

# NV23K



12×12.9×9.9

Features	
▪ Small size, lightweight (4g) .	
▪ Withstands high temperature, operating under 105°C ambient temperature.	
▪ Heavy contact load switching current up to 30A.	
▪ Suitable for automobile and lamp accessories application.	

Ordering Information	
<b>NV23K Q C Z S 30 DC12V N 0.57</b>	
1 Part number: NV23K	6 Contact current: 30: 30A; 20: 20A
2 Noise: NIL: Standard; Q: Quiet	7 Coil rated voltage(V): DC:10,12,24
3 Contact arrangement: A:1A; C:1C	8 Contact material: N:AgNi;S:AgSnO <sub>2</sub>
4 Enclosure: S: Sealed type; Z: Dust cover	9 Coil power consumption: 0.55:0.55W; 0.57:0.57W
5 Mounting: NIL: Standard; S: SMT	

Contact Data	
Contact Arrangement	1A (SPSTNO) ,1C (SPDT(B-M))
Contact Material	AgSnO <sub>2</sub> AgNi
Contact Rating	Resistive: 1A:30A,20A/14VDC 1C:NO:30A,20A/14VDC; NC:25A,15A/14VDC
Max. Switching Power	420W
Max. Switching Voltage	24VDC Max. Switching Current:30A
Max. carrying current	NO:40A for 2 minutes,30A for 1 hour(12VDC at 20°C); 35A for 2 minutes,25A for 1hour(12VDC at 85°C)
Contact Resistance or Voltage drop	≤ 30mV (at 10A) Item 4.12 of IEC 61810-7
Operation 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.

Dash numbers	Coil voltage VDC		Coil resistance Ω ± 10%	Pickup voltage VDC(max) (58% 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	≤ 4	≤ 1.5
012-570	12	14.4	254	6.9	1.5	0.57		
024-570	24	28.8	1010	13.8	3	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	1000MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength	Between contacts	50Hz 500V
	Between contact and coil	50Hz 500V
Shock resistance	300m/s <sup>2</sup> 6ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~500Hz double amplitude 1.27mm 60m/s <sup>2</sup>	IEC 68-2-6 Test Fc
Terminals strength	10N	IEC 68-2-21 Test Ual
Solderability	235°C ± 2°C 3s ± 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40°C~105°C	
Relative Humidity	85% (at 20°C)	IEC 68-2-3 Test Ca
Mass	4g (Q type 9.5g)	

**Dimensions** mm /inch

**Dimensions**

**Mounting (Bottom view)**

**Wiring diagram (Bottom view)**

1A      1C

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