

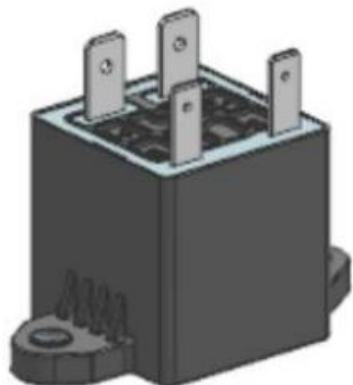


Industrial & Electrical Components

Power Relay

Part No.

NN80A-40



- Unique magnetic arc-extinguishing design and 40A/450V breaking capability.
- Unique contact design to support surge and high current resistant capability.
- Withstand voltage 4kV between high and low voltage.
- RoHS compliant.

MAIN CONTACT DATA

Contact Arrangement	H (normal-open)
Contact Material	Silver Alloy
Contact Resistive	Max.: 5 mΩ (at 1A)
Rating	DC450V 40A
Min. Load Current	6V/1A
Electrical Life (Switching)	20A/750V, 1000 OPS
	40A/450V, 1000 OPS
	10A/450V, 10000 OPS
Electrical Life (ON)	35A/450V, 75000 OPS
Mechanical Life	2×10 ⁵ (0.5s ON,0.5s OFF)
Ambient temperature	-40°C ~ +85°C
Humidity	5~85% RH

MAIN CONTACT CHARACTERISTICS

Operate Time	30msec. Max.
Release Time	10msec. Max.
Initial breakdown voltage	
Coil & Contact	4000VAC (50/60Hz) for 1 min.
Main & Auxiliary Contacts	4000VAC (50/60Hz) for 1 min.
Insulation Resistance	Coil & Contact: Min.1000MΩ
	Main & Auxiliary Contacts: Min.1000MΩ
Impulse Voltage	Between Coil & Contact: 10kV(1.2x50μs)
Shock:	Endurance 196 m/s ²
	Damage 490 m/s ²
Vibration	Sine 10 to 500Hz, 1.5mm D.A. 49m/s ²
Unit weight	Approx. 50g

Note: The datas shown above are initial values at room temperature.

ORDERING INFORMATION

e.g

NN80A - 40 / 450 - 12 - H P S F XXX

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Model No.
- ② Load Current: 40=40A
- ③ Load Voltage: 450=450 Vdc;750=750 Vdc
- ④ Coil Voltage:12=12Vdc, 24=24Vdc; 48=48Vdc
- ⑤ Main contact form: H (N/O)
- ⑥ Terminal mode:Nil=QC terminal;P=PCB terminal
- ⑦ Contact Material: S=AgSnO2+In2O3; T=AgNi
- ⑧ Mounting mode: Nil=Standard; F=Flange
- ⑨ Special custom code

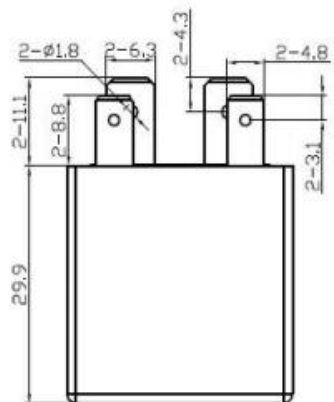
COIL DATA (at 20°C)

Rated Voltage	Pick-up Voltage VDC (Max)	Operate Voltage VDC	Drop-out Voltage VDC (Min)	Coil Resistance (Ω) (1± 7%)	Initial current * & Rated Current (A)	Initial Power * & Steady Power * (W)
12VDC	9	9~14	1	48	0.2500	3W
24VDC	18	18~28	2	192	0.1250	
48VDC	36	36~56	4	768	0.0625	

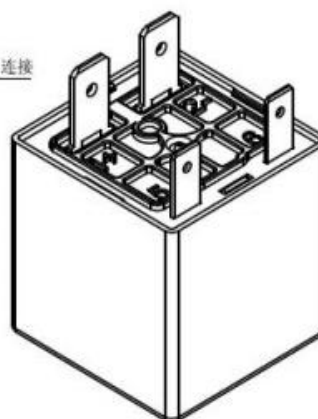
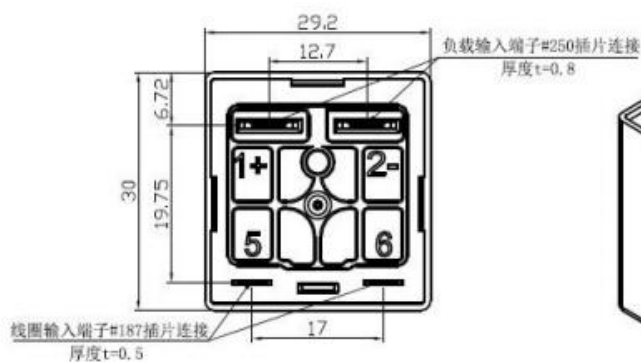
Note: * means at rated volage.

DIMENSIONS

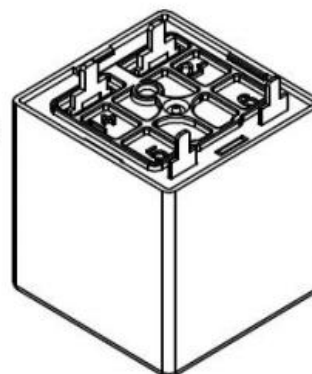
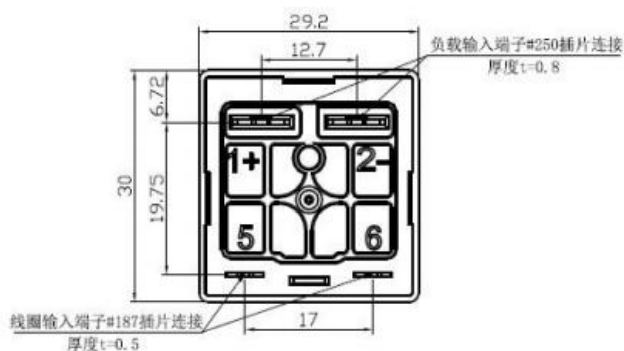
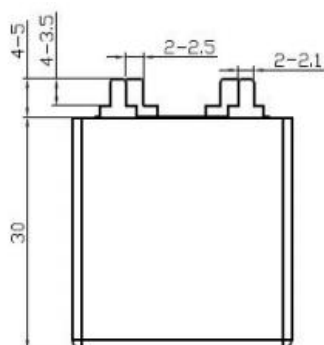
Unit: mm



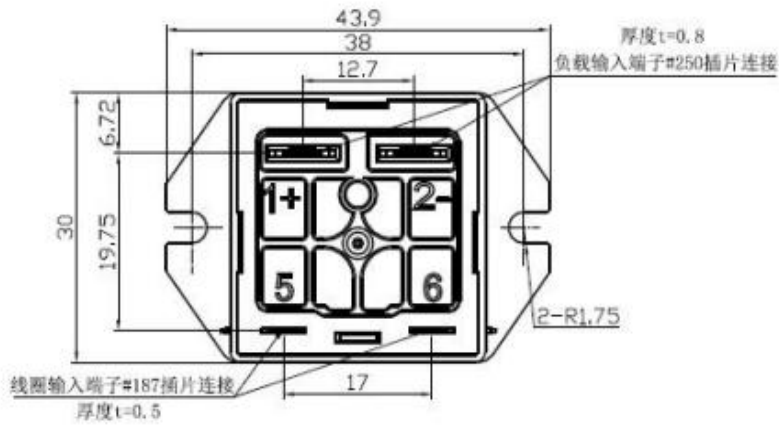
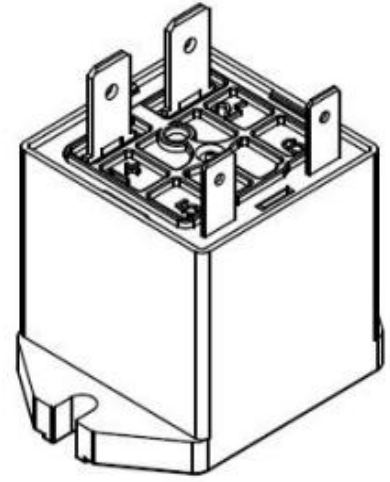
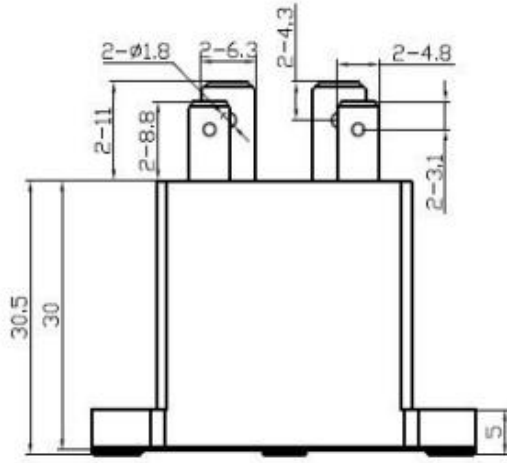
NN80A-H



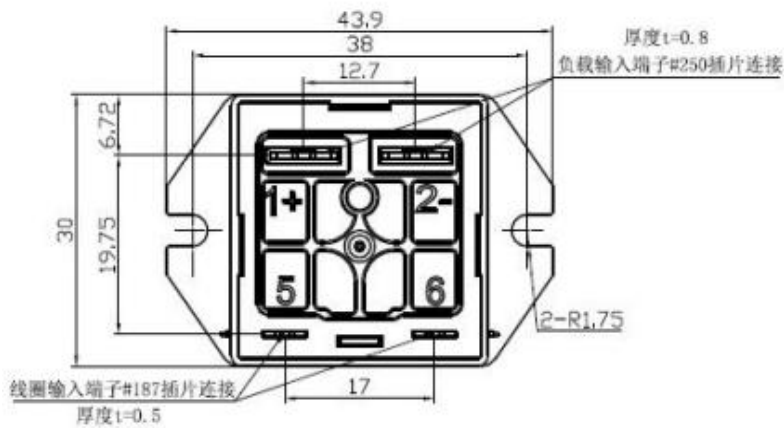
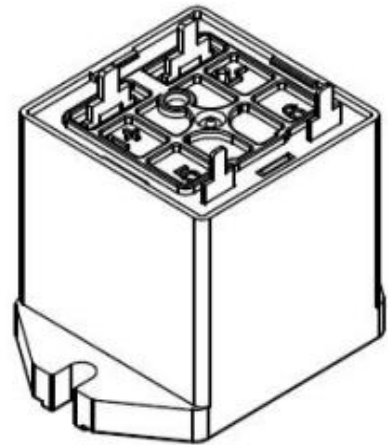
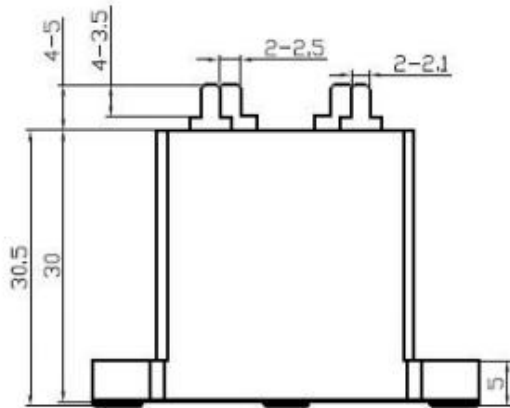
NN80A-H P



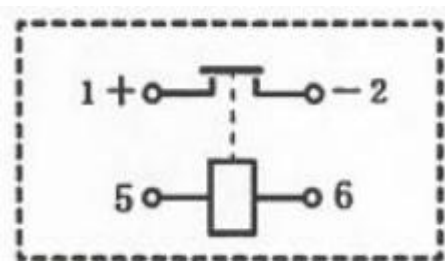
NN80A-H F



NN80A-H PF



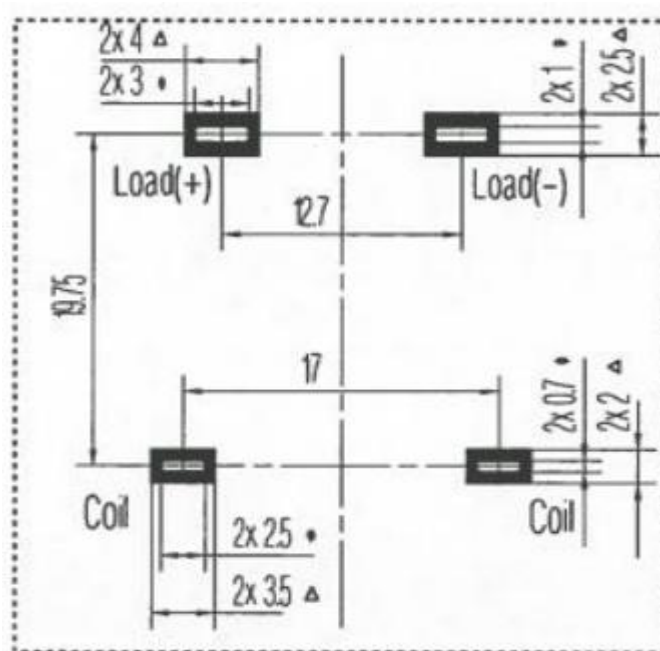
MOUNTING DIMENSION(Bottom view) :



Note 1: No polarity on the coil, but polarity on the load.

Note 2: All unspecified tolerance according to following table.

PCB board installation specification.



Note: The dimensions of * is the opening dimensions of PCB board.

The dimensions of Δ is the dimensions of PCB pads.(For reference).

Note : All unspecified tolerance according to following table.

Outline dimensions hadn't specified tolerance	
Outline dimensions	Tolerance
≤10	±0.3
>10~50	±0.5
> 50	±0.8