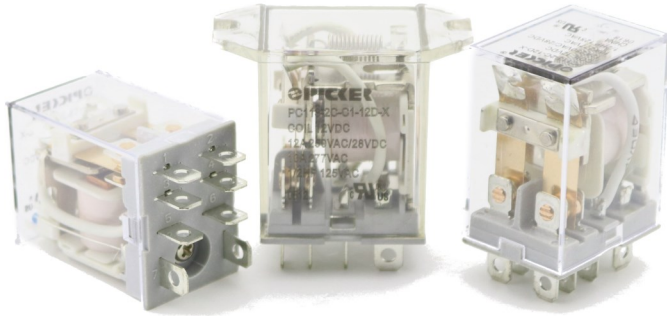


# Miniature 12 & 20 Amp General Purpose Relay PC113



### FEATURES

- 1 and 2 Pole Contact Forms
- 12 & 20 Amp Switching Capacity
- AC & DC Coils Available
- Available as Plug In or PC Pins
- Available with Gold Plated Contacts
- UL Class F Coil Wire Insulation Standard
- Arc Barrier Equipped
- Available with Top Mounting Flange
- Compatible with SC113 Series Sockets
- RoHS Compliant

### CONTACT DATA

Material	AgCdO (Silver Cadmium Oxide)	
Initial Contact Resistance	50 milliohms max @ 0.1 A, 6 VDC	
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	1 X 10 <sup>5</sup> Operations

Load Type	Voltage	1 Form C (SPDT)	2 Form C (DPDT)
General Purpose	277 VAC	20 A	10 A
	250 VAC	20 A	12 A
	28 VDC	20 A	12 A
Motor	125 VAC	1/2 HP	1/2 HP
	250 VAC	1/2 HP	1/2 HP
Max. Switching Power		3,750 VA 420 W	3,000 VA 336 W

### CHARACTERISTICS

Operate Time	25 ms Max
Release Time	25 ms Max
Insulation Resistance	1,000 MΩ min (at 500 VDC)
Dielectric Strength	1,500 Vrms, 1 min. Between Coil and Contacts
	1,000 Vrms, 1 min. Between Open Contacts
	1,000 Vrms, 1 min. Between Contacts Poles
Shock Resistance	100 m/s <sup>2</sup> 11 ms,
Power Consumption	1 & 2 Pole DC 0.9 W, AC 1.2 VA

### CHARACTERISTICS CONTINUED

Vibration Resistance	10 Hz - 55 Hz DA 1.5 mm
Terminal Strength	8N; 4N PC Type
Solderability	260°C for 5 seconds
Operating Temperature	-40 to 70 °C
Relative Humidity	85% (at 30°C)
Weight	37 grams

### ORDERING INFORMATION

Example:	PC113	-1C	-P	-C1	-120A	-L	-X	See SC113-2C for Available Plug-In Sockets
Model:	PC113							
Contact Form:	1A (1U), 1B or 1C; 2A, 2B or 2C							See SC113-2C-PCB for Available PCB Socket
Terminal Type:	Nil: Solder Lugs; P: PC Pins							
Case Type:	Nil: Plain Case; C1: Flange Mount Case							
Coil:	XXXA: AC Coil 6, 12, 24, 36, 48, 120, 220, 240; XXXD: DC Coil 6, 12, 24, 36, 48, 110, 220							
Options:	Nil: None; G: Gold Plate Contacts; L: LED Indicator; D: Internal Diode							<b>Note:</b> LED polarity is positive on terminal 8 and negative on terminal 7 (see page 3)
RoHS Compliant:	-X: RoHS Compliant							

Box Quantity: 500; Inner Box: 250

**COIL DATA**

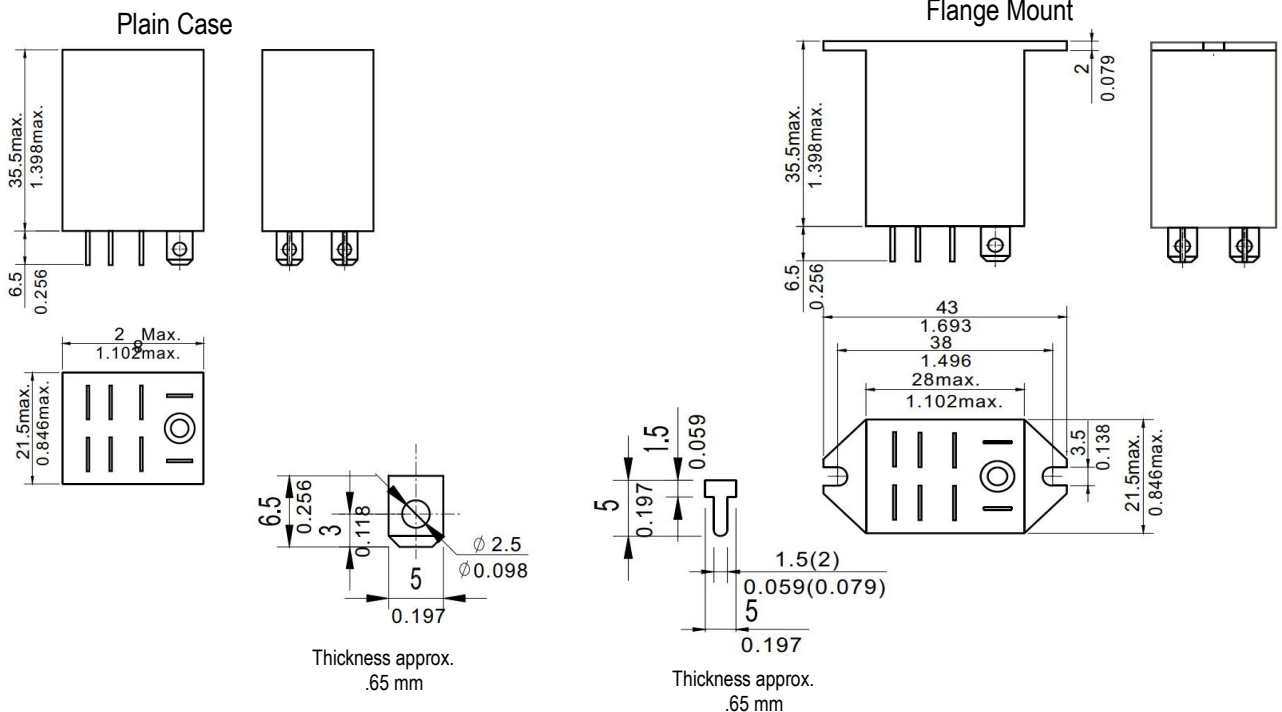
Voltage Type	Coil Voltage		Resistance Ohms ± 10%	Must Operate Voltage Max.	Must Release Voltage Min. (VDC)	
	Coil Power	Rated				Max
DC 0.9 W		6	6.6	40	4.8	0.6
		12	13.2	160	9.6	1.2
		24	26.4	650	19.2	2.4
		36	39.6	1,440	28.8	3.6
		48	52.8	2,600	38.4	4.8
		110	121	11,000	88.0	11.0
		220	242	53,778	176.0	22.0
AC 1.2 VA		6	6.6	11.5	4.8	1.8
		12	13.2	46	9.6	3.6
		24	26.4	184	19.2	7.2
		36	39.6	320	28.8	10.8
		48	52.8	735	38.4	14.4
		120	132	4,550	96.0	36.0
		220	242	14,400	176.0	66.0
		240	312	19,000	192.0	72.0

**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.

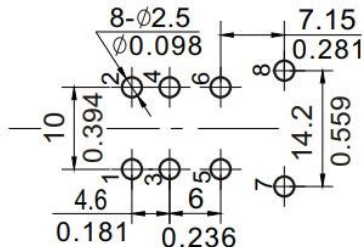
Dimensions are in mm, Inches are listed for reference only.

**DIMENSIONS (mm/inches)**



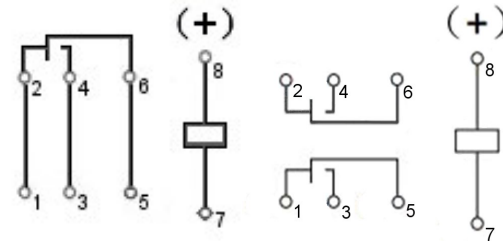
**DIMENSIONS (mm/inches)**

PC Board layout



**1C and 2C**

Wiring Diagrams



**1C**

**2C**

- NOTES 1).Dimensions are in millimeters.  
2).Inch equivalents are given for general information only.

**Reference Data**

