

# N68F



28.5×10.1×12.3

UL<sup>®</sup> E158859

CQC 06001015741

## Features

- Slim type and small occupying area can offer high density P.C.B. technique.
- Employment of suitable plastic materials to be applied to high temperature and various chemical solution.
- Dielectric strength 5000V.
- Creepage distance >8mm.

## Ordering Information

**N68F C S 8 DC12V F**  
 1 2 3 4 5 6

1 Part number: N68F  
 2 Contact arrangement: A:1A;C:1C  
 3 Enclosure: S:Sealed type; Z:Dust cover

4 Contact current: 8A  
 5 Coil rated voltage(V): DC:5,6,12,18,24,48,60  
 6 Resist heat class: B:130℃; F:155℃

## Contact Data

Contact Arrangement	1A(SPSTNO) 1C (SPDT(B-M))	
Contact Material	AgCdO AgSnO <sub>2</sub> AgNi (gold clad)	
Contact Rating (Resistive)	8A/250VAC,30VDC	
Max. Switching Power	300W	2500VA
Max. Switching Voltage	125VDC 380VAC	Max. Switching Current:10A
Contact Resistance or Voltage drop	≤100mΩ	Item 4.12 of IEC 61810-7
Operational life	Electrical	10 <sup>5</sup> Item 4.30 of IEC 61810-7
	Mechanical	10 <sup>7</sup> Item 4.31 of IEC 61810-7

**CAUTION:** 1.For the intermediate current, it only applies to the room temperature.  
 2.For gold plated version, the min. Switching current and min. switching voltage is 50mA/6VDC; for non gold plated version (standard type),the min. switching current and min. switching voltage is 100mA/6VDC.

## Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pickup voltage VDC (max) (75%of rated voltage )	Release voltage VDC (min) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max						
005-220	5	6.5	114	3.75	0.5	0.22	<7	<3
006-220	6	7.8	164	4.5	0.6			
012-220	12	15.6	655	9.0	1.2			
018-220	18	23.4	1473	13.5	1.8			
024-220	24	31.2	2618	18.0	2.4			
048-250	48	62.4	9216	36.0	4.8	0.25	<7	<3
003-250	60	78	14400	45.0	6.0			

**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.Unless otherwise stated, the rated coil voltage specified in coil parameter table shall be used for all tests and its application to the relay.

### Operation condition

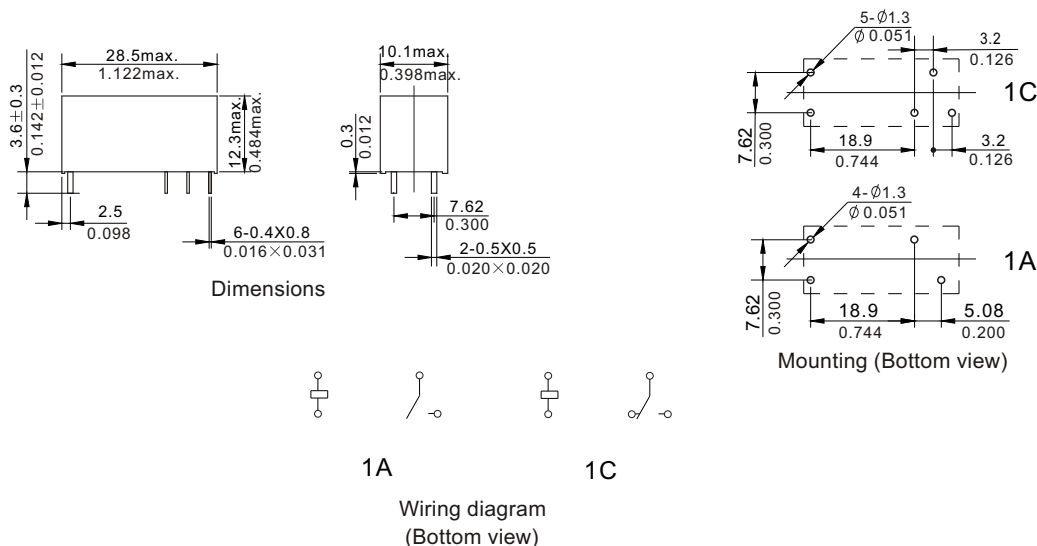
Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength Between contacts Between contact and coil	50Hz 1000V 50Hz 5000V	Item 6 of IEC 60255-5 Item 6 of IEC 60255-5
Shock resistance	Functional 100m/s <sup>2</sup> 11ms Survival: 1000m/s <sup>2</sup> 6ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~500Hz double amplitude 1.5mm 200m/s <sup>2</sup>	IEC 68-2-6 Test Fc
Terminals strength	10N	IEC 68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3s $\pm$ 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40 $^{\circ}$ C ~85 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC 68-2-3 Test Ca
Mass	8.2g	

### Safety approvals

Safety approval	UL & CUR	CQC
Load	8A/250VAC,30VDC	8A/250VAC

### Dimensions

mm /inch



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

### Reference Data

