



 $14.2 \times 9.3 \times 5.3$ 

c**™**us E158859 ▲ R50044271

# Features

- Surface mount Type with "L" shaped Terminals.
- Conforms to FCC Part 681.5kV 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.

Ordering Information					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
1 Part number: PS 2 Operating function: Nil: Single Side Stable; L:1 Coil Latching; K:2 Coil Latching	3 Coil rated voltage(V): DC:3,4.5,5,6,9,12,24 4 Contact material: Nil: AgPd; W: AgNi				

#### **Contact Data**

Contact Arra	ngement	2C (DPDT(B-M)) (Bifurcated Crossbar)		
Contact Material Contact Rating (resistive) Max. Switching Power		AgPd(Stationary Contact: Gold clad ) AgNi(Gold clad)		
		1A/30VDC; 0.5A/125VAC		
		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	
Operational life	Electrical	1A/30VDC: 2×10 <sup>5</sup> (Ag Ni : 1×10 <sup>5</sup> ) 0.5A/125VAC: 1×10 <sup>5</sup>	Item 3.30 of IEC255-7	
lile	Mechanical	10 <sup>8</sup>	Item 3.31 of IEC255-7	

### **CAUTION:**

31

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

### **Coil Parameter**

Dash	Coil voltage VDC		Coil resistance	Pick up voltage VDC(max)	Release voltage VDC(min)	Coil	Operate	Release /Reset	
numbers	Rated	Max.	Ω ±	±10%	(75%of rated voltage)	(10% of rated voltage)	power W	Time ms	Time ms
PS-003	3	7.5		64.3	2.25	0.3	0.14		
PS-004	4.5	11.25		144.6	3.38	0.45	0.14		
PS-005	5	12.5		178	3.75	0.5	0.14		
PS-006	6	15.0		257	4.50	0.6	0.14	Approx.2	Approx.1
PS-009	9	22.5		579	6.75	0.9	0.14		
PS-012	12	30.0		1028	9.00	1.2	0.14		
PS-024	24	48.0		2880	18.0	2.4	0.20		
1 Coil Latch	1 Coil Latching				Reset(Max)			Reset	
PSL-003	3	8.7		90	2.25	-2.25	0.10		
PSL-004	4.5	13.0		202.5	3.38	-3.38	0.10		
PSL-005	5	14.5		250	3.75	-3.75	0.10		
PSL-006	6	17.4		360	4.50	-4.50	0.10	Approx.2	Approx.2
PSL-009	9	26.1		810	6.75	-6.75	0.10		
PSL-012	12	34.8		1440	9.00	-9.00	0.10		
PSL-024	24	57.6		3840	18.0	-18.0	0.15		
2 Coil Latching Se		Set Coil	Reset Coil		Reset(Max)			Reset	
PSK-003	3	8.7	45	45	2.25	2.25	0.20		
PSK-004	4.5	13.0	101	101	3.38	3.38	0.20		
PSK-005	5	14.5	125	125	3.75	3.75	0.20		
PSK-006	6	17.4	180	180	4.50	4.50	0.20	Approx.2	Approx.2
PSK-009	9	26.1	405	405	6.75	6.75	0.20		
PSK-012	12	34.8	720	720	9.00	9.00	0.20		
PSK-024	24	57.6	1920	1920	18.0	18.0	0.30		

# **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 fortest 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 be in the magnetically neutral position.

### Characteristics

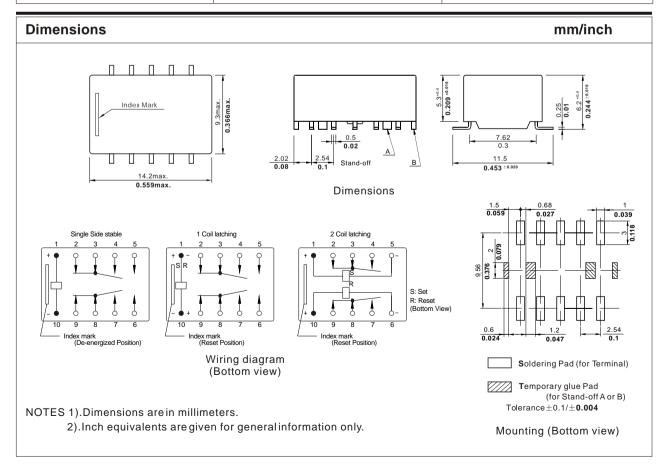
Electrostatic capacitance			
Between open Contacts	Approx.0.4pF	Item 3.41 of IEC255-7	
Between coil & Contacts	Approx.0.9pF	Item 3.41 of IEC255-7	
Between Contact Poles	Approx.0.2pF	Item 3.41 of IEC255-7	
Insulation Resistance	1000M Ω min (at 500VDC)	Item 7 of IEC255-5	
Dielectric Strength			
Between 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	2500V	FCC68	
Shock resistance	Functional:500m/s <sup>2</sup> 11ms; Survival:1000 m/s <sup>2</sup> 6ms	IEC68-2-27 Test Ea	
Vibratian registance	10~55Hz Double amplitude Functional: 3mm	IEC68-2-6 Test Fc	
Vibration resistance	Survival:5mm	1600-2-0 165116	
Terminals strength	5N	IEC68-2-21 Test Ua1	
Solderability	235℃ ±2℃ 3±0.5s	IEC68-2-20 Test Ta method 1	
Temperature Range	-40~85°C(-40~185° F)		
Mass	1.5g		

## **Qualification inspection:**

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

## Safety approvals

Safety approval	UL&CUR	ΤüV		
Load	1A/30VDC、0.5A/125VAC	1A/30VDC、0.5A/125VAC		



Ningbo Forward Relay Corporation LTD. \_\_\_\_\_ 32