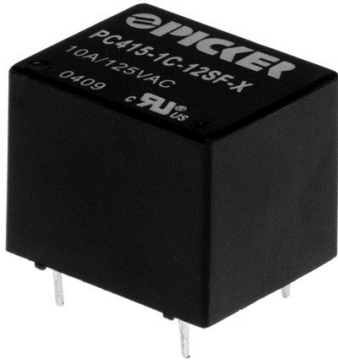


**12 Amp 277 VAC Subminiature PCB Power “Sugar Cube” Relay** **PC422**



**UL** US E86876

**FEATURES**

- 12 Amp 277 VAC 100,000 Cycle @ 105°C UL Rating
- Designed for High Temperature Environments
- 105°C Operating Temperature
- Low Coil Power
- IEC60335-1 Compliance Version Option
- Popular “Sugar Cube” Footprint
- Lead Free and RoHS Compliant
- Production Line Fully Automated
- 10 Amp Version - See PC420

Load Type	Temp	All Forms, All Contacts	Cycles
Resistive (NO Only)	85°C Version	12 Amps @ 250 VAC	60,000
		12 Amps @ 277 VAC	
	105°C Version	12 Amps @ 250 VAC	60,000
12 Amps @ 277 VAC			
		15 Amps @ 125 VAC	20,000

**CHARACTERISTICS**

Insulation Resistance	250 megohms min, @ 500 VDC
Dielectric Strength	1,500 Vrms, 1 min. between coil and contacts
	750 Vrms, 1 min. between open contacts
Shock Resistance	100 m/s <sup>2</sup> , 11 ms
Vibration Resistance	DA 1.5 mm, 10 - 55 Hz
Terminal Strength	5N
Solderability	260 °C for 5 seconds
Ambient Temperature	-55 to 85 °C
Relative Humidity	85% (at 40°C)
Weight	9.5 grams

**CONTACT DATA**

Max Switching Power	3,324 VA	
Max. Switching Voltage	380 VAC	
Material	AgSnO <sub>2</sub>	
Contact Resistance	100 milliohms max	
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	1 X 10 <sup>5</sup> Operations @ 10 Amps, 250 VAC / 277 VAC (105°C) 6 X 10 <sup>4</sup> Operations @ 12 Amps, 250 VAC / 277 VAC (105°C) 2 X 10 <sup>4</sup> Operations @ 15 Amps, 125 VAC (105°C)

**ORDERING INFORMATION**

Example:	PC422	-1A	-12	S	F	-X
Model:	<b>PC422</b>					
Contact Form:	<b>1A, 1C</b>					
Coil Voltage:	<b>5, 6, 9, 12, 24</b>					
Coil Sensitivity:	<b>Nil:</b> 360 mW					
Enclosure:	<b>C:</b> Dust Cover, <b>S1:</b> Flux Free, <b>S:</b> Sealed					
Insulation System:	<b>Nil:</b> 85°C, <b>F:</b> 105°C					
Contact Material:	<b>Nil:</b> AgSnO <sub>2</sub>					
RoHS & IEC 60335-1 Compliance:	<b>-X:</b> RoHS Only, <b>-X335:</b> RoHS & IEC 60335-1					

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

**COIL DATA**

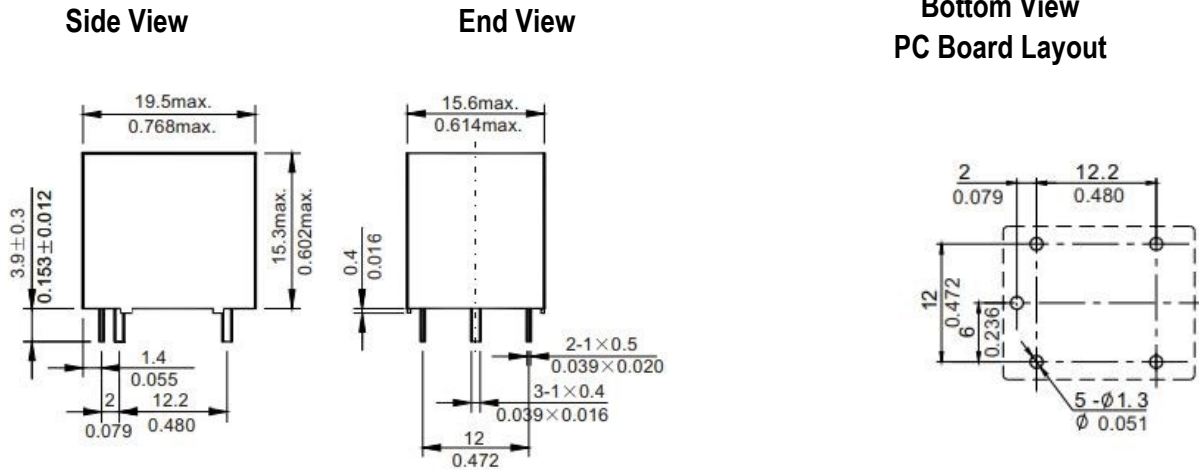
Coil Voltage (VDC)		Coil Power	Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)	Coil Power Consumption (W)	Operate Time (ms)	Release Time (ms)
Rated	Max	Resistance ohms $\pm 10\%$					
		360 mW					
5	6.5	70	3.75	0.5	0.36	< 10	< 5
6	7.8	100	4.5	0.6			
9	11.7	225	6.75	0.9			
12	15.6	400	9.0	1.2			
24	31.2	1,600	18.0	2.4			

**NOTES:**

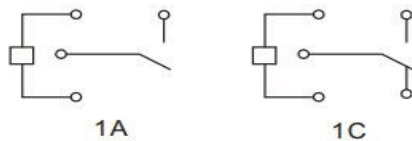
The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

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

**DIMENSIONS (mm/inches)**



**Wiring Diagram**



Notes: Contact Form C shown  
 On Contact Forms A Unused Pins are Omitted  
 Tolerances  $\pm .010$  unless otherwise noted

