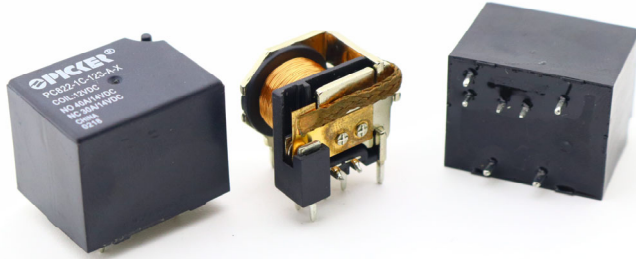


45 Amp Miniature Automotive PCB Relay

PC822



FEATURES

- Miniature Design
- 1A, 1B and 1C Contact Forms Available
- Contact Switching Capacity up to 100 Amps
- 45 Amps Continuous Carrying Capacity
- -40°C to 125°C Operating Temperature
- US and European Footprints Available
- Open Frame, Sealed or Dust Cover Available
- Lead Free & RoHS Compliant
- Fully Automated Assembly
- Constructed with Braided Copper Wire to Dissipate Heat

CONTACT RATINGS at 25°C

Contact Form		1 Form A (SPST-NO)		1 Form C (SPDT)		
		Normally Open	Normally Open	Normally Open	Normally Closed	
Max Switching Current	14 VDC	Make 135 A ⁽¹⁾	Make 120 A ⁽¹⁾	Make 90 A ⁽¹⁾		
		Break 45 A	Break 40 A	Break 30 A		
	28 VDC	Make 67 A ⁽¹⁾	Make 60 A ⁽¹⁾	Make 45 A ⁽¹⁾		
		Break 22.5 A	Break 20 A	Break 15 A		
Max Continuous Current	14 VDC	45 A @ 25°C	40 A @ 25°C	30 A @ 25°C		
		35 A @ 85°C	30 A @ 85°C	20 A @ 85°C		
	28 VDC	22.5 A @ 25°C	20 A @ 25°C	15 A @ 25°C		
		17.5 A @ 85°C	15 A @ 85°C	10 A @ 85°C		
	Max Switching Voltage	75 VDC, 380 VAC				
	Max. Switching Power	630 W, 3,600 VAC				
Minimum Load	0.1 A @ 6 VDC					

CHARACTERISTICS

Operate Time	5 msec max.
Release Time	3 msec max
Insulation Resistance	100 MΩ Min at 500VDC, 50%RH
Dielectric Strength	500 V 50 Hz Between Contacts
	750 V 50 Hz Between Contact and Coils
Shock Resistance	20 g, 11ms, functional; 200 g, destructive
Vibration Resistance	10 Hz - 40 Hz Double Amplitude 1.27 mm
Coil Power Consumption	1.9 W (6V, 9V Coil Voltages)
	1.6 W (12V, 18V, 24V Coil Voltages)

ORDERING INFORMATION

Example:	PC822	-1C	-12	S	-A	L	-X
Model:	PC822						
Contact Form:	1A (SPST-NO), 1B (SPST-NC), or 1C (SPDT)						
Coil Voltage:	6, 9, 12, 18, 24						
Enclosure:	Nil: Open Frame; S: Sealed; S1: Flux Tight ⁽²⁾						
Footprint:	A: US (Narrow); A1: US with pin 4 removed; E: European (Wide)						
Coil Sensitivity:	Nil: Standard Pull In; L: Low Pull In (See Coil Data Table)						
Contact Material:	Nil: AgSnOInO						
RoHS Compliant:	-X						

⁽¹⁾With current load applied for a maximum of 3 seconds at a maximum duty cycle of 10%.

⁽²⁾ Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT suitable for water wash cleaning.

Box Quantity: 800; Inner Box: 200

CROSS REFERENCE

Sanyo: SARB Series
Example: SARB-S-112DU Crosses to PC822-1C-12S-A-X
TE Connectivity: V23133 and V23076 Series
Example: V23133-A1001-D143 (1-1393278-3) crosses to PC822-1C-12SE-X
Example: V23076A1001C133 (1393277-4) crosses to PC822-1C-12SE-X
American Zettler: AZ971 Series
Example: AZ971-1C-12D Crosses to PC822-1C-12S1-X
Omron: G9PE
Example: G8PE-1C4-DC12 Crosses to PC822-1C-12S-E-X

CONTACT DATA

Material	AgSnOInO (Silver Tin Indium Oxide)	
Initial Contact Resistance	30 mΩ Max @ 0.1A, 6VDC	
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations

CHARACTERISTICS Continued

Solderability	260°C for 5 seconds
Operating Temperature Range	- 40°C to 125°C
Storage Temperature Range	- 40°C to 155°C
Weight	Open: 19 grams; Enclosed: 21 grams

COIL DATA

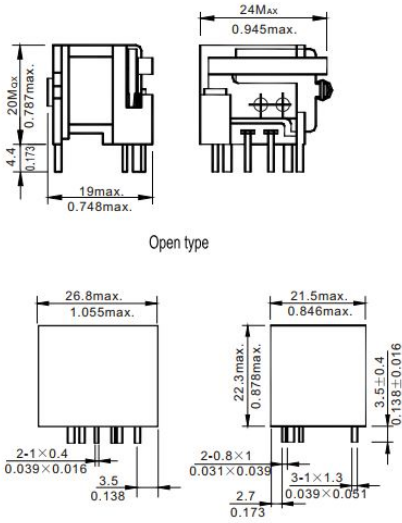
Coil Voltage	Resistance Ohms $\pm 10\%$	Standard Must Operate Voltage Max. (VDC)	(L) Low Pull In Option Voltage Max. (VDC)	Must Release Voltage Min. (VDC)	Continuous Voltage Max. (VDC)	Coil Power (Watts)
6	19.0	4.2	3.3	0.6	7.8	1.9
9	42.6	6.3	5.1	0.9	11.7	1.9
12	90.0	8.4	6.8	1.2	15.6	1.6
18	202.5	12.6	10.2	1.8	23.4	1.6
24	360.0	16.8	13.9	2.4	31.2	1.6

NOTES:

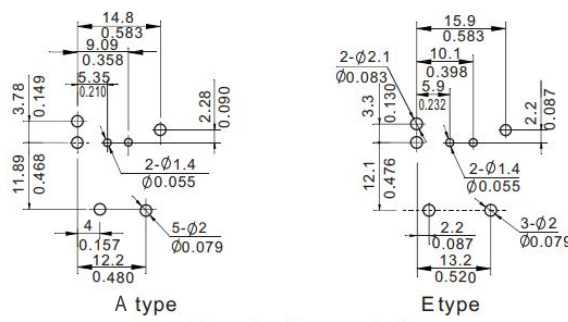
The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

Dimensions

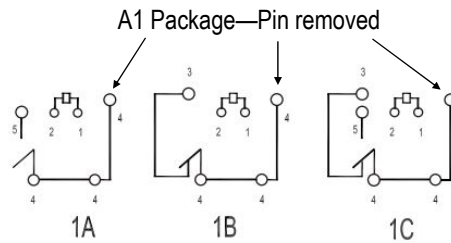
mm /inch



PC822 Top View



Mounting (Bottom view)



Wiring diagram (Bottom view)

