



28.5×10.1×12.5

# N68F

 us E158859

## 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:Wash tight ;  
Z:Flux proof

4 Contact current: 8A

5 Coil rated voltage(V): DC:5,6,12,18,24,48

6 Resist heat class: B:130°C; F:155°C

## Contact Data

Contact Arrangement		1A (SPSTNO) 1C (SPDT(B-M))	
Contact Material		AgSnO <sub>2</sub> AgNi	
Contact Rating (Resistive)		8A/250VAC,30VDC	
Max. Switching Power		300W 2500VA	
Max. Switching Voltage		125VDC 380VAC	Max. Switching Current:10A
Contact Resistance		≤100mΩ	Item 4.12 of IEC 61810-7
Operational Life	Electrical	1×10 <sup>5</sup>	Item 4.30 of IEC 61810-7
	Mechanical	1×10 <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%	Pick-up voltage VDC (max) (75%of rated voltage )	Drop-out voltage VDC (min) (10% of rated voltage)	Coil power 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

**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.

## Characteristics

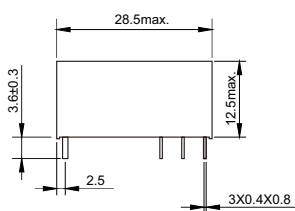
Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 1000V 50Hz 5000V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	Functional: 98m/s <sup>2</sup> 11ms Destructive: 980m/s <sup>2</sup> 6ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~500Hz Double amplitude 1.5mm 200m/s <sup>2</sup>	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40 $^{\circ}$ C~85 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	8.2g	Item 4.7 of IEC 61810-7

## Safety Approvals

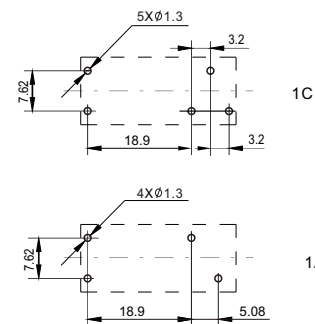
Safety approval	UL & CUR
Load	8A/250VAC,30VDC

## Dimensions

mm



Dimensions



Mounting (Bottom view)



1A

1C

Wiring diagram  
(Bottom view)

**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm ;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

## Reference Data

