

## 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

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 Strenght	5N		
Solderability	235 °C for 3 seconds		
Operating Temperature	-55 to 85 ºC		
Relative Humidity	93% (at 40°C)		
Weight	9.5 grams		

#### ORDERING INFORMATION

Example:

Model: PC415

Contact Form: 1A, 1B, 1C

Coil Voltage: 3, 5, 6, 9, 12, 24, 48

Coil Sensitivity: Nil: 360 mW, B: 450 mW, L: 800 mW

Enclosure: S: Sealed; C: Dust Cover

Insulation System: Nil: Class B, F: Class F

Contact Material: Nil: AgCdO, T: AgSnO, G: AgCdO + Gold Plate

RoHS Compliant: -X

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



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PC415

#### **COIL DATA**

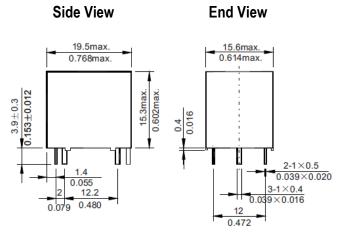
Coil V	oltage	Coil Power		Must Operate	Must Release	
IV)	OC)	Resistance ohms ± 10%		Voltage Max.	Voltage Min.	
Rated	Max	360 mW	450 mW	800 mW	(VDC)	(VDC)
3	3.9	25	20	11	2.1	0.3
5	6.5	70	55.6	31	3.5	0.5
6	7.8	100	80	45	4.2	0.6
9	11.7	225	180	101	6.3	0.9
12	15.6	400	320	180	8.40	1.2
24	31.2	1600	1280	720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

#### NOTES:

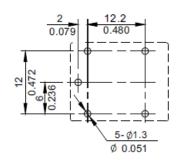
The use of any coil voltage less that the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

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

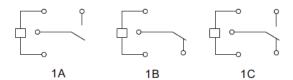
### **DIMENSIONS (mm/inches)**



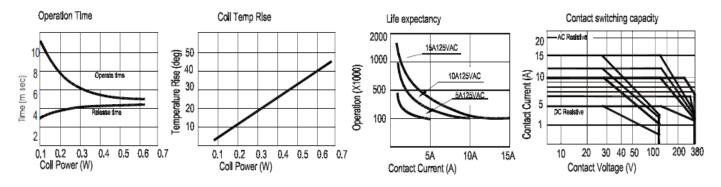
# Bottom View PC Board Layout



### **Wiring Diagram**



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



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