

# Ultraminiature 30 Amp Automotive PCB-Mounted Relay

**PC537**



## FEATURES

- Ultra Miniature Design
- 1 A (SPST NO) and 1 C (SPDT) Contacts Forms Available
- Contact Switching Capacity Up to 100 A
- Sealed, Immersion Cleanable
- -40°C to 105°C Operation Temperature
- RoHS Compliant
- See PC537B for 20 Amp Version
- Available as a Dual See PC549

### CONTACT RATING 14 VDC @ 25°C\*\*

Contact	1 Form A (SPST-NO) or 1 Form C (SPDT)		
	Normally Open	Normally Closed	
Rated Load (Resistive)	30 A	25 A	
Max. Switching Current	Make 100 A*		
	Break 40 A		
Max. Switching Voltage	28 VDC		
Max. Carry Current	20°C	40 A for 2 min	NA
		30 A For 1 Hour	NA
	85°C	35 A for 2 min	NA
		25 A for 1 Hour	NA
Max. Switching Power	420 W		
Minimum Load	0.5 A @ 12 VDC		

\*Peak Inrush Cold Filament, 5 ms maximum

\*\*See PC537B for 20 Amp Version

## CHARACTERISTICS

Operate Time	4 ms max.
Release Time	1.5 ms max
Insulation Resistance	1,000 MΩ min, at 500 VDC
Dielectric Strength	500 V 50 Hz between Coil and Contacts
	500 V 50 Hz between Contacts
Shock Resistance	300 m/s <sup>2</sup> 6ms
Vibration Resistance	10 Hz - 500 Hz, DA 1.27 mm 60 m/s <sup>2</sup>
Power Consumption	0.55 W, 0.57 W

## ORDERING INFORMATION

Example:	PC537	-1C	-12	S	-N	-X
Model:	<b>PC537</b>					
Contact Form:	<b>1A:</b> 1 Form A (SPST-NO) <b>1C:</b> 1 Form C (SPDT)					
Coil Voltage:	<b>10, 12, 24</b>					
Case Style:	<b>C:</b> Dust Cover; <b>S:</b> Sealed, <b>S1:</b> Flux Tight <sup>(1)</sup>					
Contact Material:	<b>Nil:</b> AgSnO <sub>2</sub> ; <b>N:</b> AgNi; <b>G:</b> AgSnO <sub>2</sub> + Au (Clad)					
RoHS Compliant:	<b>-X</b>					

(1) 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 2000: Inner Box 1000

### CONTACT RATING 28 VDC @ 25°C

Contact	1 Form A (SPST-NO) or 1 Form C (SPDT)	
	Normally Open	Normally Closed
Rated Load (Resistive)	15 A	12.5 A
Max. Switching Current	Make 50 A*	
	Break 20 A	
Max. Switching Voltage	28 VDC	
Max. Continuous Current	15 A	12.5 A
Max. Switching Power	420 W	
Minimum Load	0.5 A @ 12 VDC	

## CONTACT DATA

Material	AgSnO <sub>2</sub> , AgNi, AgSnO <sub>2</sub> +Au	
Initial Contact Resistance	100 mΩ max @ 0.1 A, 6 VDC	
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	1 X 10 <sup>5</sup> Operations

## CHARACTERISTICS Continued

Terminal Strength	10N
Solderability	260°C for 5 seconds
Operating Temperature Class F	-40°C to 105°C
Storage Temperature	-40°C to 155°C
Relative Humidity	85% at 20°C
Weight	4 grams

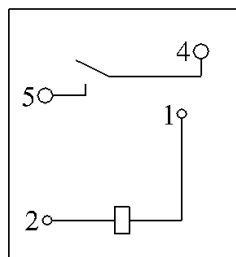
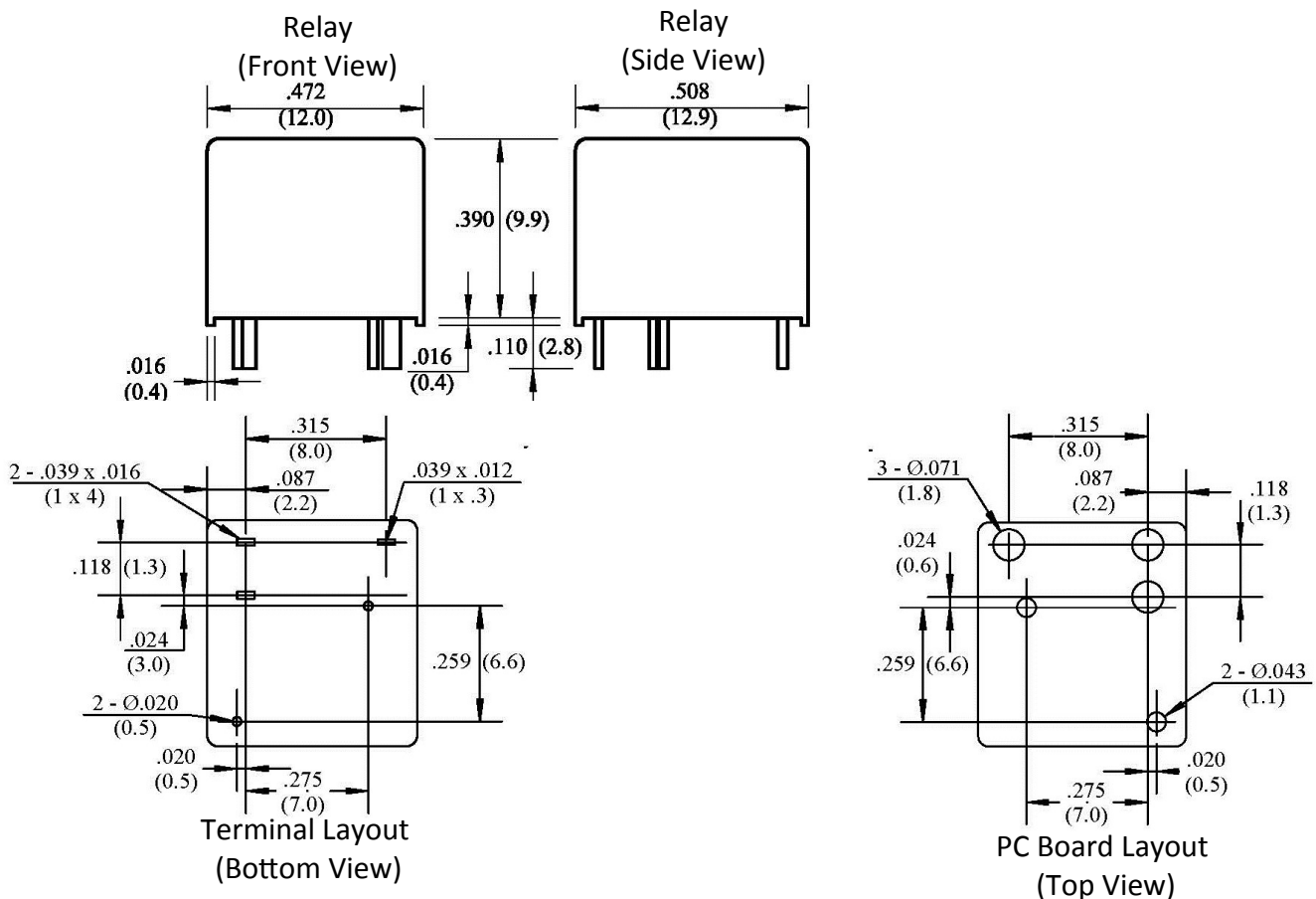
**COIL DATA**

Coil Voltage (VDC) (1)		Coil Resistance ohms ± 10%	Must Operate Voltage Max. (VDC) (2)	Must Release Voltage Min. (VDC) (2)	Coil Power Consumption (W)
Rated	Max				
10	12	181	5.7	1.25	0.55
12	14.4	254	6.9	1.5	0.57
24	28.8	1,010	13.8	3	0.57

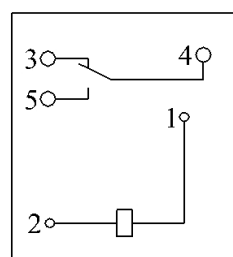
**NOTES:**

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

**DIMENSIONS (mm/inches)**



1A



1C

**Wiring Diagrams**