



20x5x12.8

# NPA



## Features

- Small size, light weight.
- Low coil power consumption 0.12W.
- PC board mounting, SIL terminal
- Suitable for household electrical appliance, automation system, electronic equipment, instrument, meter, telecommunication facilities and remote control facilities.

## Ordering Information

**NPA A S 5 DC12V**

1 2 3 4 5

1 Part number: NPA ; NPA<sub>2</sub>

2 Contact arrangement: A:1A

4 Contact current: 3:3A; 5:5A

5 Coil rated Voltage(V): DC:3,4,5,5,6,12,18,24

## Contact Data

Contact Arrangement	1A (SPSTNO)	
Contact Material	Silver Alloy (Gold clad)	
Contact Rating (resistive)	3A,5A/30VDC,250VAC ;	
Max. Switching Power	150W 1250VAC	min Load:0.1mA/0.1VDC (reference value)
Max. Switching Voltage	110VDC 250VAC	Max. Switching Current:5A
Contact Resistance & Voltage drop	≤30mΩ ( at 1A/6V)	Item 3.12 of IEC255-7
Operation life	Electrical	1 × 10 <sup>5</sup>
	Mechanical	2 × 10 <sup>7</sup>
		Item 3.30 of IEC255-7
		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

Dash numbers	Coil voltage VDC		Rated current mA	Coil resistance Ω±10%	Pickup voltage VDC(max) (70%of rated voltage )	release voltage VDC(min) (5% of rated voltage)	Coil power Consumption W	Operate Time ms	Release Time ms
	Rated	Max.							
NPA-005	5	6	24	208	3.5	0.25	0.12	≤6	≤3
NPA-006	6	7.2	20	300	4.2	0.3			
NPA-009	9	10.8	13.3	675	6.3	0.45			
NPA-012	12	14.4	10	1200	8.4	0.6			
NPA-018	18	21.6	6.7	2700	12.6	0.9			
NPA-024	24	28.8	5	3200	16.8	1.2	0.18	≤6	≤3

- 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.

**Operation condition**

Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 1000V	Item 6 of IEC255-5
Between contact and coil	50Hz 2000V Surge voltage:4kV	Item 6 and 8 of IEC255-5
Shock resistance		
Functional	: 147m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Survival	: 980m/s <sup>2</sup> 6ms	
Vibration resistance		
10~55Hz Functional	double amplitude 2.5mm	IEC68-2-6 Test Fc
Survival	double amplitude 3.5mm	
Terminals strength	5N	IEC68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3 $\pm$ 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~70 $^{\circ}$ C	
Relative Humidity	5%~85% (at 40 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	3g	

**Qualification inspection:**

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

**Dimensions (Unit: mm)**

	mm	inch
	0.25	0.010
	0.3	0.012
	0.5	0.020
	0.8	0.031
	1.1	0.046
	1.2	0.047
	1.3	0.051
	2.54	0.100
	3.5	0.138
	5.0	0.197
	5.08	0.200
	10.16	0.300
	12.5	0.504
Mounting (Bottom views)	20	0.787

Dimensions

Wiring diagram  
(Bottom views)

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