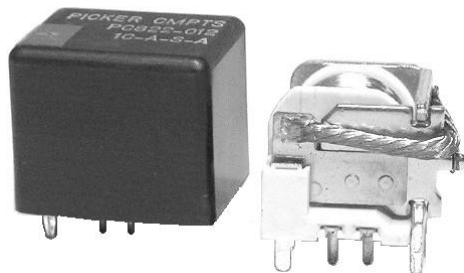


## Miniature Automotive PCB Power Relay

## PC822



### FEATURES

- Miniature design
- 1 A, 1 B and 1 C contact forms available
- Contact switching capacity up to 100 Amps
- 45 Amps continuous carrying capacity
- Up to 125 degrees C operating temperature
- Both US and European footprints available
- Open frame, Sealed or Dust cover available

### CONTACT RATINGS

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 100 Amps	Make 30 Amps
	Break 60 Amps	Break 30 Amps
Max. Switching Voltage	16 VDC	16 VDC
Max. Continuous Current	45 Amps	30 Amps
Minimum Load	0.5 A @ 12 VDC	

### CONTACT DATA

Material		AgNiO 15 (Silver Nickel Oxide 15%) AgSnOInO (Silver Tin Oxide Indium Oxide)
Initial Contact Resistance		100 milliohms max @ 0.1A, 6VDC
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	2 X 10 <sup>5</sup> Operations

### CHARACTERISTICS

Operate Time	5 ms. typical
Release Time	3 ms. typical
Insulation Resistance	100 megohms min, at 500VDC, 50%RH
Dielectric Strength	500 Vrms, 1 min. between coil and contacts
Shock Resistance	20 g, 11ms, functional; 200 g, destructive
Vibration Resistance	DA 1.5 mm, 20 - 200 Hz functional
Drop Resistance	1 Meter height drop on concrete in final enclosure
Power Consumption	1.5 W approx.
Ambient Temperature Range	-40 to 125 degrees C operating, -40 to 155 storage
Weight	Open: 18 grams; Enclosed: 23 grams approx.

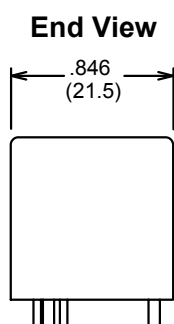
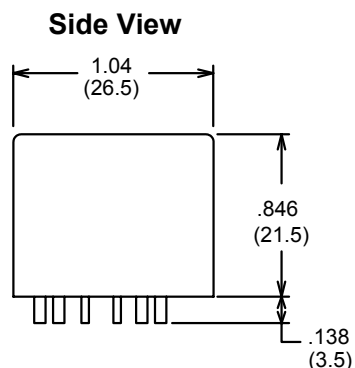
### ORDERING INFORMATION

Example:	PC822	-1C	-12	S	-A	T
Model						
Contact Form 1A, 1B or 1C						
Coil Voltage						
Enclosure Nil: Open Frame; S: Sealed; C: Dust Cover						
Footprint A: US; E: European						
Contact Material Nil: AgNiO 15; C: AgCdO; T: AgSnOInO						

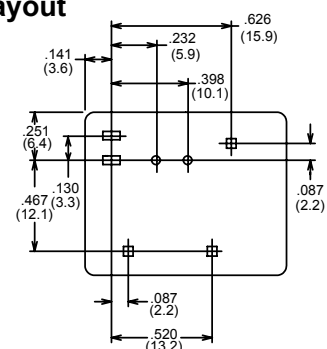
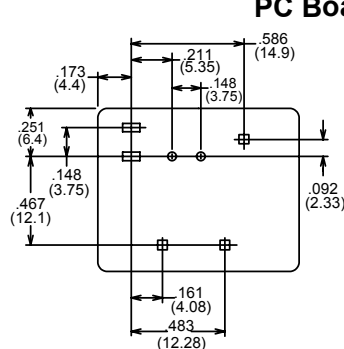
## COIL DATA

Coil Voltage	Resistance ohms $\pm 10\%$	Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)	Continuous Voltage Max. (VDC)
6	19	3.3	0.6	8.9
9	54	5.1	0.9	14.5
12	90	6.8	1.2	19.3
24	362	13.9	2.4	38.7

## Dimensions in Inches (millimeters)



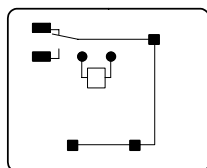
**Bottom View**  
**PC Board Layout**



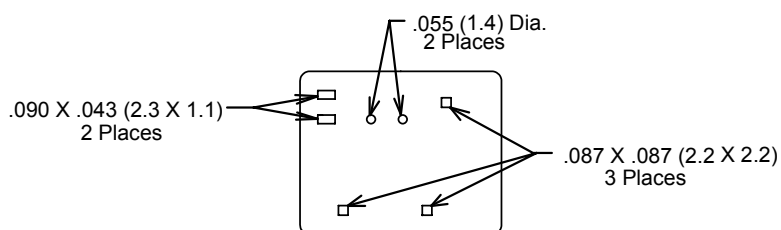
## US FOOTPRINT

## EUROPEAN FOOTPRINT

**Bottom View**  
**Wiring Diagram**



**Bottom View**  
**PC Hole Sizes**



## Notes:

Contact Form C shown

On Contact Forms A &amp; B Unused Pins are Omitted

Tolerances  $\pm .010$  unless otherwise noted

Maximum make current refers to inrush of a lamp load

Make current of 180 Amps permissible with AgSnInO contacts

In 85 degree C ambient reduce maximum coil voltage to 72%

**PICKER**  
COMPONENTS

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