NVF4-1&NVF4-2

NVF4-1 NVF4-2 NVF4-2b

26.5×26.5×24.5(+15.5) 35.5×35.5×45.5(+22.5)

Features

- Small size and light weight.
- Heavy contact load (40A).
- Suitable for automobile and lamp accessories application.
- PC board mounting and QC mounting available.

Ordering Information

NVF4-1 C - Z 30 b DC12V 1.6 D

1 2 3 4 5 6 7 8

1 Part number: NVF4-1
NVF4-2(Plastic Bracket)
NVF4-2a(With Metal Bracket)
NVF4-2b(Shrouded With Metal Bracket)
2 Contact arrangement: A:1A; A2:1A2; B:1B; C:1C
3 Enclosure: S: Wash tight ; Z: Dust protected
4 Contact rating: A Form:20:20A; 40:40A
A2 Form:2×20A
B Form:20:20A; 30:30A
C Form:15:15A; 20:20A; 30:30A; 40:40A

5 Terminals: b:PCB type; a1:QC type 1; a2:QC type 2
6 Coil rated voltage(V): DC:6,9,12,24,48
7 Coil power: 1.6:1.6W; 1.9:1.9W;
2.3:2.3W; 2.6:2.6W
8 Coil transient suppression: D:with diode
R:with resistor
NIL:standard

Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))			
Contact Material	$AgSnO_2$			
Contact Rating	1A	1B	1C	1A2
	40A/14VDC 20A/24VDC	30A/14VDC 20A/24VDC	NO:40A/14VDC NC:30A,40A/14VDC 15A,20A/24VDC	2×20A/14VDC
Max. Switching Power	560W			
Max. Switching Voltage	75VDC	Max. Switching Current:40A		
Voltage Drop(Initial)	Typ.: 50mV(at 10A)	Item 4.12 of IEC 61810-7		
Electrical Endurance	1×10^5	Item 4.30 of IEC 61810-7		
Mechanical Endurance	1×10^7	Item 4.31 of IEC 61810-7		

Notes: Limiting continuous current at 125℃:NC/NO:10A/15A.

Coil Parameter

Coil voltage VDC		Coil resistance Ω±10%	Pick-up voltage VDC(max) (65%of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
Rated	Max.						
6	7.8	22.5	3.9	0.6	1.6	≤7	≤5
9	11.7	50.6	5.9	0.9			
12	15.6	90	7.8	1.2			
24	31.2	360	15.6	2.4			
48	62.4	1440	31.2	4.8			
6	7.8	19	3.9	0.6	1.9		
12	15.6	75.8	7.8	1.2			
24	31.2	303.2	15.6	2.4			
6	7.8	15.6	3.9	0.6	2.3		
12	15.6	62.6	7.8	1.2			
24	31.2	250.4	15.6	2.4			
6	7.8	13.8	3.9	0.6	2.6		
12	15.6	55.4	7.8	1.2			
24	31.2	221.5	15.6	2.4			

Characteristics

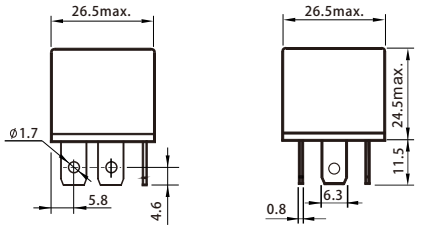
Insulation Resistance[1)]	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength [1)] Between Open Contacts Between Contact and Coil	 500VAC 1min 750VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	147m/s^2 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~40Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	Terminal retention(pull & push): ⩾ 100N Terminal resistance to bending(front & side): ⩾10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40℃~125℃	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	31g(NVF4-1);33g(NVF4-2);33g(NVF4-2a);45g(NVF4-2b)	Item 4.7 of IEC 61810-7

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

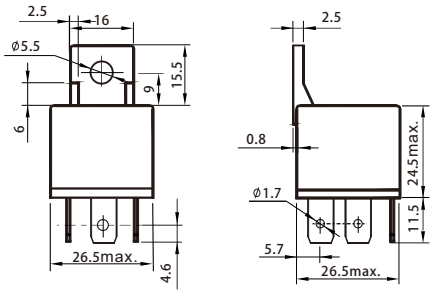
Dimensions

mm

Dust cover

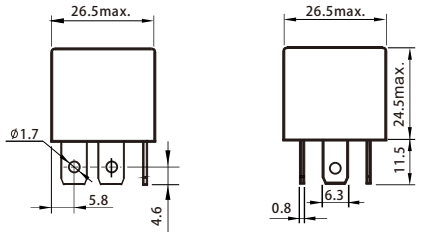


NVF4-1type

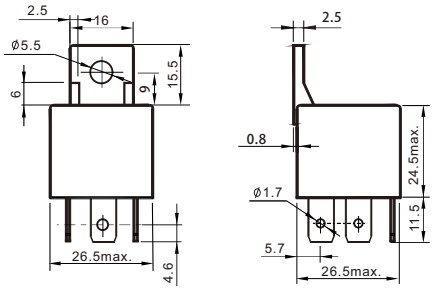


NVF4-2 type

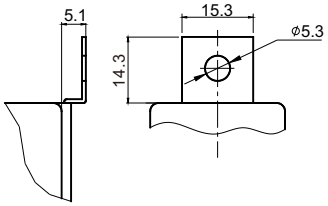
Sealed type



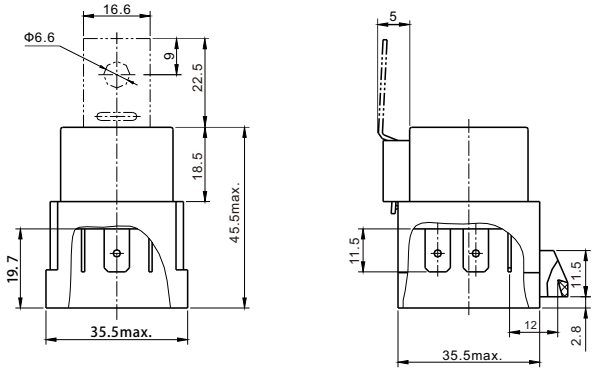
NVF4-1type



NVF4-2 type



NVF4-2a type

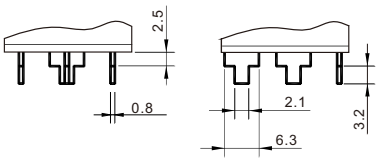


NVF4-2b type

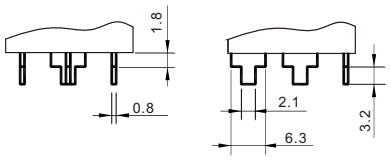
Dimensions

Dimensions

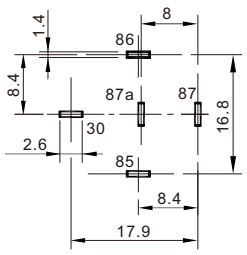
mm



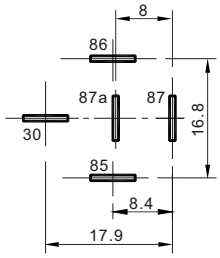
Dust cover PCB type terminals



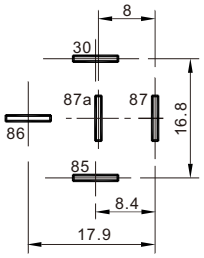
Sealed PCB type terminals



PCB type

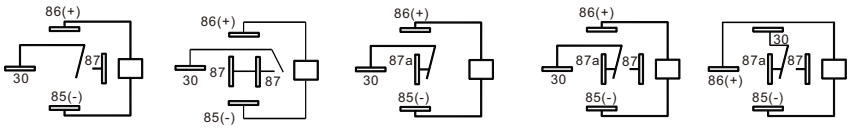


QC type 1(a1)



QC type2 (a2)

Mounting (Bottom view)



Wiring diagram (Bottom view)

Remark: In case of no tolerance shown in outline dimension: outline dimension≤1mm,tolerance should be ±0.2mm ; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.