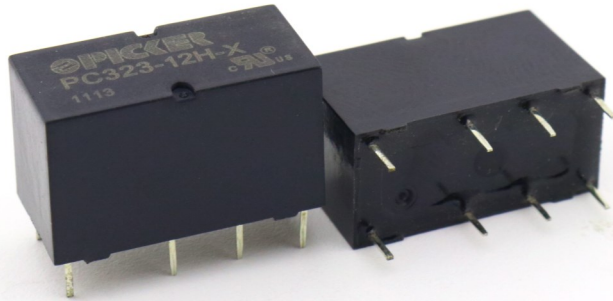


# 3 Amp Subminiature PCB Telecom Relay With Bifurcated Contacts

**PC323**



## FEATURES

- Subminiature Design
- Bifurcated Crossbar Contacts
- 0.300" 16 Pin DIL Package
- Contact Capacity from 1 mA to 1 A
- Meets FCC part 68 Voltage Surge
- Class "B" Insulation Standard
- Three Coil Sensitivities Available
- RoHS Compliant:



Contact Form	2 Form C, DPDT(B-M) (Bifurcated Crossbar)
Rated Load	1A 24 VDC; 0.5A 120 VAC
Max. Switching Power	60W 125 VA
Max. Switching Voltage	220 VDC 250 VAC
Max. Switching Current	2 A
Min. Switching Load	0.01 mA @10mV

## CONTACT DATA

Material	AgNi+Au (Clad); AgPd+Au (Clad)	
Initial Contact Resistance	50 mΩ max	
Service Life	Mechanical	2 X 10 <sup>5</sup> Operations
	Electrical	1 X 10 <sup>8</sup> Operations

## CHARACTERISTIC

Operate Time	4.5 ms. Max.
Release Time	1.5 ms. Max.
Insulation Resistance	1,000 MΩ min, at 500 VDC
Dielectric Strength	1,000 VAC, 1 min, Between Open Contacts
	1,000 VAC, 1 min, Between Coil and Contacts
	1,000 VAC, 1 min, Between Contacts Poles
Surge Withstand Voltage	1,500 V, Between Open Contacts
	1,500 V, Between Coil and Contacts
	1,500 V, Between Contacts Poles
Power Consumption	150 mW, 200 mW, 450 mW

Shock Resistance	Functional	100 m/s <sup>2</sup> 11 ms
	Survival	1,000 m/s <sup>2</sup> 6 ms
Vibration Resistance	Functional	10 Hz - 55 Hz Double Amplitude 1.5 mm
	Survival	10 Hz - 55 Hz Double Amplitude 5 mm
Terminal Strength	5N	
Solderability	260°C for 5 seconds	
Temperature Range	- 40°C ~ 90°C (-40° F ~ 194° F) (- 40°C ~ 80°C for 0.3 W , 0.45 W Coil)	
Weight	4.5 gr	

## ORDERING INFORMATION

Example:	PC323	-12	L	-X
Model:	<b>PC323</b>			
Coil Voltage:	<b>5, 6, 9, 12, 24, 48</b>			
Contact Material:	<b>Nil: AgNi+Au (Clad); P: AgPd+Au (Clad)</b>			
Coil Sensitivity:	<b>Nil: 450 mW; L: 150 mW; H: 200 mW :</b>			
RoHS Compliant:	<b>-X</b>			

Box Quantity: 4000; Inner Box: 1000

**COIL DATA**

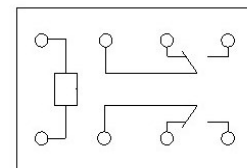
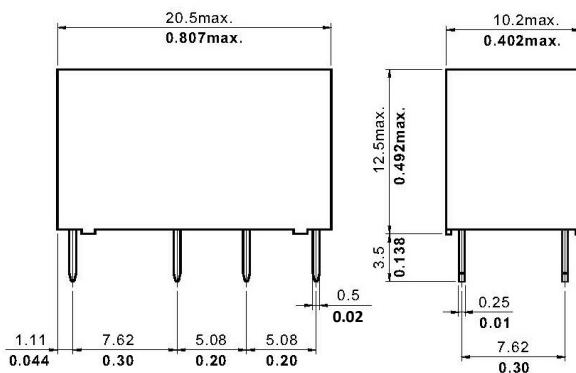
Coil Voltage (VDC)		Resistance ohms ± 10%	Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Coil Power
Rated	Max				
3	7.5	60	2.1	0.15	150 mW
5	12.5	167	3.5	0.25	150 mW
6	15.0	240	4.2	0.3	150 mW
9	22.5	540	6.3	0.45	150 mW
12	30.0	960	8.4	0.6	150 mW
18	40.0	1620	12.6	0.9	200 mW
24	52.9	2880	16.8	1.2	200 mW
48	84.9	7680	33.6	2.4	300 mW
3	6.5	45	2.1	0.3	200 mW
5	10.8	125	3.5	0.5	200 mW
6	13.0	180	4.2	0.6	200 mW
9	19.5	405	6.3	0.9	200 mW
12	26.5	720	8.4	1.2	200 mW
24	52.9	2880	16.8	2.4	200 mW
48	103.9	11520	33.6	4.8	200 mW
5	7.7	56	3.3	0.3	450 mW
6	9.2	80	4.0	0.5	450 mW
9	13.7	180	6.0	0.6	450 mW
12	18.3	320	8.0	0.9	450 mW
18	27.5	720	12.0	1.2	450 mW
24	36.7	1280	15.9	2.4	450 mW
48	72.5	5000	33.0	4.8	450 mW

**NOTES:**

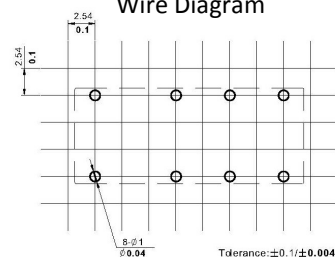
The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

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

**DIMENSIONS (mm/inches)**



Wire Diagram



PC Board Layout



3220 Commander Drive, Suite 102 Carrollton, TX 75006  
 Sales: (972) 713-6272 (888) 997-3933 Fax: (972)735-0964

www.PickerComponents.com

e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.



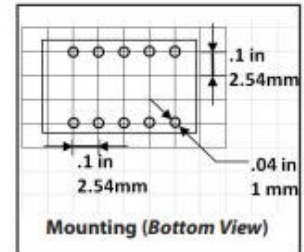
Signal Relays In Applications  
From Dry Contacts to 5 Amps



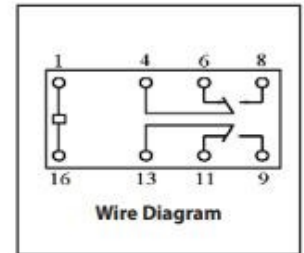
### Subminiature Signal Relays



Current Rating At 30 VDC	Series	Coil Power Options in milliWatts						
		150	200	360	400	450	510	560
1 Amp	PC324				X			X
1 Amp	PC323	X	X			X		
2 Amps	PC322	X	X	X			X	
2 Amps	PC324S				X			X
3 Amps	PC332	X	X					



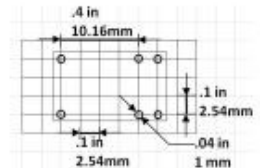
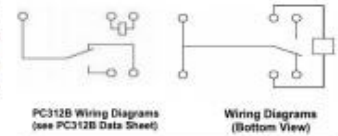
- 0.300" 16 Pin DIL Socket Footprint
- 2 Form C - DPDT (B-M)
- Gold Clad Bifurcated Contacts
- Meets FCC Part 68 Voltage Surge



Current Rating At 30 VDC	Series	Coil Power Options in milliWatts		
		200	360	450
3/5 Amps	PC312	X	X	X
3/5 Amps	PC312B	X	X	X

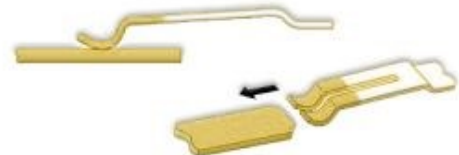
- 0.300" 12 Pin DIL Socket Footprint
- 2 Form 1A - SPST OR 1C SPDT
- Meets FCC Part 68 Voltage Surge

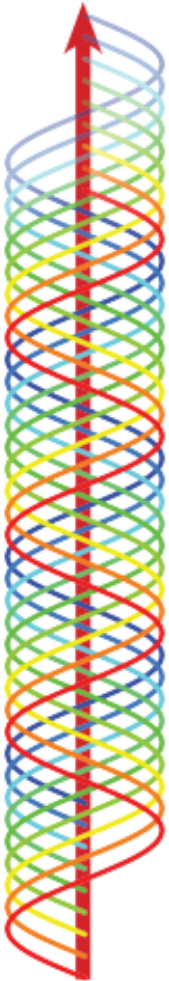
PC312 differs from the PC312B with a different pin configuration



### Gold Clad Bifurcated Contacts

- Where noted, these relays utilize *Gold Clad Bifurcated Contacts*.
- These are forked contacts making a connection at two parallel contact points. This adds to the reliability of the relay by reducing the contact resistance.
- Gold is used because it does not oxidize like copper or silver which is most important in dry contact applications.

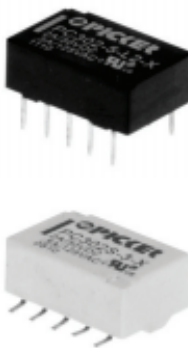
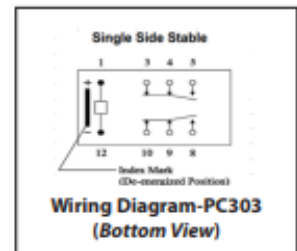
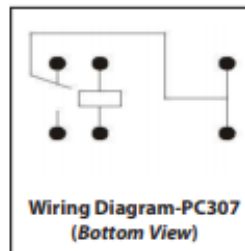
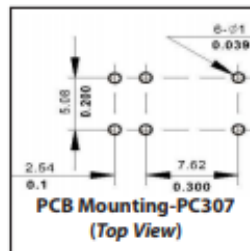
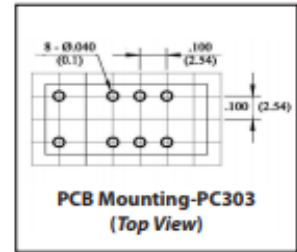




### Ultraminiature Signal Relays

Current Rating At 30 VDC	Series	Coil Power Options in milliwatts			Contact Configuration	Optional Latching
		140	150	200		
1 Amps	PC307	X	X	X	Form 1c SPST	X
2 Amps	PC303	X			Form 2c DPDT (B-M)	Single Coil

- 0.200" 10 Pin DIL Socket Footprint
- Gold Plated Bifurcated Contacts
- Meet FCC Part 68 Voltage Surge



### Microminiature Signal Relays

Current Rating At 30 VDC	Series	Coil Power Options in milliwatts			Optional Latching
		140	150	200	
2 Amps	PC302	X			Single & Dual Coil
2 Amps	PC3025	X			Single Coil Side Stable

- 0.300" 10 Pin DIL Socket Footprint
- Low 5mm Profile
- Gold Plated Bifurcated Contacts
- Meet FCC Part 68 Voltage Surge
- Latching - Single and Dual Coil Latching Options

