



14.2×9.3×5.3

PS

cus E158859

Features

- Surface mount Type with “L ” shaped Terminals ◦
- Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC ◦
- Monostable or bistable relays Single and double Coil magnet latching Type available ◦
- Application for Telecommunication Equipment, Office Equipment, Security Alarm Systems, Measuring instruments, Medical Monitoring Equipment, Audio Visual Equipment, Flight Simulator, Sensor Control ◦

Contact Data

Contact Arrangement	2C (Bifurcated Crossbar)		
Contact Material	Ag·Pd(Stationary Contact: Gold clad)		
Contact Rating (resistive)	1A/30VDC; 0.5A/125VAC		
Max. Switching Power	30W 62.5VA		Min. Switching load: 0.01mA/10mV (Reference Value)
Max. Switching Voltage	220VDC 250VAC		Max. Switching Current:1A
Contact Resistance or Voltage drop	≤50mΩ		Item 3.12 of IEC255-7
Operation life	Electrical	1A/30VDC: 2 × 10 ⁵ (Ag Alloy : 1 × 10 ⁵)	Item 3.30 of IEC255-7
	Mechanical	10 ⁸	Item 3.31 of IEC255-7

CAUTION:

Relays previously tested or used above 10mA resistive at 6VDC maximum or peak AC open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

Coil voltage VDC		Coil resistance Ω±10%	Pick up voltage VDC(max) (75%of rated voltage)	release voltage VDC(min) (10% of rated voltage)	Coil power W	Operate Time ms	Release /Reset Time ms
Rated	Max.						
3	7.5	64.3	2.25	0.3	0.14	≤2	≤1
5	12.5	178	3.75	0.5	0.14		
6	15.0	257	4.50	0.6	0.14		
9	22.5	579	6.75	0.9	0.14		
12	30.0	1028	9.00	1.2	0.14		
24	48.0	2880	18.0	2.4	0.20		

- CAUTION:**
- 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 - 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.
 - 3.When latching relays are installed in equipment, the latch and reset coil should not be pulsed simultaneously. coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operate time of the relay. If these conditions are not followed, it is possible for the relay to in be the magnetically neutral position .

Qualification inspection:

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

Characteristics

Electrostatic capacitance			
Between open Contacts	Approx.0.4pF	Item 3.41	of IEC255-5
Between coil & Contacts	Approx.0.9pF	Item 3.41	of IEC255-5
Between Contact Poles	Approx.0.2pF	Item 3.41	of IEC255-5
Insulation Resistance	1000M Ω min (at 500VDC)	Item 7	of IEC255-5
Dielectric Strength			
Between open Contacts	1000VAC 1min	Item 6	of IEC255-5
Between coil & Contacts	1000VAC 1min	Item 6	of IEC255-5
Between Contact Poles	1000VAC 1min	Item 6	of IEC255-5
Surge Withstand Voltage			
Between open Contacts	1500V	FCC68	
Between coil & Contacts	1500V	FCC68	
Between Contact Poles	1500V	FCC68	
Shock resistance	Functional:500m/s ² 11ms; Endurance:1000 m/s ² 6ms	IEC68-2-27	Test Ea
Vibration resistance	10~55Hz Double amplitude Functional: 3mm Endurance:5mm	IEC68-2-6	Test Fc
Terminals strength	5N	IEC68-2-21	Test Ua1
Solderability	230 $^{\circ}$ C \pm 2 $^{\circ}$ C 10 \pm 0.5s	IEC68-2-20	Test Ta method 1
Temperature Range	-40~80 $^{\circ}$ C (-40~185 $^{\circ}$ F)		
Weight	1.5g		

Ordering Information	
PS	12
Nominal coil voltage 3V, 5V, 6V, 9V, 12V, 24V	
Operating Function: Nil:Single Side Stable	
Type : PS	

Dimensions	mm/inch
<p>The technical drawings include: <ul style="list-style-type: none"> Top View: Shows a rectangular component with an 'Index Mark' on the left side. Dimensions are 14.2 mm (0.559 in) in width and 9.3 mm (0.366 in) in height. Side Views: Two views showing the profile of the component. Dimensions include a total height of 5.3 mm (0.209 in), a base width of 7.62 mm (0.3 in), and a mounting pad width of 0.25 mm (0.01 in). Mounting Pad Layout: A detailed diagram of the terminal pads. It shows 10 pads with dimensions: 1.5 mm (0.059 in) for the top row, 0.88 mm (0.035 in) for the middle row, and 1.0 mm (0.039 in) for the bottom row. Spacing between pads is 0.376 mm (0.015 in) and 0.6 mm (0.024 in). Dimensions: A diagram showing the stand-off height of 0.5 mm (0.02 in) and the distance between terminals A and B. Wiring Diagram: A schematic showing the internal connections for a 'Single Side stable' relay. It has 5 terminals on top (1-5) and 5 terminals on the bottom (10-6). Terminal 1 is marked with a '+' and terminal 6 with a '-'. An 'Index mark (De-energized Position)' is shown on the left. </p>	

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