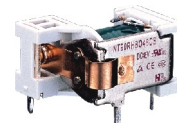


# DB ELECTRO<sup>CO., LTD.</sup>

Présente / Presents:

NINGBO HUAGUAN ELECTRONICS CO.,LTD.

**NHG**<sup>®</sup>





23.8×12.9×9.9



NV231

Patent No.: 01139153.7,01274370.4

Features

- Small size, lightweight (8g) 。
- Withstands high temperature, operating under 105℃ ambient temperature.
- Heavy contact load switching current up to 30A.

Ordering Information

NV231 2C Z S DC12V N 0.57  
1 2 3 4 5 6 7

- 1 Part number: NV231

2 Contact arrangement: 2A:2A; 2C:2C

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

4 Mounting: NIL: Standard; S: SMT
- 5 Coil rated voltage(V): DC:10,12

6 Contact material: N:AgNi;S:AgSnO<sub>2</sub>

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

Contact Data

|                                    |            |                                                          |                            |
|------------------------------------|------------|----------------------------------------------------------|----------------------------|
| Contact Arrangement                |            | 2A (DPSTNO) ,2C (DPDT(B-M))                              |                            |
| Contact Material                   |            | AgSnO <sub>2</sub> AgNi                                  |                            |
| Contact Rating                     |            | Resistive: 2A:20A/14VDC<br>2C:NO:20A/14VDC; NC:15A/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 | 10 <sup>5</sup>                                          | Item 3.30 of IEC255-7      |
|                                    | Mechanical | 10 <sup>7</sup>                                          | Item 3.31 of IEC255-7      |

Coil Parameter

| Dash Numbers | Coil voltage VDC |      | Coil resistance Ω ±10% | Pick up 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   | 2×181                  | 5.7                                            | 1.25                                              | 2×0.55                   | ≤3              | ≤1.5            |
| 012-570      | 12               | 14.4 | 2×254                  | 6.9                                            | 1.5                                               | 2×0.57                   | ≤3              | ≤1.5            |

**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.

Operation condition

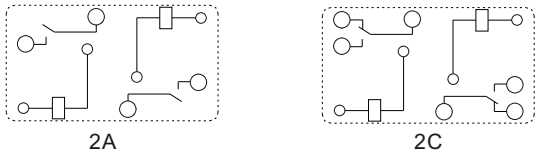
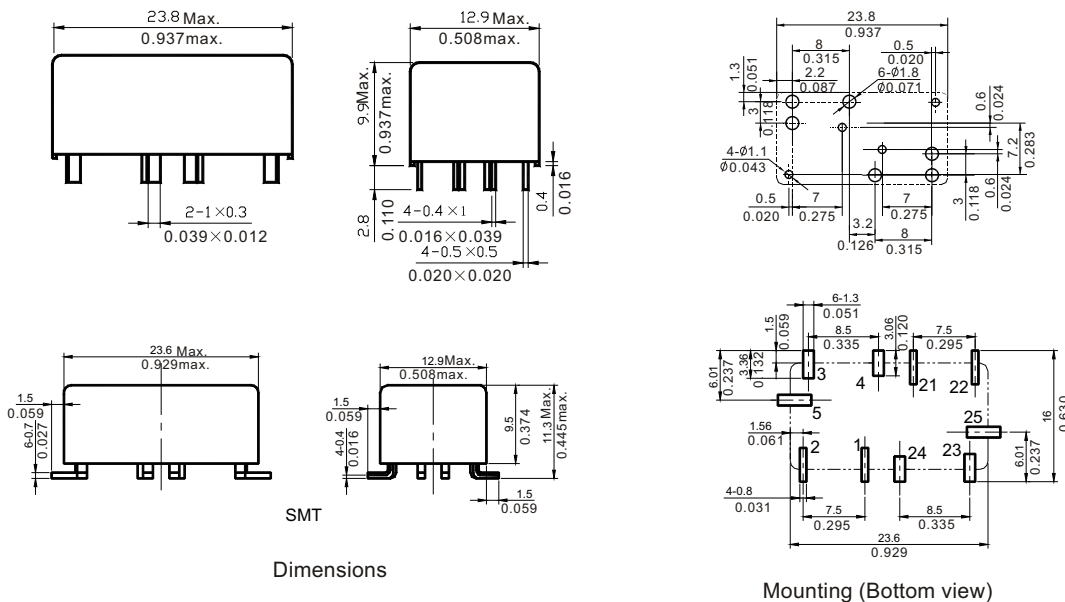
|                         |                                                        |                             |
|-------------------------|--------------------------------------------------------|-----------------------------|
| Insulation Resistance   | 1000MΩ min (at 500VDC)                                 | Item 7 of IEC255-5          |
| Dielectric Strength     |                                                        |                             |
| Between contacts        | 50Hz 500V                                              | Item 6 of IEC255-5          |
| Between contact and coi | 50Hz 500V                                              | Item 6 of IEC255-5          |
| Shock resistance        | 300m/s <sup>2</sup> 6ms                                | IEC68-2-27 Test Ea          |
| Vibration resistance    | 10~500Hz double amplitude 1.27mm<br>60m/s <sup>2</sup> | IEC68-2-6 Test Fc           |
| Terminals strength      | 10N                                                    | IEC68-2-21 Test Ua1         |
| Solderability           | 235℃ ±2℃ 3 ±0.5s                                       | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature     | -40~105℃                                               |                             |
| Relative Humidity       | 85% (at 20℃)                                           | IEC68-2-3Test Ca            |
| Mass                    | 8g                                                     |                             |

Qualification inspection:

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

Dimensions

mm /inch



Wiring diagram (Bottom view)

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