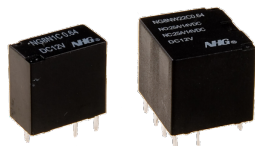


# NG8N & NG8NW



14.3×7.2(15.7)×13.5

## Features

- Small size and light weight.
- Low coil power consumption.
- Self-locking motor load can achieve 25A .
- PC board relay with high reliability.
- Suitable for reflow soldering.
- Suitable for home appliance application , motor positive-negative control, wiper and so on.

## Ordering Information

**NG8N 1S R C 0.80 DC12V**

|                                                                                                                                               |   |   |                                                                                                                                                                                             |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1                                                                                                                                             | 2 | 3 | 4                                                                                                                                                                                           | 5 | 6 |
| 1 Part number: NG8N, NG8NW<br>2 Sensitivity: 1:Standard<br>1S:High sensitivity<br>1L:High temperature<br>1H:High temperature/High sensitivity |   |   | 3 Soldering method: NIL: Standard; R: Reflow soldering<br>4 Contact arrangement: GN8N:C:1C; NG8NW:2C:2C(Twin)<br>5 Coil power: 0.64:0.64W; 0.80:0.80W<br>6 Coil rated voltage(V): DC:12, 24 |   |   |

Notes: 1. The R type relay is with the reflow soldering capability and it is not the sealed relay.  
2. Please contact the relevant personnel in our factory when using the R type relay.

## Contact Data

|                        |                                    |                            |
|------------------------|------------------------------------|----------------------------|
| Contact Arrangement    | NG8N:1C(SPDT(B-M)) NG8NW:2C (Twin) |                            |
| Contact Material       | AgSnO <sub>2</sub>                 |                            |
| Contact Rating         | 25A motor lock (14VDC)             |                            |
| Max. Switching Power   | 480W                               |                            |
| Max. Switching Voltage | 16VDC                              | Max. Switching Current:30A |
| Voltage Drop(Initial)  | Typ.: 50mV(at 10A)                 | Item 4.12 of IEC 61810-7   |
| Electrical Endurance   | 1×10 <sup>5</sup>                  | Item 4.30 of IEC 61810-7   |
| Mechanical Endurance   | 1×10 <sup>6</sup>                  | Item 4.31 of IEC 61810-7   |

## Coil Parameter

| Model | Coil voltage VDC |      | Coil resistance Ω ± 10% | Pick-up voltage VDC(max) | Drop-out voltage VDC(min) | Coil power W | Operate time ms | Release time ms |
|-------|------------------|------|-------------------------|--------------------------|---------------------------|--------------|-----------------|-----------------|
|       | Rated            | Max. |                         |                          |                           |              |                 |                 |
| 1     | 12               | 16   | 225                     | 7.2                      | 1.0                       | 0.64         | ≤10             | ≤5              |
| 1S    | 12               | 16   | 180                     | 6.5                      | 1.0                       | 0.80         |                 |                 |
| 1L    | 12               | 16   | 225                     | 7.2                      | 1.0                       | 0.64         |                 |                 |
| 1H    | 12               | 16   | 180                     | 6.5                      | 1.0                       | 0.80         |                 |                 |
| 1     | 24               | 32   | 900                     | 14                       | 2.0                       | 0.64         | ≤10             | ≤5              |
| 1S    | 24               | 32   | 720                     | 13                       | 2.0                       | 0.80         |                 |                 |

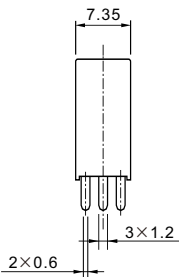
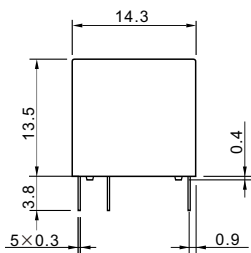
Notes: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
2.Pick-up and drop-out voltage are for test purposes only and are not to be used as design criteria.

Characteristics

|                                                                     |                                  |                          |
|---------------------------------------------------------------------|----------------------------------|--------------------------|
| Insulation Resistance                                               | 100MΩ min (at 500VDC)            | Item 4.11 of IEC 61810-7 |
| Dielectric Strength<br>Between Contacts<br>Between Contact and Coil | 500VAC 1min<br>500VAC 1min       | Item 4.9 of IEC 61810-7  |
| Shock Resistance                                                    | Functional: 98m/s <sup>2</sup>   | Item 4.26 of IEC 61810-7 |
|                                                                     | Destructive: 980m/s <sup>2</sup> | Item 4.26 of IEC 61810-7 |
| Vibration Resistance                                                | 10Hz~55Hz Double amplitude 1.5mm | Item 4.28 of IEC 61810-7 |
| Terminals Strength                                                  | 5N                               | Item 4.24 of IEC 61810-7 |
| Ambient Temperature                                                 | -40~105℃                         |                          |
| Relative Humidity                                                   | 5% to 85%                        | Item 4.16 of IEC 61810-7 |
| Weight (Approx.)                                                    | 4.1g 8g(NG8NW)                   | Item 4.7 of IEC 61810-7  |

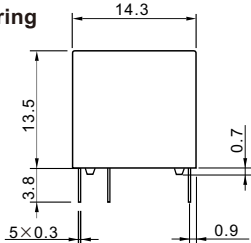
Dimensions

Standard

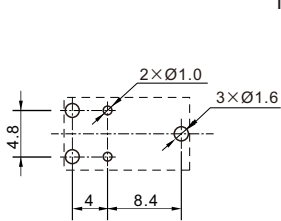


NG8NW

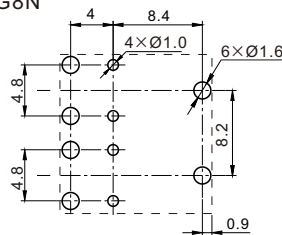
Reflow soldering



NG8N



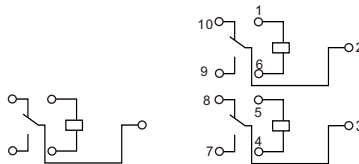
NG8N



NG8NW

Mounting (Bottom view)

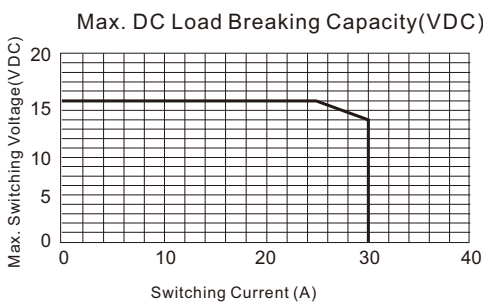
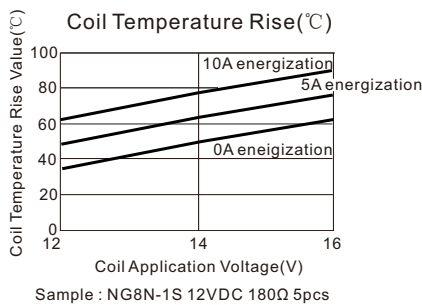
Dimensions



Wiring diagram (Bottom view)

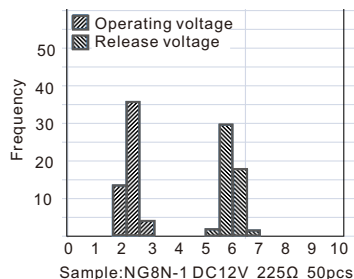
**Remark:** In case of no tolerance shown in outline dimension: outline dimension≤1mm, tolerance should be ±0.2mm ;  
outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should  
be ±0.4mm.

Reference Data

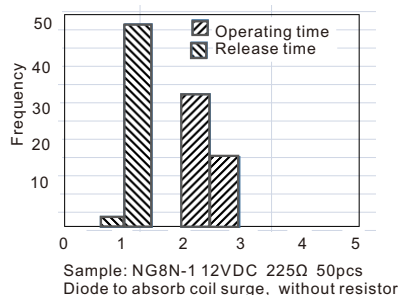


## Reference Data

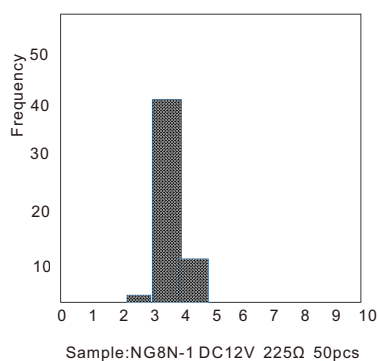
Operating and Release Voltage (V)



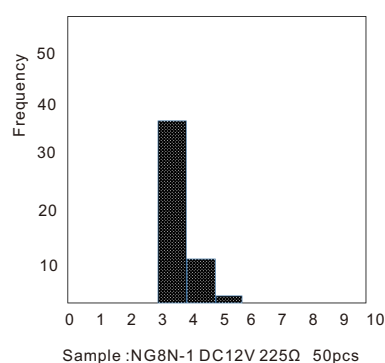
Operating Time and Release Time (ms)



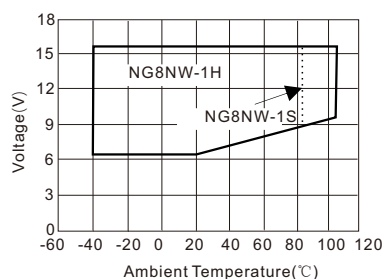
NO Contact Resistance (mΩ)



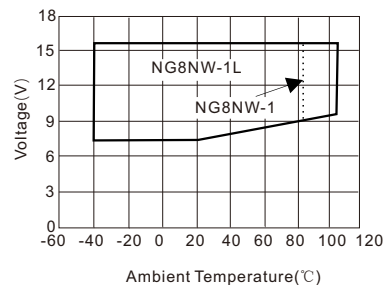
NC Contact Resistance (mΩ)



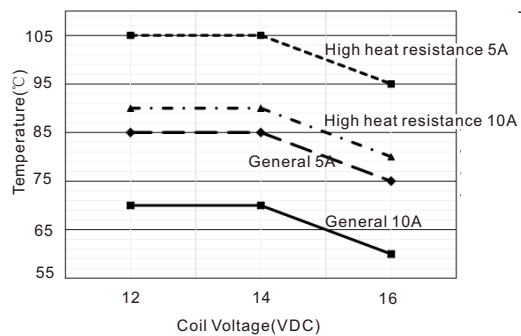
Ambient Temperature and Service Voltage Range(Cold Start)



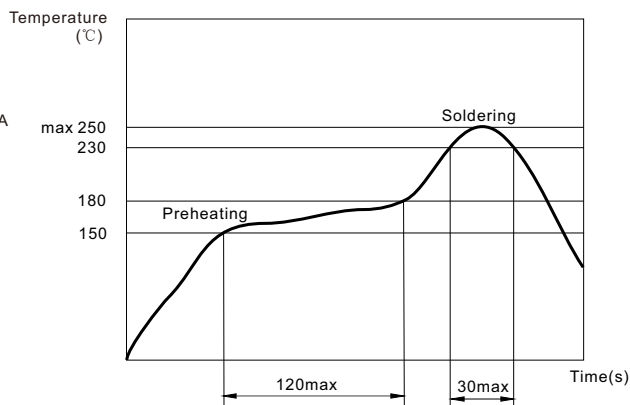
Ambient Temperature and Service Voltage Range(Cold Start)



Continuous Electricity Allowed Range



Reflow Soldering, Temperature on PCB Board



**Notes:** Contact electric current :5A (10A for reference date)  
Max. Coil temperature general 155℃  
Max. Coil temperature high heat resistance 180℃

Recommended soldering temperature, only for reflow soldering version