



14.3×7.2(15.7)×13.5

NG8N&NG8NW

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.
- NG8NW relay is with two circuits.
- 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

2 Sensitivity: 1:Standard

1S:High sensitivity

1L:High temperature

1H:High temperature/High sensitivity

3 Soldering method: NIL: Standard ; R: Reflow soldering

4 Contact arrangement: GN8N:C:1C; NG8NW:2C:2C(Twin)

5 Coil power: 0.64:0.64W ; 0.80:0.80W

6 Coil rated voltage(V): DC:12

Contact Data

Contact Arrangement	NG8N:1C(SPDT(B-M)) NG8NW:2C (Twin)	
Contact Material	AgSnO ₂	
Contact Rating(Resistive)	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
Operation Life	Electrical	1×10 ⁵ Item 4.30 of IEC 61810-7
	Mechanical	1×10 ⁶ 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		

- 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.

Characteristics

Insulation Resistance	100M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 500VAC 50Hz 500VAC	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	Functional: 98m/s ²	Item 4.26 of IEC 61810-7
	Destructive: 980m/s ²	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~500Hz 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
Mass	4.1g 8g(NG8NW)	Item 4.7 of IEC 61810-7

Dimensions

mm

Standard

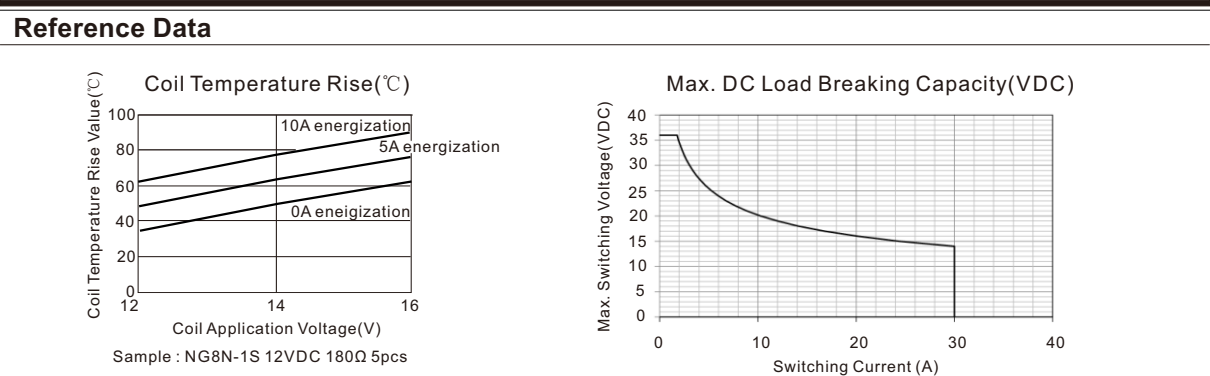
Reflow soldering

Dimensions

Wiring diagram (Bottom view)

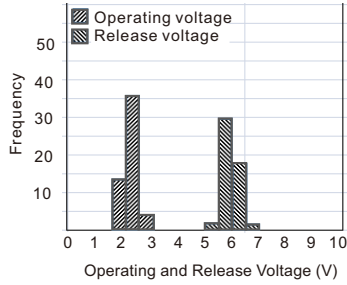
CAUTION: In case of no tolerance shown in outline dimension: outline dimension ≤ 1mm, tolerance should be ±0.2mm ;
outline dimension > 1mm and ≤ 5mm, tolerance should be ±0.3mm; outline dimension > 5mm, tolerance should be ±0.4mm.

Reference Data

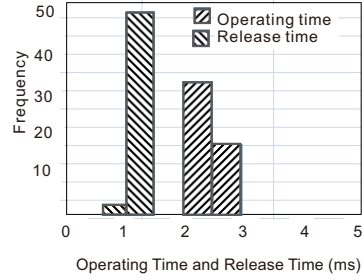


Reference Data

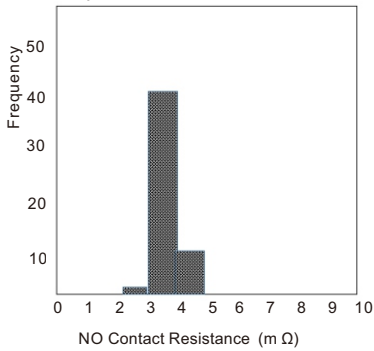
Sample:NG8N-1 DC12V 225Ω 50pcs



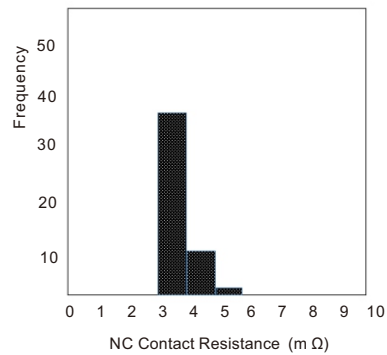
Sample: NG8N-1 12VDC 225Ω 50pcs
Diode to absorb coil surge,
without resistor



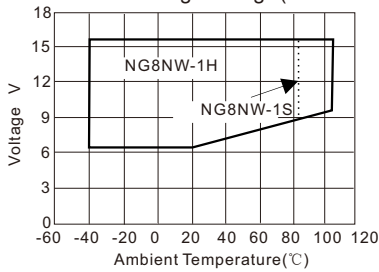
Sample:NG8N-1 DC12V 225Ω 50pcs



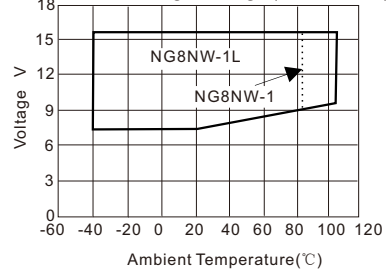
Sample :NG8N-1 DC12V 225Ω 50pcs



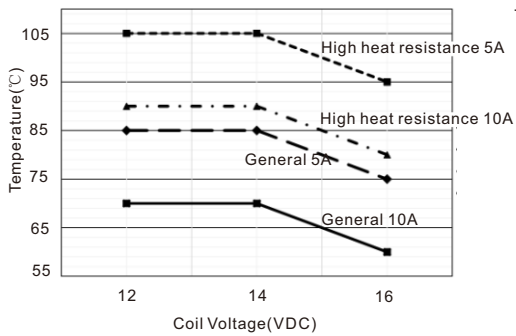
Ambient Temperature and Service Voltage Range(Cold Start)



Ambient Temperature and Service Voltage Range(Cold Start)

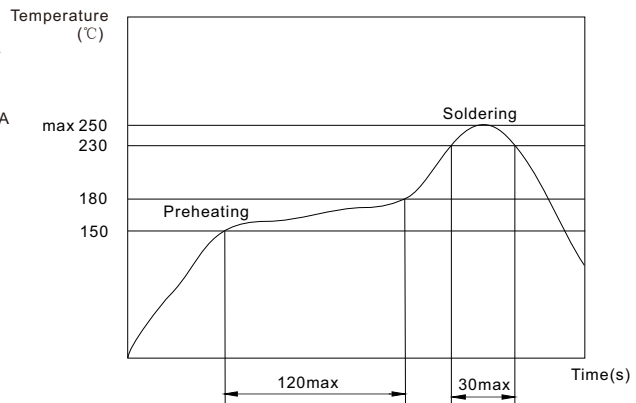


Continuous Electricity Allowed Range



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

Reflow Soldering, Temperature on PCB Board



Recommended soldering temperature, only for reflow soldering version