

Ultraminiature 60 Amp Automotive PCB Power 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 to 105 Degrees C Operation Temperature
- RoHS Compliant
- **Available as a Dual See PC549**

CONTACT RATING 14 VDC @ 25°C

Contact	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Rated Load (Resistive)	30 A/14 VDC	25 A/14 VDC
Max. Switching Current	Make 100 A*	
	Break 40 A	
Max. Switching Voltage	28 VDC	
Max. Continuous Current	30 A	25 A
Max. Switching Power	420 W	
Minimum Load	0.5 A @ 12 VDC	

*Peak Inrush Cold Filament

CONTACT RATING 28 VDC @ 25°C

Contact	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Rated Load (Resistive)	15 A/24 VDC	12.5 A/24 VDC
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	

CHARACTERISTICS

Operate Time	4 ms typical
Release Time	1.5 ms typical
Insulation Resistance	1000 MΩ min, at 500 VDC, 50% RH
Dielectric Strength	500 V 50 Hz between Coil and Contacts 500 V 50 Hz between Contacts
Shock Resistance	300 m/s ² 6ms
Vibration Resistance	10 Hz - 500 Hz, DA 1.27 mm 60 m/s ²
Terminal Strength	10N
Solderability	235 °C ± 2°C 3 s ± 0.5 s
Power Consumption	0.55 W, 0.57 W

CONTACT DATA

Material	AgSnO ₂ , AgNi, AgSnO ₂ +AU	
Initial Contact Resistance	100 mΩ max @ 0.1 A, 6 VDC	
Service Life	Mechanical	1 X 10 ⁷ Operations
	Electrical	1 X 10 ⁵ Operations

CHARACTERISTICS Continued

Operating Temperature Class F	- 40 to 105°C
Storage Temperature	- 40°C to 155°C
Relative Humidity	85% at 20°C
Weight	4 grams

ORDERING INFORMATION

Example:	PC537	-1C	-12	S	-N	-X
Model:	PC537					
Contact Form:	1A or 1C					
Coil Voltage:	10, 12, 24					
Case Style:	C: Dust Cover; S: Sealed					
Contact Material:	Nil: AgSnO₂; N: AgNi; G: AgSnO₂ + Au (Clad)					
RoHS Compliant:	-X					

Box Quantity 2000: Inner Box 1000

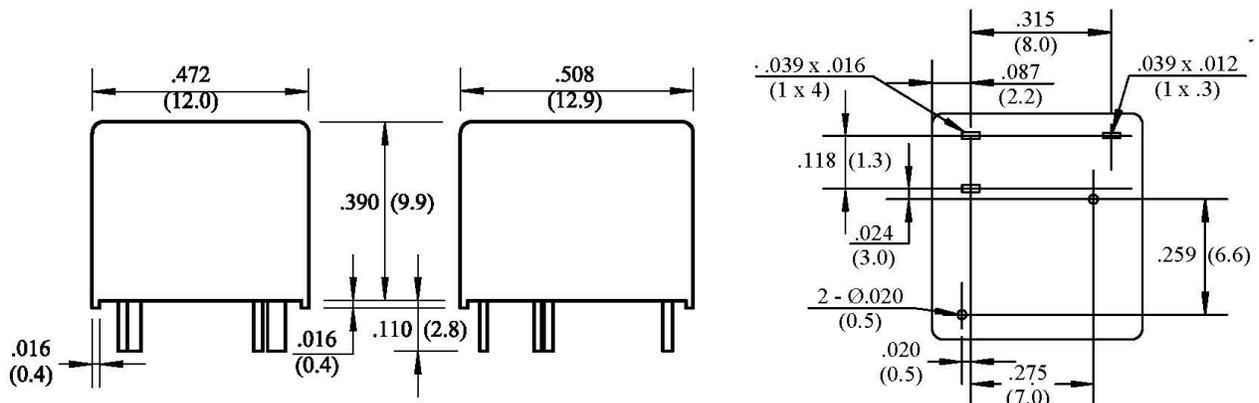
COIL DATA

Coil Voltage (VDC)		Coil Resistance ohms $\pm 10\%$	Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)	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	1010	13.8	3	0.57

NOTES:

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

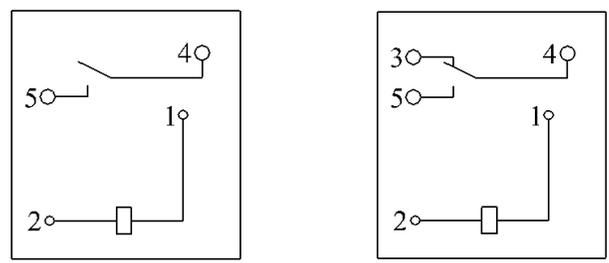
DIMENSIONS (mm/inches)



Relay (Front View)

Relay (Side View)

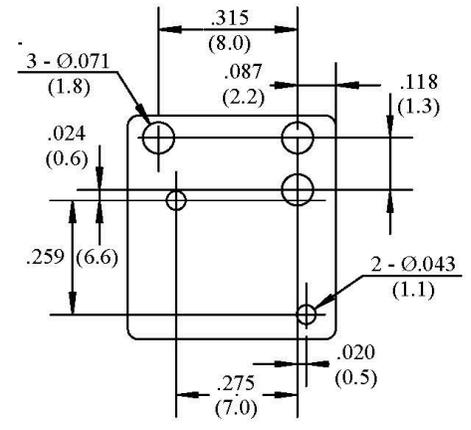
Terminal Layout (Bottom View)



1A

1C

Wiring Diagram



PC Board Layout (Top View)