



NV23K

12x12.9x9.9

Features

- Small size, light weight (4g)。
- Withstands high temperature, operational under 105°C ambient temperature.
- Heavy contact load switching current up to 30A.

Ordering Information

NV23K **Q** **C** **Z** **S** **DC12V** **0.57**

1 2 3 4 5 6 7

1 Part number: NV23K

2 Noise: NIL: Standard; Q: Quiet

3 Contact arrangement: A:1A; C:1C

4 Enclosure: S: Sealed type; Z: Dust cover

5 Mounting: NIL: Standard; S: SMT

6 Coil rated Voltage(V): DC:10,12

7 Coil power consumption: 0.55:0.55W; 0.57:0.57W

Contact Data

Contact Arrangement

1A (SPSTNO), 1C (SPDT(B-M))

Contact Material

Ag-SnO₂ Ag-Ni

Contact Rating

Resistive: 1A:20A/14VDC

1C:NO:20A/14VDC; NC:15A/14VDC

Inductive:1.0mH On 18A(NO)13A(NC)/14VDC Off:8A/14VDC

Max. Switching Power

280W

Max. Switching Voltage

24VDC

Max. Switching Current:30A

Contact Resistance or Voltage drop

≤30mV (at 10A)

Item 3.12 of IEC255-7

Operation life

Electrical

10⁵

Item 3.30 of IEC255-7

Mechanical

10⁷

Item 3.31 of IEC255-7

Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (57%of rated voltage)	release voltage VDC(min) (12.5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
010-550	10	12	181	5.7	1.25	0.55	≤3	≤1.5
012-570	12	14.4	254	6.9	1.5	0.57		

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.

Sound Pre. Characteristics (Q type):

Operation noise: <50db

Coil voltage :12VDC

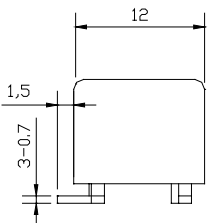
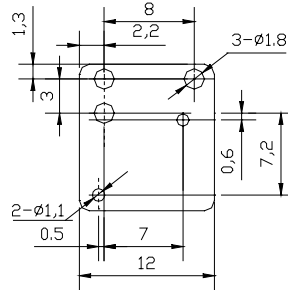
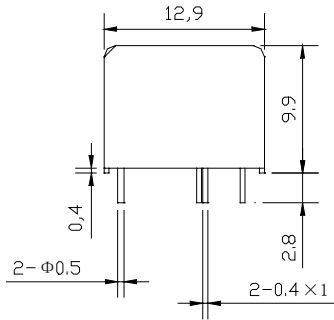
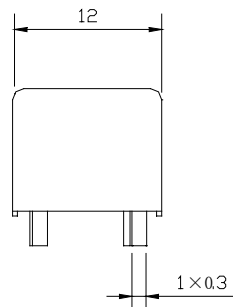
Operation condition

Insulation Resistance	1000M Ω min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC255-5
Between contact and coil	50Hz 500V	Item 6 of IEC255-5
Shock resistance	300m/s ² 6ms	IEC68-2-27 Test Ea
Vibration resistance	10~500Hz double amplitude 1.27mm 60m/s ²	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-20 Test Ta method 1
Solderability	235 $^{\circ}$ C \pm 2 $^{\circ}$ C 3 \pm 0.5s	
Ambient Temperature	-40~105 $^{\circ}$ C	IEC68-2-3 Test Ca
Relative Humidity	85% (at 20 $^{\circ}$ C)	
Mass	4g (Q type 9.5g)	

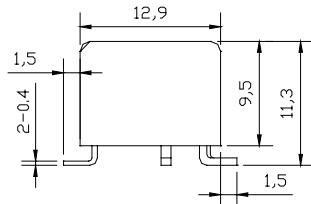
Qualification inspection:

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

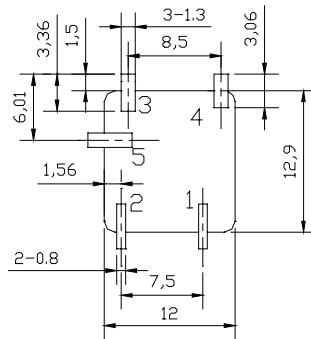
Dimensions (Unit: mm)



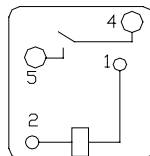
SMT



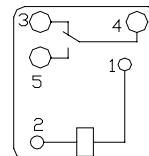
Dimensions



Mounting (Bottom views)



1A



1C

Wiring diagram

(Bottom views)

mm	inch
0.3	0.012
0.4	0.016
0.5	0.020
0.6	0.024
0.7	0.027
0.8	0.031
1.0	0.039
1.1	0.043
1.3	0.051
1.5	0.059
1.56	0.061
1.8	0.071
2.2	0.087
2.8	0.110
3.0	0.118
3.06	0.120
3.36	0.132
6.01	0.237
7.0	0.275
7.2	0.283
7.5	0.295
8	0.315
8.5	0.335
9.5	0.374
9.9	0.390
11.3	0.445
12	0.472
12.9	0.508

NOTES 1).Dimensions are in millimeter.

2).Inch equivalents are given for general information only.