

Subminiature PCB Telecom Relay

PC312



FEATURES

- Subminiature Design
- PC Terminals on 0.1" Grid Pattern
- Contact Capacity from 50 mA to 5 A
- Meets FCC Part 68 Voltage Surge
- Class "B" Insulation Standard
- Three Coil Sensitivities Available
- Sealed, Immersion Cleanable
- 0.300" 12 Pin DIL Socket Footprint
- RoHS Compliant:

UL / CUL Ratings

UL **E86876**

Contact Form	1 Form C SPDT		
Rated Load	Voltage	Amps* (3 Amp)	Amps* (5 Amp)
Resistive	14 VDC	0.05 - 3 A	0.05 - 5 A
Resistive	125 VAC	0.05 - 3 A	0.05 - 5 A
Resistive	30 VDC	0.05 - 3 A	0.05 - 5 A

*Minimum Switching Condition for Gold Plated Contacts is 50 mA at 6 VDC

CHARACTERISTIC

Operate Time	5.0 ms. Max.
Release Time	5.0 ms. Max.
Insulation Resistance	100 MΩ min, at 500 VDC
Dielectric Strength	Meets FCC Part 68.302 1,500 V Lightning Surge
	Meets FCC Part 68.304 1,000 V Dielectric
	500 V 50 Hz, Between Contacts
Coil Power	200 mW, 360 mW, 450 mW

CONTACT DATA

Max. Switching Power	90 W 375 VA	150 W 625 VA
Max. Switching Voltage	60 VDC 220 VAC	
Max. Switching Current	3 A	5 A
Material	AgNi+Au (Clad)	
Initial Contact Resistance	50 mΩ max	
Service Life	Mechanical	1 X 10 ⁷ Operations
	Electrical	1 X 10 ⁵ Operations

CHARACTERISTIC Continued

Shock Resistance	100 m/s ² 11 ms
Vibration Resistance	10 Hz - 70 Hz Double Amplitude 1.5 mm
Terminal Strength	5N
Solderability	260°C for 5 seconds
Temperature Range	- 25°C ~ 70°C
Weight	3.5 grams

ORDERING INFORMATION

Example:	PC312	-12	H	-X
Model:	PC312			
Contact Form:	Nil: 1C			
Coil Voltage:	3, 5, 6, 9, 12, 18, 24			
Contact Material:	Nil: AgNi + Au			
Sensitivity:	Nil: Standard 360 mW; B: 450 mW; H: 200 mW			
Current Rating:	Nil: Standard, 3 A; S: 5 A			
RoHS Compliant:	-X			

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

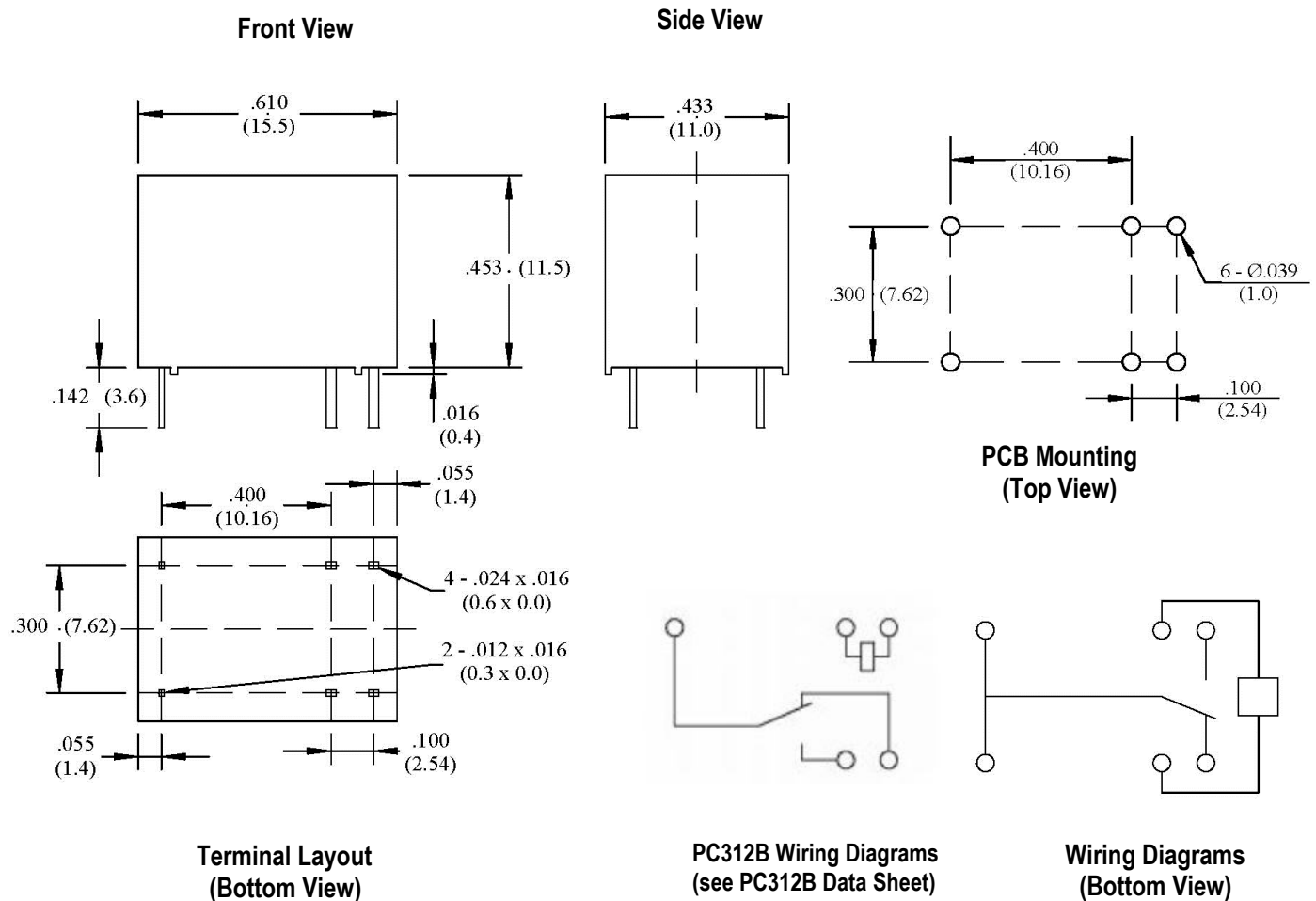
COIL DATA

Coil Voltage (VDC)		Coil Power			Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)
		Resistance ohms ± 10%				
Rated	Max	200 mW	360 mW	450 mW		
3	3.3	45	25	20	2.25	0.3
5	5.5	125	75	56	3.75	0.5
6	6.6	180	100	80	4.50	0.6
9	9.9	405	225	180	6.75	0.9
12	13.2	720	400	320	9.00	1.2
18	19.8	1,620	900	720	13.5	1.8
24	26.5	2,880	1,600	1,280	18.0	2.4

Notes:

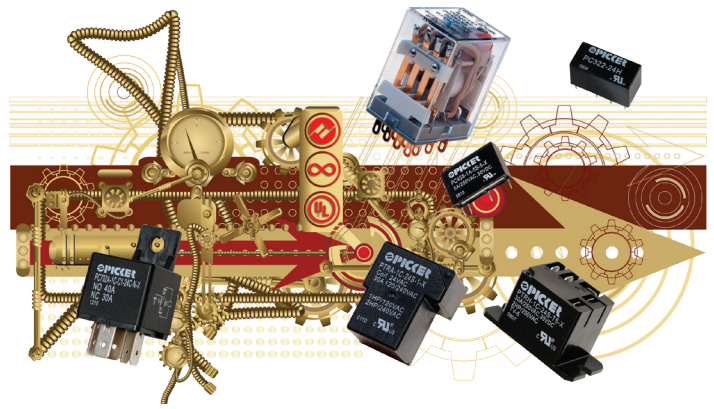
The use of any coil voltage less than the rated voltage will compromise the operation of the relay. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

Relay DIMENSIONS Inches/mm



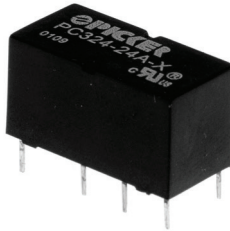
PICKER

Signal Relays

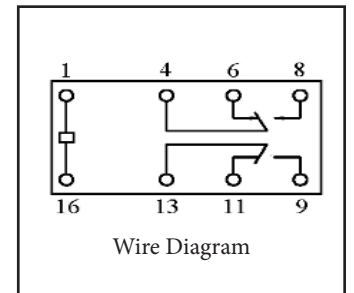
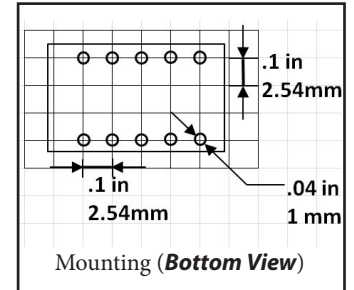


Signal Relays In Applications
From Dry Contacts to 5 Amps

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		
1 Amps	PC322		X	X			X	
2 Amps	PC324S				X			X
3 Amps	PC332	X	X					

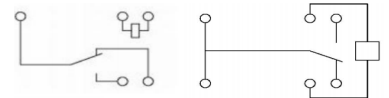


- 0.300" 16 Pin DIL Socket Footprint
- 2 Form C - DPDT (B-M)
- Gold Clad Bifurcated Contacts
- Meets FCC Part 68 Voltage Surge



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

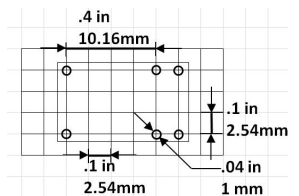
PC312 differs from the PC312B with a different pin configuration



PC312B Wiring Diagrams (see PC312B Data Sheet)

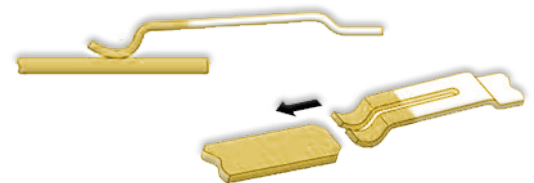
Wiring Diagrams (Bottom View)

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



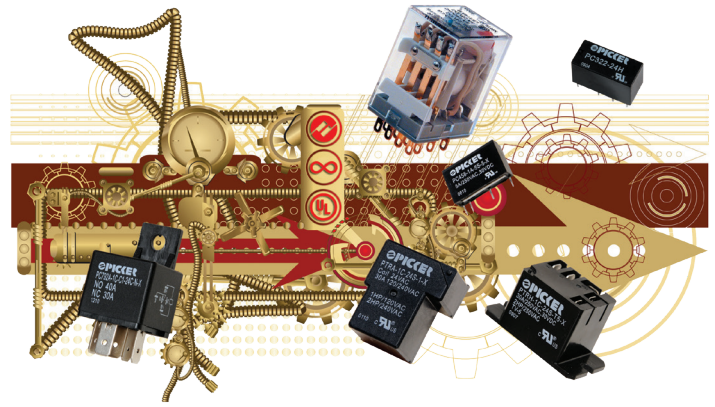
Gold Clad Bifurcated Contacts

- 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.



PICKER

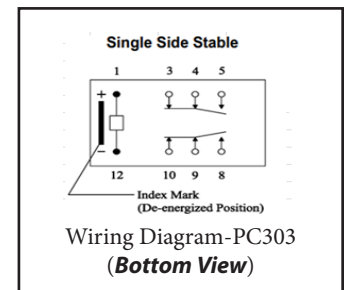
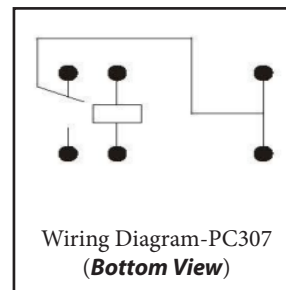
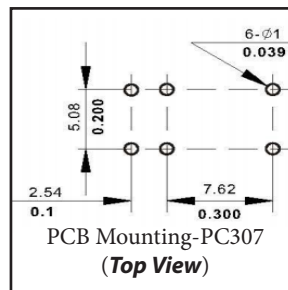
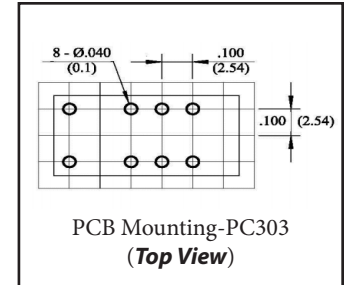
Signal Relays



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	Form 1C SPST	X
2 Amps	PC303	X			Form 2C DPDT (8-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	PC302S*	X			Single Coil Side Stable

* PC 302S is the Surface Mount Version

- 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

