50 Amp Latching PCB Relay

cULus E86876 **PC10L**

FEATURES

- Energy Saving Latching Operation
- Single or Dual Coil
- Manual Switch on Top or Sealed without Switch
- 39 x 25 x 15mm Package Dimensions

RoHS COMPLIANT

UL / CUL Ratings

Contact Form	1 Form A SPST N.O.	
Rated Load	Voltage	Amps
Resistive, 50K cycles, 40°C	277VAC	50A

CHARACTERISTICS

Insulation Resistance	1,000M Ω min. at 500 VDC
Dielectric Strength	4000V rms, between coil & contacts 1500V rms, between contact
Power Consumption	1.5W Single Coil, 2 x 3.0W Dual Coil
Terminal Strength	10N
Solderability	260°C 5s ± 0.5s
Operating Temperature	-40ºC to 70ºC
Storage Temperature	-40ºC to 125ºC
Shock Resistance	98m/s^2 for 11 ms functional
Vibration Resistance	1.5m double amplitude 10 Hz ~ 55 Hz
Weight	25g

CONTACT DATA

Maximum Switching Power		13,850VA
Maximum Switching Voltage		440VAC
Maximum Switching Current		50A
Mininum Operating Contact Current		10mA @ 6VDC & 25°C 100mA @ 5VDC
Material		$AgSnO_2$
Initial Contact Resistance		≤20 mΩ max.
Service Life	Mechanical	5 x 10^6 operations
	Electrical	1 x 10^5 operations

Values can change due to the switching frequency, desired reliability levels, environmental conditions, and in-rush current levels. It is recommended to test to actual load conditions for the applicaiton. It is the users responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

ORDERING INFORMATION

Example: PC10L -50 -1A -12 C -R -X

Model:	PC10L
Contact Rating	50 = 50A
Contact Form	1A
Contact Voltage	6 = 6VDC 9 = 9VDC 12 = 12VDC 24 = 24VDC 48 = 48VDC
Enclosure	Nil = Dust Cover C = Sealed, no manual switch, non-washable
Coil	Nil = Single Coil 1.5W D = Dual Coil 2 x 3.0W
Polarity	Nil - Standard R = Reverse Polarity
RoHS Compliant	-X

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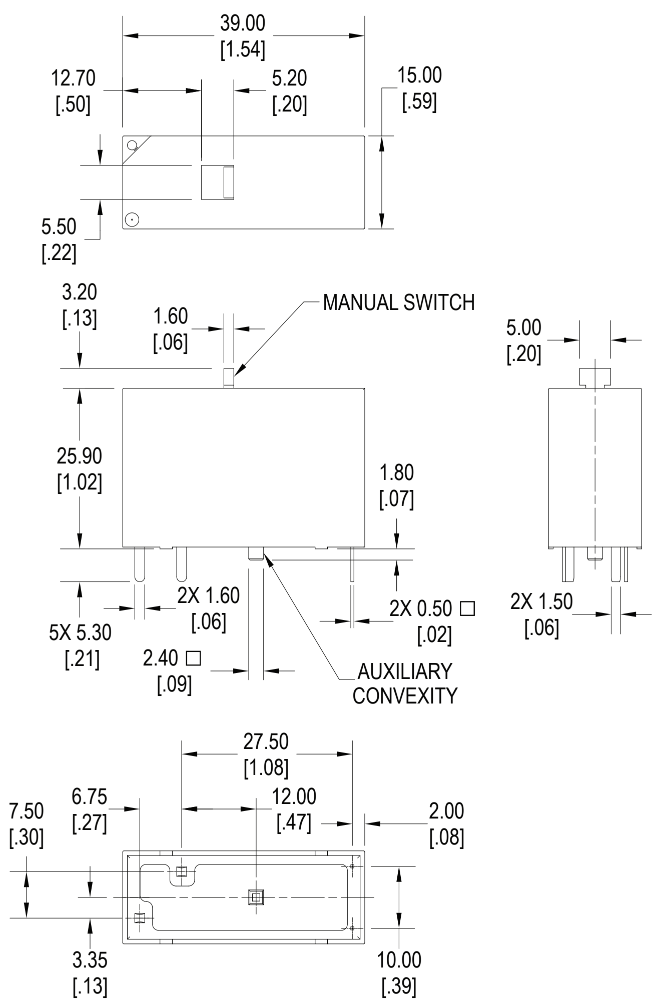
COIL DATA - Single Coil

Coil Voltage		Resistance (Ohms ± 10%)	Pick Up Voltage Max. VDC	Pulse Magnitude ms	Coil Power W	Operate Time ms	Release Time ms
Rated	Max						
6	7.8	24	4.5	≥50	1.5	15	15
9	11.7	54	6.75				
12	15.6	96	9.00				
24	31.2	384	18.00				
48	62.4	1536	36.00				

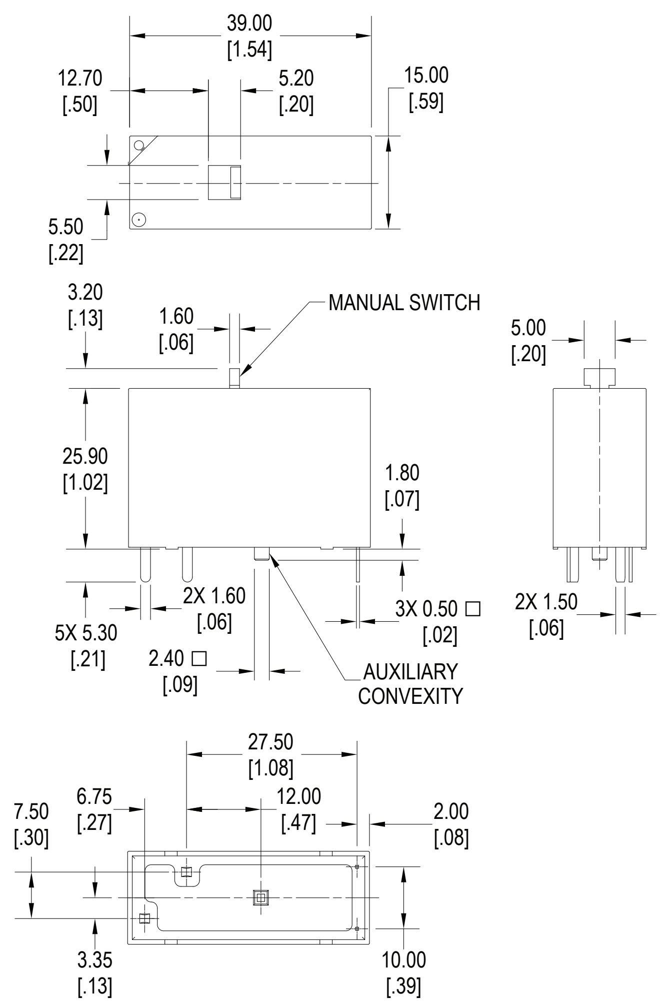
COIL DATA - Dual Coil

Coil Voltage		Resistance (Ohms ± 10%)	Pick Up Voltage Max. VDC	Pulse Magnitude ms	Coil Power W	Operate Time ms	Release Time ms
Rated	Max						
6	7.8	12	4.5	≥50	3.0	15	15
9	11.7	27	6.75				
12	15.6	48	9.00				
24	31.2	192	18.00				
48	62.4	768	36.00				

DIMENSIONS *Inches (mm)*

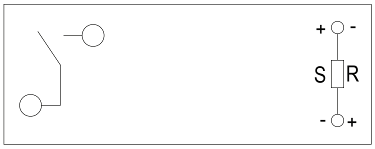


1A Single Coil

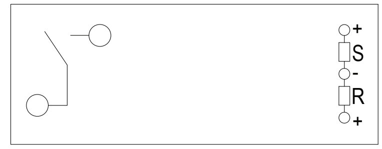


1A Dual Coil

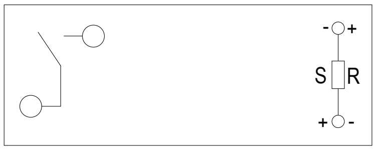
SCHEMATICS & PC LAYOUT *Bottom Views*



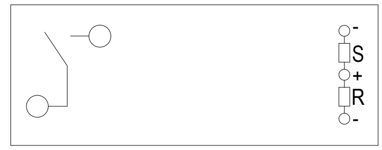
1A Single Coil



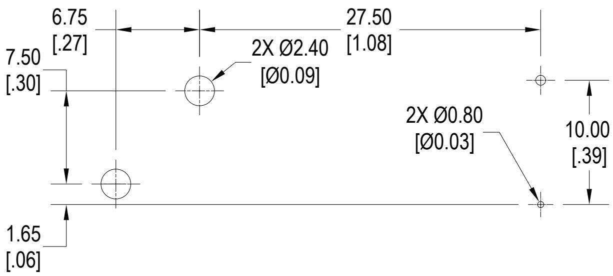
1A Dual Coil



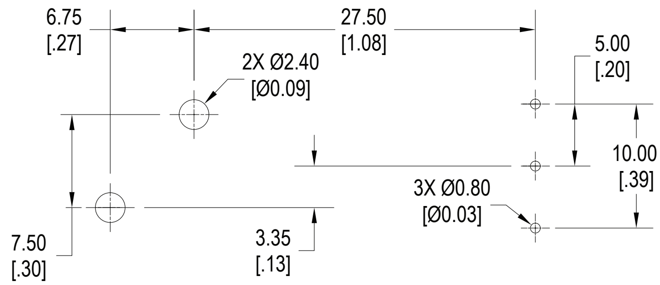
1A Single Coil Reverse Polarity



1A Dual Coil Reverse Polarity



1A Single Coil



1A Dual Coil