

# 10 Amp Subminiature PCB Power Relay

**PC415**



## FEATURES

- 10 Amp Continuous Contact Capacity
- 1 Form A, 1 Form B and 1 Form C Contact Forms
- Most Popular Package and Footprint
- Class "B" Insulation Standard
- Class "F" Insulation Available
- Popular "Sugar Cube" Footprint
- Sealed, Immersion Cleanable
- Lead Free and RoHS Compliant
- Production Line Fully Automated

## UL / CUL Ratings



Load Type	All Forms, All Contacts
Resistive	10 Amps @ 120 VAC & 28 VDC
	7 Amps @ 240 VAC
	5 Amps @ 277 VAC
	20 Amps @ 14 VDC
General Purpose	10 Amps @ 120 VAC & 28 VDC
	7 Amps @ 240 VAC
	5 Amps @ 277 VAC
	20 Amps @ 14 VDC
Motor	1/3 HP @ 125 VAC / 277 VAC

## CONTACT DATA

Max Switching Power	420 W, 2500 VA	
Max. Switching Voltage	110 VDC, 380 VAC	
Max Switching Current	20 A	
Material	AgCdO (Silver Cadmium Oxide)	
Initial Contact Resistance	100 milliohms 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

Operate Time	Less than 10 ms
Release Time	Less than 5 ms
Insulation Resistance	1,000 megohms min, at 500 VDC, 50% RH
Dielectric Strength	1500 Vrms, 1 min. between coil and contacts
	750 Vrms, 1 min. between open contacts
Shock Resistance	10 g, 11 ms, functional; 100 g, destructive

Vibration Resistance	DA 1.5 mm, 10 - 55 Hz
Terminal Strength	5N
Solderability	260 °C for 5 seconds
Operating Temperature	-55 to 85 °C
Relative Humidity	93% (at 40°C)
Weight	9.5 grams

## ORDERING INFORMATION

Example:	PC415	-1A	-12	Nil	S	F	-X	T
Model:	<b>PC415</b>							
Contact Form:	<b>1A, 1B, 1C</b>							
Coil Voltage:	<b>3, 5, 6, 9, 12, 24, 48</b>							
Coil Sensitivity:	<b>Nil:</b> 360 mW, <b>B:</b> 450 mW, <b>L:</b> 800 mW							
Enclosure:	<b>S:</b> Sealed; <b>C:</b> Dust Cover							
Insulation System:	<b>Nil:</b> Class B, <b>F:</b> Class F							
RoHS Compliant:	<b>-X</b>							
Contact Material:	<b>Nil:</b> AgCdO, <b>T:</b> AgSnO, <b>G:</b> AgCdO + Gold Plate							

Box Quantity: 2,000; Inner Box 1,000

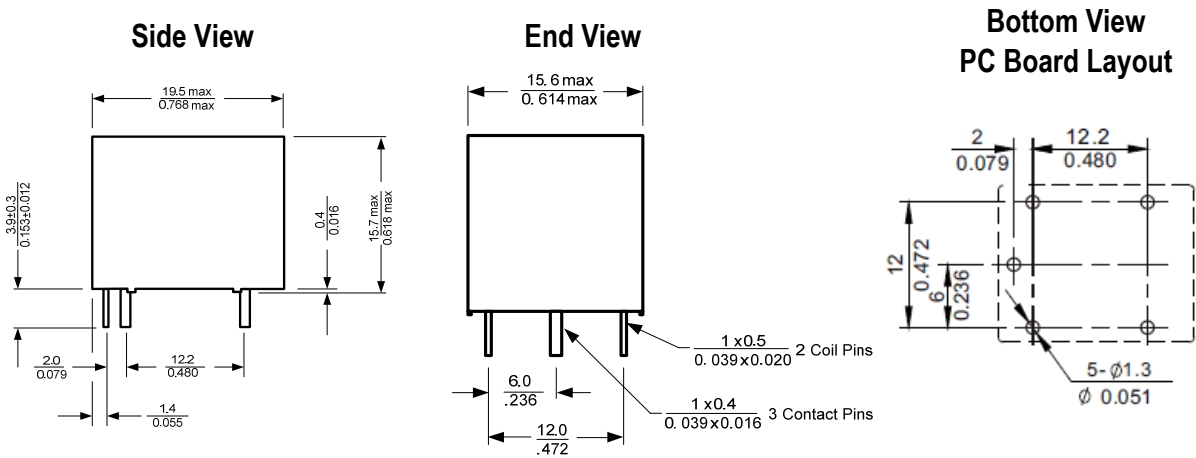
**COIL DATA**

Coil Voltage (VDC)		Coil Power			Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)
		Resistance ohms ± 10%				
Rated	Max	360 mW	450 mW	800 mW		
3	3.9	25	20	11	2.1	0.3
5	6.5	70	55.6	31	3.5	0.5
6	7.8	100	80	45	4.2	0.6
9	11.7	225	180	101	6.3	0.9
12	15.6	400	320	180	8.40	1.2
24	31.2	1600	1280	720	16.8	2.4
48	62.4	6400	5120	2880	33.60	4.8

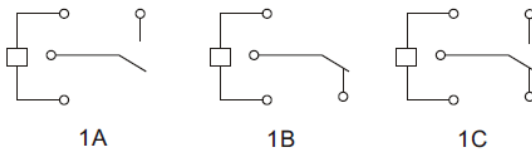
**NOTES:**

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 (mm/inches)**



**Wiring Diagram**



Notes: Contact Form C shown  
 On Contact Forms A & B Unused Pins are Omitted  
 Tolerances ± .010 unless otherwise noted

