes or Resistors Available
- RoHS Compliant
- Fully Automated Assembly

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A (SPST-NO)	1 Form C (SPDT)	
	Normally Open	Normally Open	Normally Closed
Max Switching Current	Make 90 A ⁽¹⁾	Make 90 A ⁽¹⁾	Make 20 A ⁽¹⁾
	Break 30 A	Break 30 A	Break 15 A
Max Continuous Current	35 A @ 25°C	30 A @ 25°C	20 A @ 25°C
	25 A @ 85°C	22.5 A @ 85°C	15 A @ 85°C
Max Switching Voltage	75 VDC		
Max. Switching Power	490 W	420 W	
Minimum Load	0.1A @ 12 VDC		

CHARACTERISTICS

Operate Time	10 msec max.
Release Time	7 msec max
Insulation Resistance	100 MΩ Min at 500VDC
Dielectric Strength	500 V, 50 Hz Between Contacts
	1,000 V, 50 Hz Between Contact and Coils
Shock Resistance	100 m/s ² 11ms
Vibration Resistance	10 Hz - 40 Hz Double Amplitude 2.7 mm
Terminal Strength	8N (Plug-In type), 4N (PCB type)
Coil Power Consumption	1.2 W (1A SPST-NO), 1.5 W (1C SPDT)

*Sealed with 6, 12 or 24 VDC, 1.2 or 1.5 Watt Coil Versions

ORDERING INFORMATION

Example:	PC782	-1C	-P	-12	S	-R	-X
Model:	PC782						
Contact Form:	1A: 1 Form A (SPST-NO) 1C: 1 Form C (SPDT)						
Mounting Version:	Nil: Plug-In; P: PCB						
Coil Voltage:	6: 6 VDC; 12: 12 VDC; 24: 24 VDC; 48: 48 VDC						
Enclosure:	C: Dust Cover, S: Sealed Case S1: Flux Tight ⁽²⁾						
Parallel Component:	Nil: None; D: Diode, :R Resistor						
RoHS Compliant:	-X						

⁽²⁾ Flux Tight relays are constructed such that Flux will not enter the relay in an automated process, they are NOT suitable for water wash cleaning

Box Quantity: 1,000; Inner Box: 500

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A (SPST-NO)	1 Form C (SPDT)	
	Normally Open	Normally Open	Normally Closed
Max Switching Current	Make 45 A ⁽¹⁾	Make 45 A ⁽¹⁾	Make 10 A ⁽¹⁾
	Break 15 A	Break 15 A	Break 7.5 A
Max Continuous Current	17.5 A @ 25°C	15 A @ 25°C	10 A @ 25°C
	12.5 A @ 85°C	11 A @ 85°C	7.5 A @ 85°C
Max Switching Voltage	75 VDC		
Max. Switching Power	490 W	420 W	
Minimum Load	0.1A @ 24 VDC		

CONTACT DATA

Material	AgSnO ₂	
Initial Contact Resistance	50 mΩ Max	
Service Life	Electrical	1 x 10 ⁶ Operations
	Mechanical	1 x 10 ⁷ Operations

CHARACTERISTICS Continued

Solderability	260°C for 5 seconds
Operating Temperature Range	- 40 to 125°C
Storage Temperature Range	- 40 to 155°C
Weight	18.5 grams

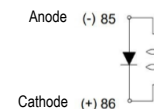
⁽¹⁾With current load applied for a maximum of 3 seconds at a maximum duty cycle of 10%.

See SC782 for Available Sockets

Coil Options

Resistor Values (1/4 Watt):
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

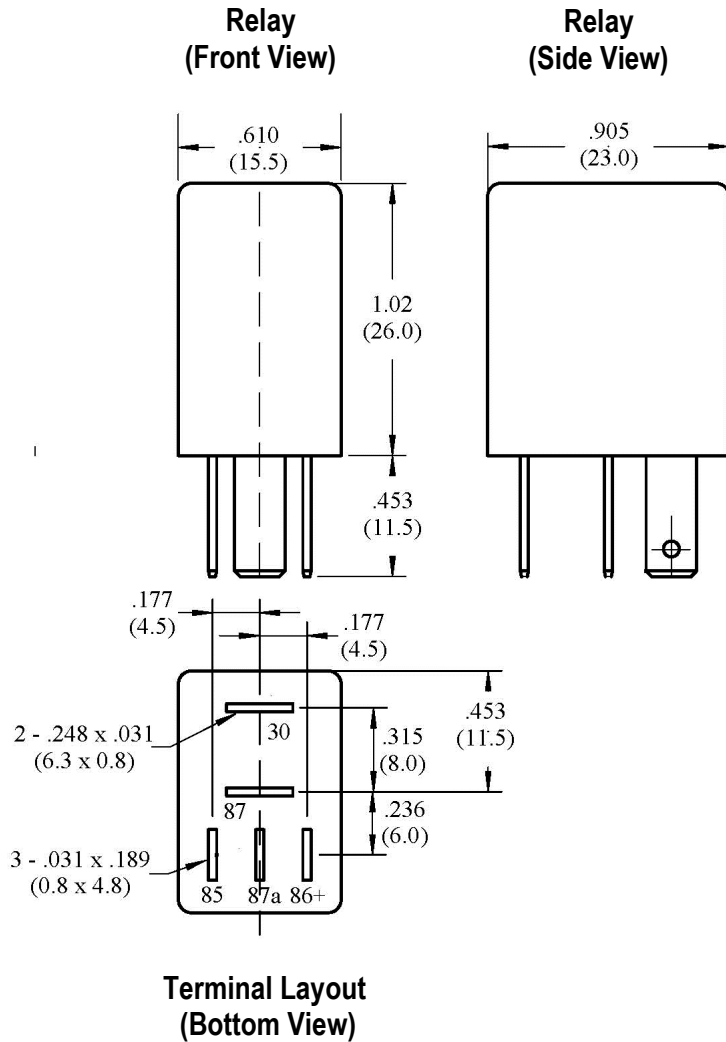
COIL DATA

Coil Voltage (VDC)(2)		Coil Resistance (Ohms ± 10%)		Must Operate Voltage Max (VDC)(3)	Must Release Voltage Min. (VDC)(3)
Rated	Max	1.2 W 1A (SPST - NO)	1.5 W 1C (SPDT)		
6	7.8	30	24	4.2	0.6
12	15.6	120	96	8.4	1.2
24	31.2	480	384	16.8	2.4
48	62.4	1,920	1,536	33.6	4.8

NOTES:

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

DIMENSIONS (mm/inches)



Wiring Diagrams



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

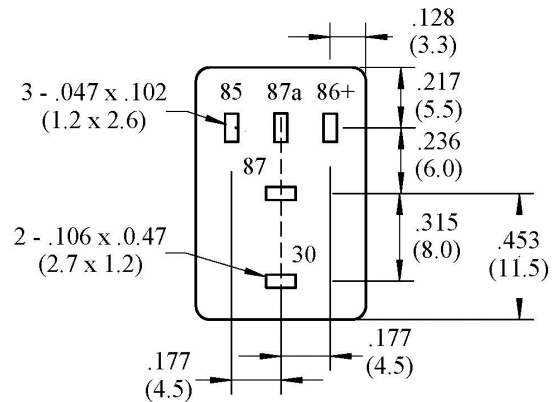
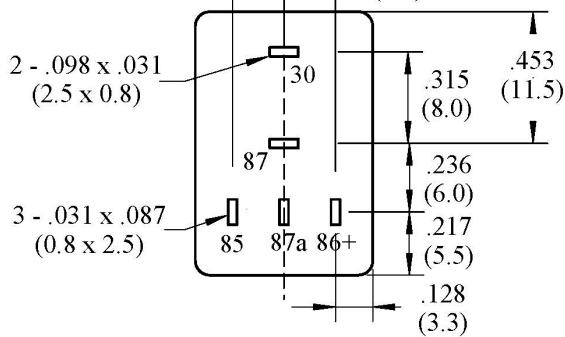
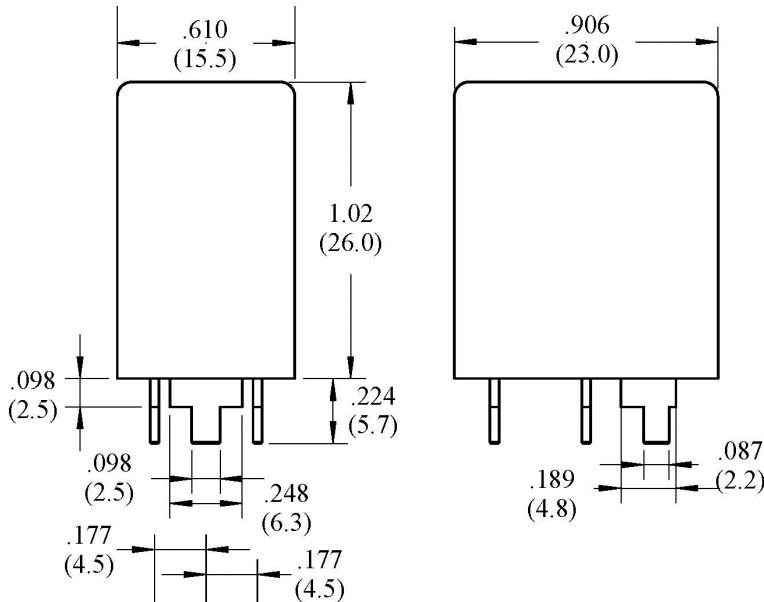
www.PickerComponents.com
 e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice

**Relay
(Front View)**

**Relay
(Side View)**

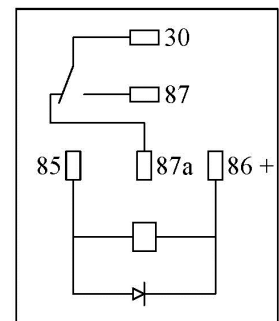
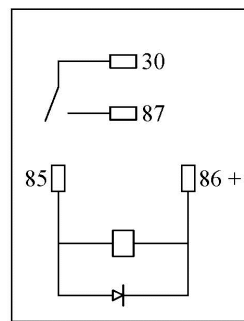
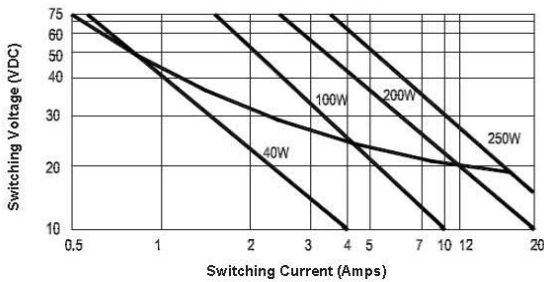


**Terminal Layout
(Bottom View)**

**PC Board Layout
(Top View)**

Reference Data

Contact Switching Capacity



1A (SPST-NO)

1C (SPDT)

Wiring Diagrams

Internal Diode Shown for Example Only