

# 10 Amp Subminiature PCB Power Relay PC835



### FEATURES

- 10 A Continuous Contact Capacity
- 1 Form A (SPST-NO) & 1 Form C (SPDT (B-M)) Contact Forms
- Smallest 10 Amp Relay
- Class "F" Insulation Standard
- Sensitive Version Available
- 3.5 KV Dielectric Between Coil and Contacts
- Sealed, Immersion Cleanable
- RoHS Compliant
- See PC837 for 10 A @ 250 VAC Version

### UL / CUL Ratings



Load Type	All Forms, All Contacts
General Purpose	5 Amps @ 250 VAC 4.2 Amps @ 277 VAC
Resistive	10 Amps @ 125 VAC 5 Amps @ 240 VAC 4.2 Amps @ 277 VAC
Motor	1/4 HP 120/240/277 VAC
Tungsten Load	TV-5 @ 120 VAC
Pilot Duty	24 VA @ 24 VAC 125 VA @ 120/240/277 VAC C150 @ 120 VAC

### CONTACT DATA

Material	AgCdO (Silver Cadmium Oxide)	
Initial Contact Resistance	100 mΩ max.	
Max. Switching Voltage	30 VDC, 277 VAC	
Max. Switching Power	150 W, 1,250 VA	
Max. Switching Current	10 A	
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	1 X 10 <sup>5</sup> Operations

### CHARACTERISTICS

Operate Time	8 ms Max
Release Time	5 ms Max
Insulation Resistance	1,000 MΩ min. at 500 VDC
Shock Resistance	100 m/s <sup>2</sup> , 11ms,
Terminal Strength	10 N
Power Consumption	Standard 450 mW, Sensitive 200 mW

### CHARACTERISTICS Continued

Dielectric Strength	1,000 V, 50 Hz Between Contacts
	2,500 V, 50 Hz Between Contact and Coil
Vibration Resistance	10 Hz - 55 Hz DA 1.5 mm
Solderability	260°C for 5 Seconds
Operating Temperature	-40 to 105°C
Relative Humidity	95% (at 35°C)
Weight	6 grams

### ORDERING INFORMATION

Example:	PC835	-1C	-12	S	-H	-X
Model:	<b>PC835</b>					
Contact Form:	<b>1A:</b> 1 Form A (SPST-NO); <b>1C:</b> 1 Form C (SPDT (BM))					
Coil Voltage:	<b>3:</b> 3VDC; <b>5:</b> 5 VDC; <b>6:</b> 6 VDC; <b>9:</b> 9 VDC; <b>12:</b> 12 VDC <b>18:</b> 18 VDC; <b>24:</b> 24 VDC					
Enclosure:	<b>S:</b> Sealed Case					
Insulation System:	<b>Nil:</b> Class F (155°C)*					
Coil Sensitivity:	<b>Nil:</b> Standard 450mW, <b>H:</b> Sensitive 200 mW					
RoHS Compliant:	<b>-X</b>					

\*Note: As of January 2020 all PC835 Production is Class F  
Box Quantity: 2,000; Inner Box: 1,000

**COIL DATA**

Coil Voltage (VDC) (1)		Coil Resistance (Ohms ± 10%)		Must Operate Voltage Max. (VDC) (2)	Must Release Voltage Min. (VDC) (2)
		Standard	Sensitive		
Rated	Max	450 mW	200 mW		
3	3.9	20	45	2.25	0.15
5	6.5	56	125	3.75	0.25
6	7.8	80	180	4.50	0.30
9	11.7	180	405	6.75	0.45
12	15.6	320	720	9.00	0.60
18	23.4	720	1,620	13.5	0.90
24	31.2	1,280	2,880	18.0	1.20

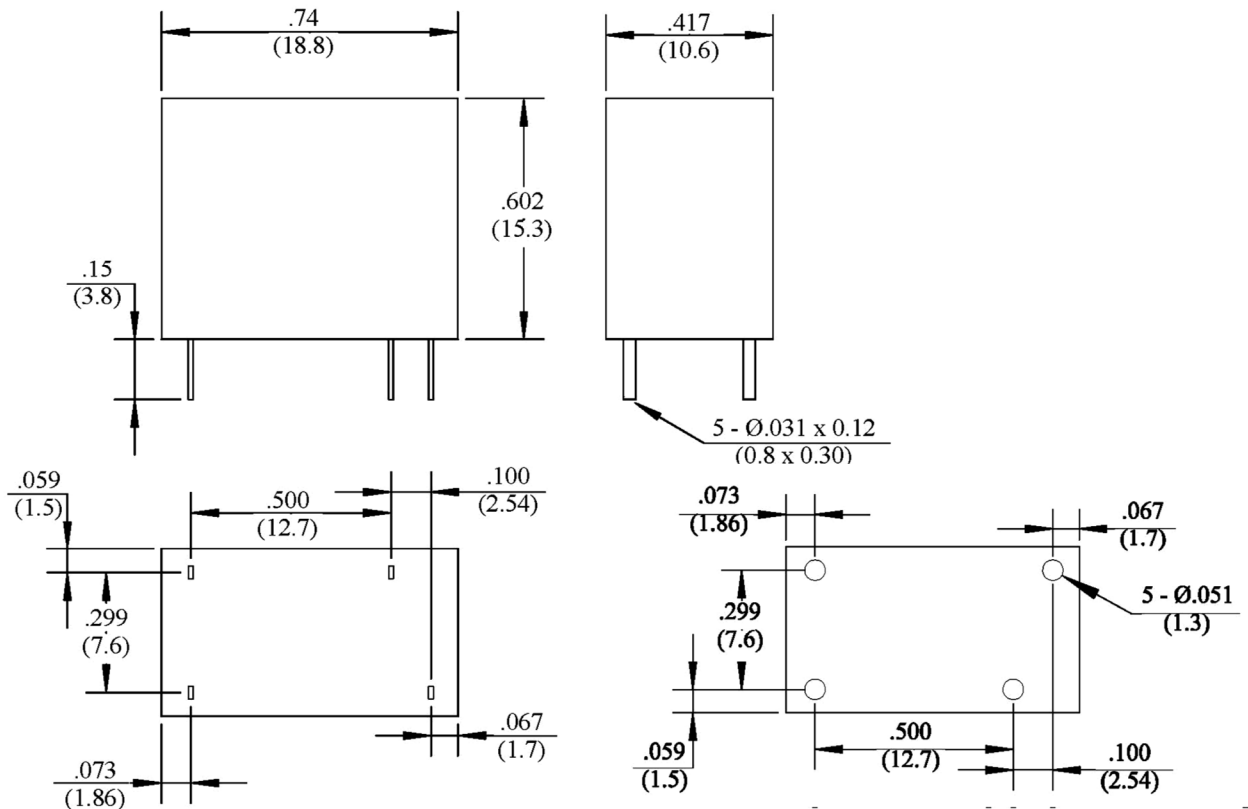
**NOTES:**

- (1) The use of any coil voltage less than the rated voltage will compromise the operation of the relays.
- (2) Must Operate Voltage and Must Release Voltage listed for test purposes only and is not to be used as design criteria.

**DIMENSIONS in Inches (mm)**

**Relay 4 Pin (Front View)**

**Relay 4 Pin (Side View)**

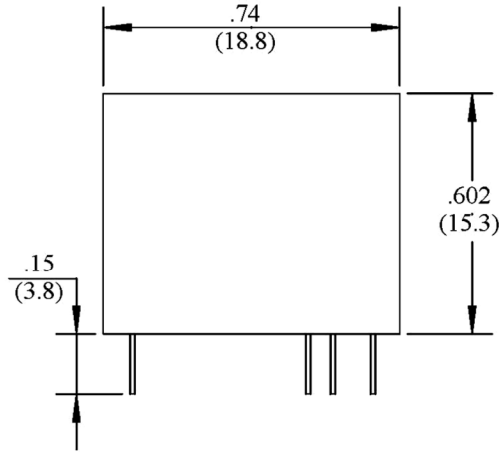


**Terminal Layout (Bottom View)**

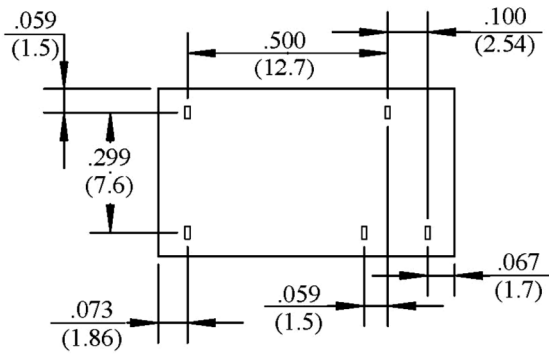
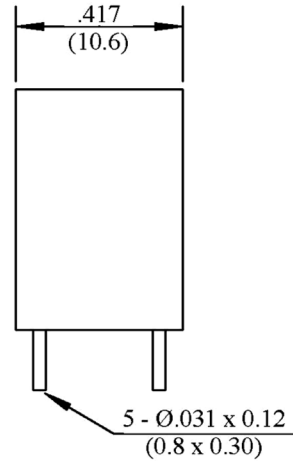
**PCB Layout (Top View)**

DIMENSIONS in Inches (mm)

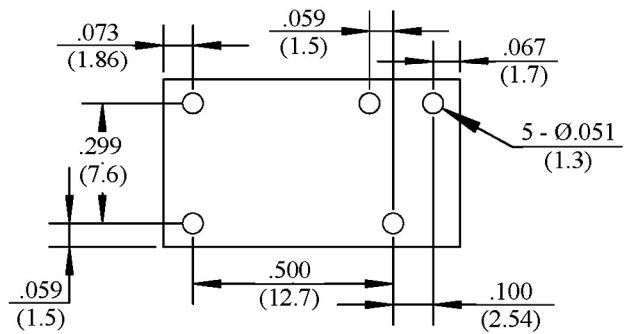
Relay 5 Pin



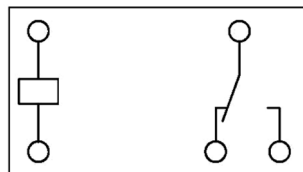
Relay 4 Pin



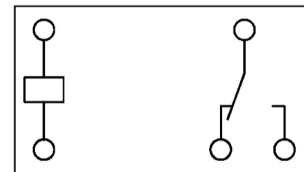
Terminal Layout  
(Bottom View)



PCB 5 Pin Layout  
(Top View)



1 Form A  
(SPST-NO)



1 Form C  
(SPDT (BM))NO

Wire Diagrams