20 Amp Automotive Subminiature PCB Relay — PC517

Features

- 20 Amp continuous current capacity
- Up to 60 amps switching capacity
- Four 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 PC617 for Dual Version**

CONTACT RATINGS @ 14 VDC

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 Current	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 50VDC , 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	255°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 10^5 Operations

ORDERING INFORMATION

Example: PC517 -1C -6 S H -X

Model:	**PC517**
Contact Form:	**1A** (SPST-NO), **1C** (SPDT), **1U**, or **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

3220 Commander Drive, Suite 102 Carrollton, TX 75006
Sales: (972) 713-6272 (888) 997-3933 Fax: (972)735-0964
www.PickerComponents.com
e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

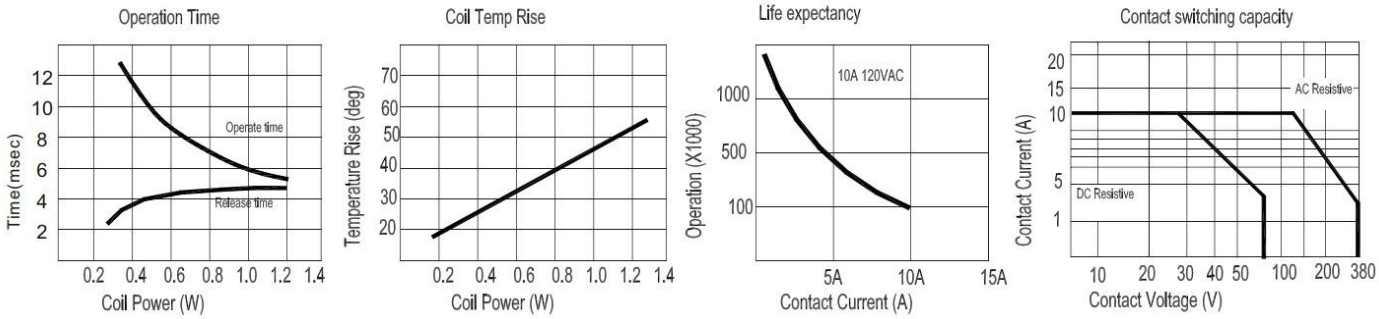
Specifications and Availability subject to change without notice.

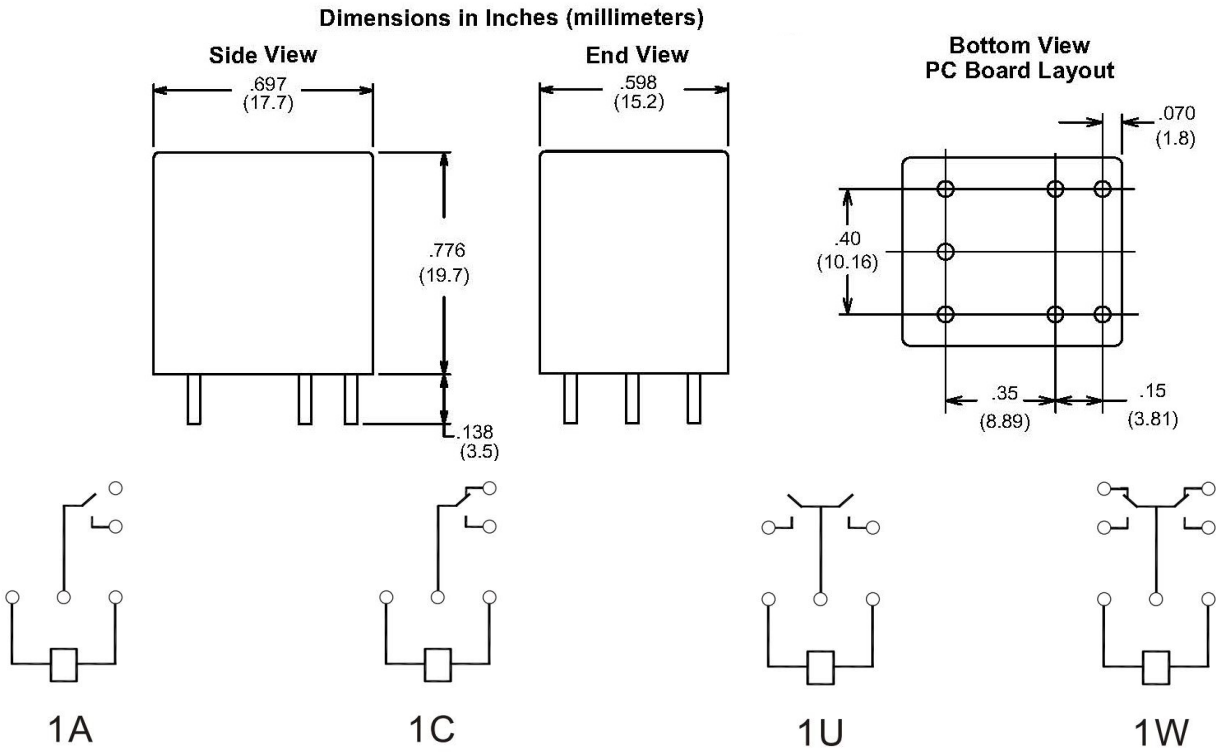
COIL DATA

Coil Voltage (VDC)		Coil Resistance Ω ± 10%	Must Operate Voltage Max. (VDC)		Must Release Voltage Min. (VDC)		Coil Power (W)
Rated	Max.		A, B, C, U, V	W	B, V	A, C, U, W	
6	7.8	36	3.75	4.5	0.35	0.7	1.0
12	15.6	145	7.50	9.0	0.70	1.4	
24	31.2	576	15.0	18.0	1.40	2.8	
H:12	15.6	120	7.50	9.0	.0.6	1.2	1.2

The use of any coil voltage less that 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.

Reference Data





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