

# NG8N & NG8NW



14.3×7.35(15.7)×13.5(14)

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

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		

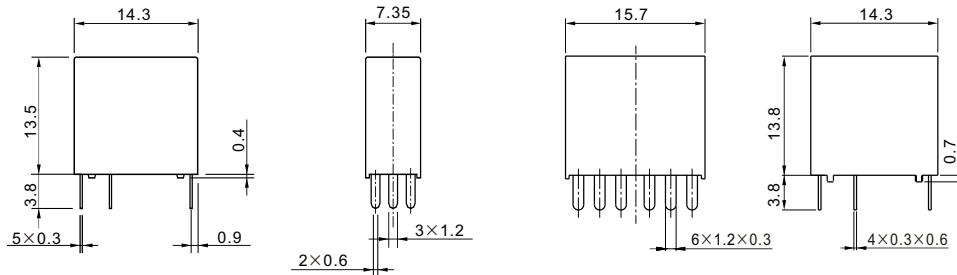
Notes: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
2.Pick-up and drop-out voltage are for test purposes only and are not to be used as design criteria.

## Characteristics

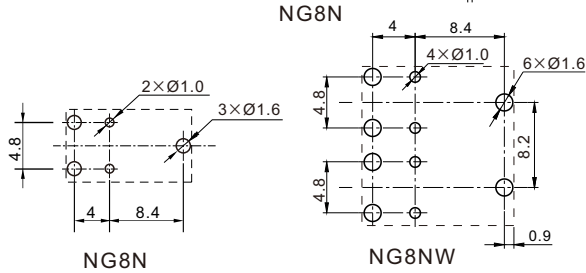
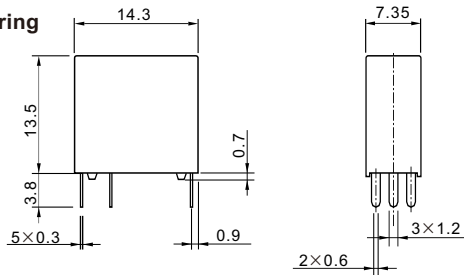
Insulation Resistance	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	500VAC 1min 500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	Functional: 98m/s <sup>2</sup>	Item 4.26 of IEC 61810-7
	Destructive: 980m/s <sup>2</sup>	Item 4.26 of IEC 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

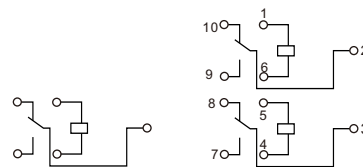
### Standard



### Reflow soldering



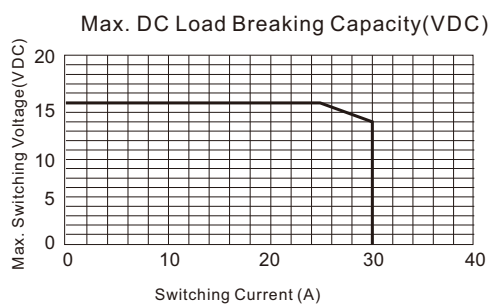
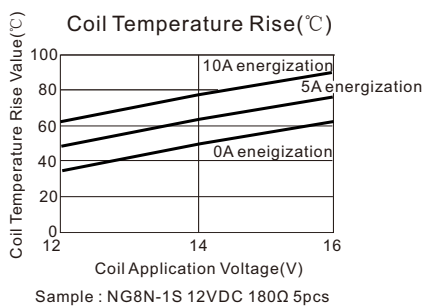
Mounting (Bottom view)



Wiring diagram (Bottom view)

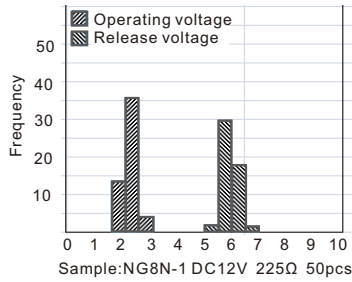
**Remark:** In case of no tolerance shown in outline dimension: outline dimension ≤ 1mm, tolerance should be ±0.2mm; outline dimension > 1mm and ≤ 5mm, tolerance should be ±0.3mm; outline dimension > 5mm, tolerance should be ±0.4mm.

## Reference Data

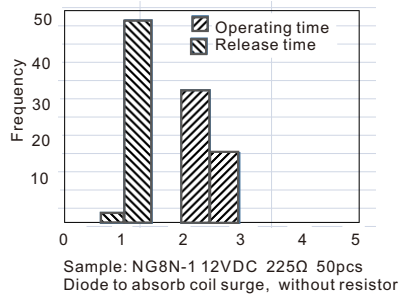


## Reference Data

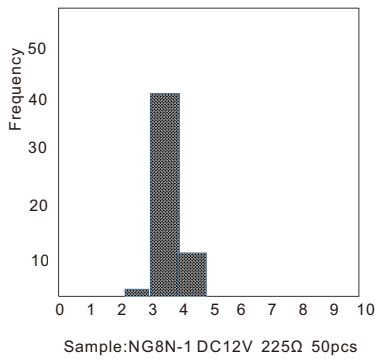
Operating and Release Voltage (V)



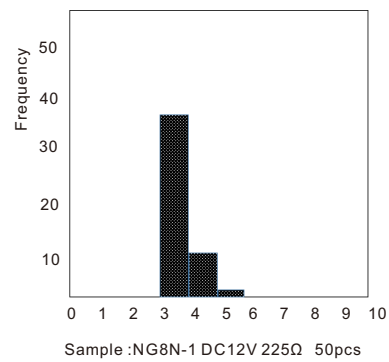
Operating Time and Release Time (ms)



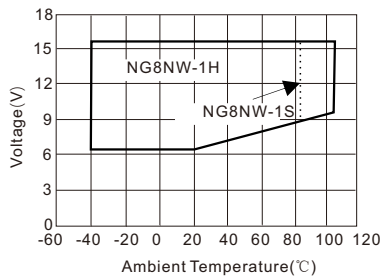
NO Contact Resistance (mΩ)



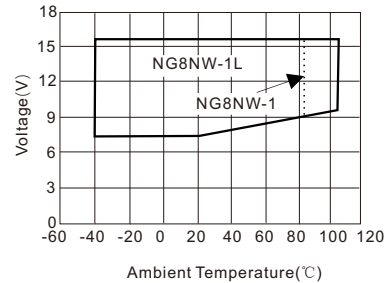
NC Contact Resistance (mΩ)



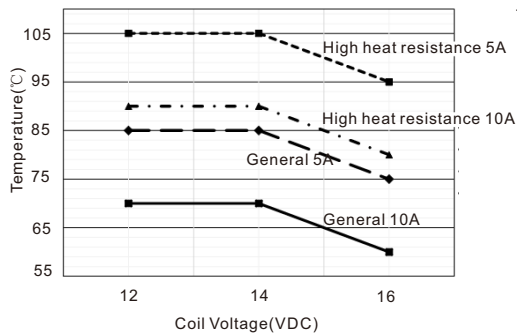
Ambient Temperature and Service Voltage Range(Cold Start)



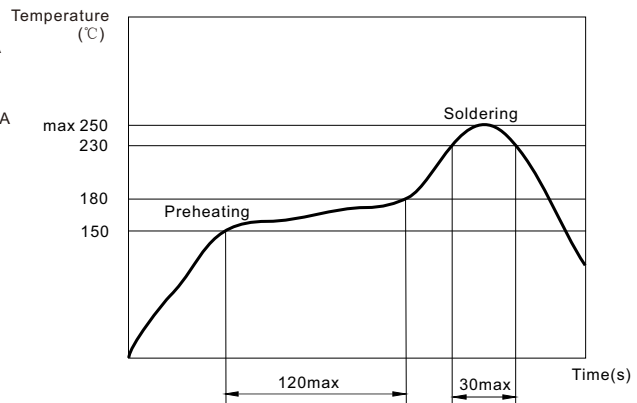
Ambient Temperature and Service Voltage Range(Cold Start)



Continuous Electricity Allowed Range



Reflow Soldering, Temperature on PCB Board



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

Recommended soldering temperature, only for reflow soldering version