

10 Amp & 20 Amp Subminiature PCB Power Relay

PC236



FEATURES

- Subminiature Design
- 10 Amps at 120 VAC, 20 Amps at 14 VDC
- 1/2 HP at 125 VAC
- TV-5 Rating
- Designed for Automotive and Power Applications
- RoHS Compliant



Contact Form	1 Form C	
	NO	NC
Contact Rating Resistive Load	20 A @ 14 VDC	10 A @ 14 VDC
	10 A @ 120 VAC	-----
Motor Load	1/2 HP 125 VAC	
TV Rating (25K Cycles)	TV-5 (50 A Inrush Current a 120 VAC)	
Minimum Load	0.1 A @ 12 VDC	

CONTACT DATA

Max. Switching Power		280W 1,250 VA
Max. Switching Voltage		42 VDC 380 VAC
Max. Switching Current		30 Amps
Material		AgSnO ₂ , AgCdO
Initial Contact Resistance		50 mΩ Max
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations

***** FOR AUTOMOTIVE APPLICATIONS*****

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A	1 Form C	
	NO	NO	NC
Max Switching Current	Make 90 A	Make 60 A	Make 45 A
	Break 30 A	Break 20 A	Break 15 A
Max Continuous Current	30 A @ 25° C	20 A @ 25° C	15 A @ 25° C
	22.5 A @ 85° C	15 A @ 85° C	11.3 A @ 85° C
Max Continuous Current 1 Form U	2 X 10 Amps		
Max. Switching Power	420 W 1,250 VA		
Max. Switching Voltage	42 VDC 380 VAC		
Minimum Load	0.1 A @ 12 VDC		

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A	1 Form C	
	NO	NO	NC
Max Switching Current	Make 45 A	Make 30 A	Make 22.5 A
	Break 15A	Break 10 A	Break 7.5 A
Max Continuous Current	15A @ 25° C	10 A @ 25° C	7.5 A @ 25° C
	11.3 A @ 85° C	7.5 A @ 85° C	5.6 A @ 85° C
Max Continuous Current 1 Form U	2 X 5 Amps		
Max. Switching Power	420 W 1,250 VA		
Max. Switching Voltage	42 VDC 380 VAC		
Minimum Load	0.1 A @ 12 VDC		

ORDERING INFORMATION

Example:	PC236	-1C	-12	S	0.8	F	-X
Model:	PC236						
Contact Form:	1A, 1C, 1U						
Coil Voltage:	6, 9, 12, 24						
Contact Material:	Nil: AgSnO ₂ ; Cd: AgCdO						
Enclosure:	S: Sealed; C: Dust Cover						
Coil Power:	Nil: 0.6 W; 0.8: 0.8 W						
Insulation System:	Nil: Class B (125°C); F: Class F(155°C)						
RoHS Compliant:	-X						

Box Quantity 2000: Inner Box 1000

COIL DATA

Coil Voltage (VDC)		Coil Power		Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)
		Resistance ohms ± 10%			
Rated	Max	600 mW (Standard)	800 mW (Large Gap)		
6	6.6	60	45	4.5	0.30
9	9.9	135	100	7.2	0.45
12	13.2	240	180	9.6	0.60
24	26.4	960	720	19.2	1.20

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.

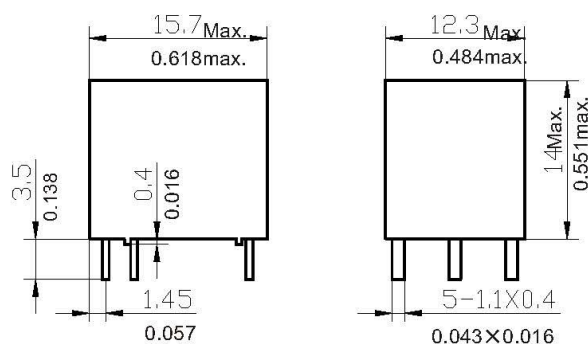
Dimensions are in mm, Inches are listed for reference only.

CHARACTERISTICS

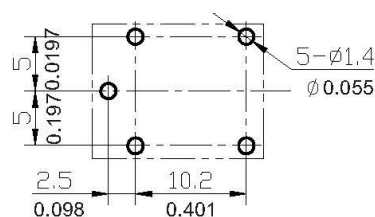
Operate Time	10 ms Max.
Release Time	5 ms Max.
Insulation Resistance	100 M Ω Min at 500VDC
Dielectric Strength	50Hz 500 V Between Contacts
	50Hz 500 V Between Contact and Coil
Terminal Strength	10 N
Power Consumption	0.6 W, 0.8 W

CHARACTERISTICS CONTINUED

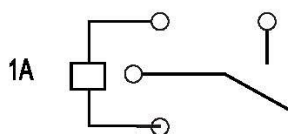
Shock Resistance	100 m/s ² 11ms
Vibration Resistance	10 Hz - 55 Hz Double Amplitude 1.5
Solderability	235°C $\pm 2^\circ\text{C}$ 3 s ± 0.5 s
Operating Temperature Range	- 40 to 85° C
Storage Temperature Range	- 40 to 100° C
Relative Humidity	85% at 20° C
Weight	6 grams



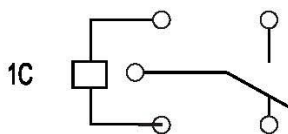
Dimensions



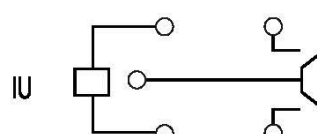
Mounting (Bottom view)



1A



1C



1U

Wiring diagram (Bottom view)

CHARACTERISTIC CURVES

