



NVF4-7      NVF4-8  
26.5×26.5×25.2    26.5×26.5×25.2(+16)

## NVF4-7&NVF4-8

### Features

- Small size and light weight.
- Heavy contact load (70A).
- Suitable for automobile and lamp accessories application.
- PC board mounting and direct insert mounting available.

### Ordering Information

**NVF4-7 A Z 70 b DC12V 1.6 D**  
1      2 3 4 5      6      7      8

1 Part number: NVF4-7, NVF4-8 (Plastic Bracket)  
2 Contact arrangement: A: 1A  
3 Enclosure: Z: Dust protected  
4 Contact current: 50: 50A; 70: 70A  
5 Terminals: b: PCB type; a: plug in type

6 Coil rated voltage (V): DC: 6, 12, 24  
7 Coil power: 1.6: 1.6W; 1.9: 1.9W  
8 Coil transient suppression: D: with diode  
2D: with two diodes  
R: with resistance  
DR: with diode and resistance  
NIL: standard

### Contact Data

Contact Arrangement	1A(SPSTNO)		
Contact Material	AgSnO <sub>2</sub>		
Contact Rating (Resistive)	50A/14VDC (at 85°C) , 70A/14VDC		
Max. Switching Power	980W		
Max. Switching Voltage	50VDC	Max. Switching Current: 70A	
Voltage Drop (Initial)	Typ. 50mV (at 10A)	Item 4.12 of IEC 61810-7	
Operation 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

### Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pick-up voltage VDC(max) (60% of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max.						
006-1900	6	7.8	19	3.6	0.6	1.9	≤7	≤2
012-1900	12	15.6	76	7.2	1.2			
024-1900	24	31.2	303	14.4	2.4			
012-1600	12	15.6	90	7.2	1.6	1.6		
024-1600	24	31.2	360	14.4	3.2			

**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.

## Characteristics

Insulation Resistance <sup>1)</sup>	100M $\Omega$ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength <sup>1)</sup>	50Hz 500V	Item 4.9 of IEC 61810-7
Between Contacts	50Hz 500V	Item 4.9 of IEC 61810-7
Between Contact and Coil		
Shock Resistance	30m/s <sup>2</sup> 6ms	Item 4.26 of IEC 61810-7
Vibration Resistance	20Hz~500Hz Double amplitude 1.8mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N 100N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40 $^{\circ}$ C~105 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	36g (NVF4-7);41g (NVF4-8)	Item 4.7 of IEC 61810-7

Note: 1). When testing, coil terminals should be connected, If coil transient suppression is installed in relay .

