

2X20 Amp Automotive Twin PCB Relay

PC617



Features

- 2X20 Amp continuous current capacity
- Up to 60 amps switching capacity
- Six different contact forms
- Two different contact materials available
- Designed for high inrush applications
- UL Class F insulation standard
- Dust cover or sealed version available
- RoHS Compliant
- **See PC517 For Single Version**

CONTACT RATINGS @ 14 VDC For Each of the Two Relays

Form		1 Form A	1 Form C (DPDT)		1 Form U	1 Form W (SPDT-DB-DM)	
		(SPST NO)	NO	NC	(SPST-NO-DM)	NO	NC
Max Switching	Make	40 Amps	40 Amps	20 Amps	2 x 40 Amps	2 x 40 Amps	2 x 20 Amps
	Motor	20 Amps	20 Amps	10 Amps	2 x 20 Amps	2 x 20 Amps	2 x 10 Amps
Max Continuous Current		20 Amps	20 Amps	10 Amps	2 x 20 Amps	2 x 20 Amps	2 x 10 Amps
Minimum Load		100 mA @ 6 VDC					
Max Switching Power/Voltage		1A, 1C: 280 W, 1,200 VA			1U, 1W: 2x280 W, 2x1,200 VA		

Note: At 28 VDC (24 V Coil) Ratings Are All 50% of 14 VDC Ratings

CHARACTERISTICS

Operate Time	10 ms. Max; 3 ms. Typical
Release Time	5 ms Max; 1.5 ms. Typical
Insulation Resistance	100 megaohms min, at 500VDC , 50% RH
Dielectric Strength	1,500 Vrms, 1 min. between coil and contacts 750 Vrms, 1 min. Between Contacts
Shock Resistance	10 g, 11ms, functional; 100 g, destructive
Vibration Resistance	DA 1.27mm, 10-40 Hz functional
Drop Resistance	1 Meter height drop on concrete in final enclosure
Power Consumption	1.0 W, 1.2W
Solderability	260°C for 5 seconds
Ambient Temperature Range	-40°C to 105°C operating, -40°C to 155°C storage
Relative Humidity	85% @ 40°C
Weight	Open: 9 grams, Enclosed: 12 grams approx

CONTACT DATA

Material	AgSnO ₂ (Silver Tin Oxide)	
Initial Contact Resistance	50 milliohms max @ 0.1A, 6VDC	
Service Life	Mechanical	1 X 10 ⁷ Operations
	Electrical	1 x 10 ⁶ Operations

ORDERING INFORMATION

Example:	PC617	-1C	-6	S	H	-X
Model:	PC617					
Contact Form:	1A: 2 x 1A (SPST-NO), 1C: 2 x 1C (SPDT), 1U: 2 x 1U, or 1W: 2 x 1W,					
Coil Voltage:*	6, 12, 24					
Enclosure:	Nil: Open Frame; S: Sealed; C: Dust Cover					
Contact material:	Nil: AgSnO ₂					
Coil Power:	Nil: 1.0 W; H: 1.2 W (H option for 12 VDC only)					
Insulation Material:	Nil: Class F					
RoHS Compliant:	-X					

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

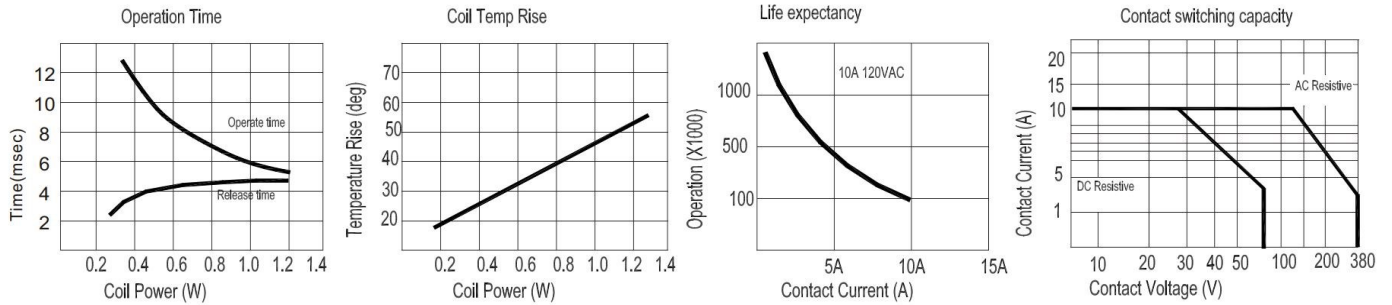
*For additional coil voltages – contact factory

COIL DATA

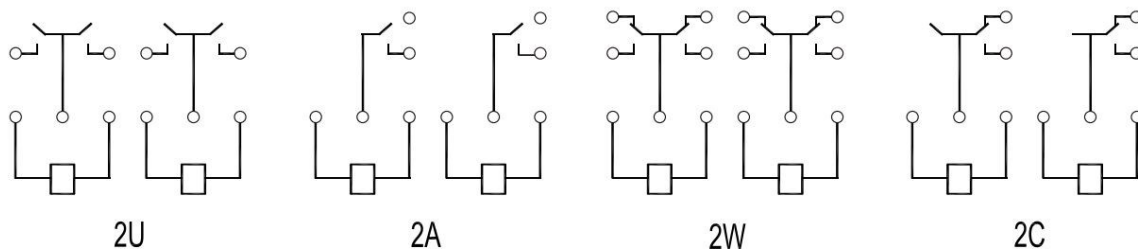
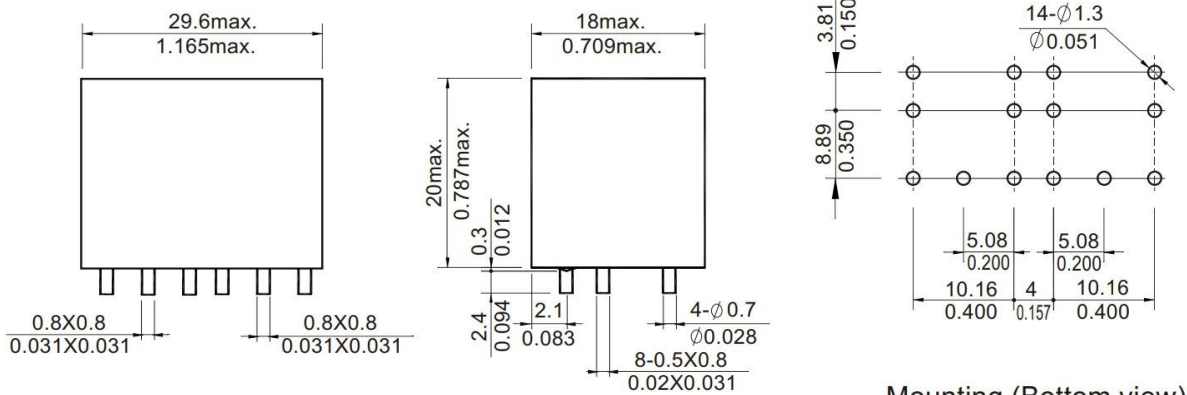
Coil Voltage (VDC)		Coil Resistance $\Omega \pm 10\%$	Must Operate Voltage Max. (VDC)		Must Release Voltage Min. (VDC)	Coil Power (W)
Rated	Max.		A, C, U	W		
6	7.8	36 X 2	3.75	4.5	0.7	2 X 1.0
12	15.6	145 X 2	7.50	9.0	1.4	
24	31.2	576 X 2	15.0	18.0	2.8	

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.

Reference Data



Dimensions



Wiring diagram(Bottom view)

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