New Energy Power Supply Battery Pack Special Water Dropper Thermistor 10K 100K 3950 High Precision NTC Thermistor

Our Product Introduction

Basic Information

- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: NTC Temperature Sensor
- Minimum Order Quantity: Negotiation
- Price: Negotiation
- Packaging Details: Export Package / Negotiation
- Delivery Time: Negotiation
- Payment Terms: T/T, L/C, Western Union
- Supply Ability: 24 million per year

Product Specification

- Features: Excellent Moisture Resistance
- Application: Household Appliances
- Type: Thermistor
- Working Temperature Range(°C): -10 To +105c
- Resistance Value: 5K,10K,20K,50K,100K
- Dissipation Factor(mw/°C): 1-2 (in Still Air)
- Highlight: **Durable NTC Thermistor Temperature Sensor**, **100K NTC Thermistor Temperature Sensor**, **Household NTC Thermistor High Temperature**

More Images

Our Product Introduction

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Product Description

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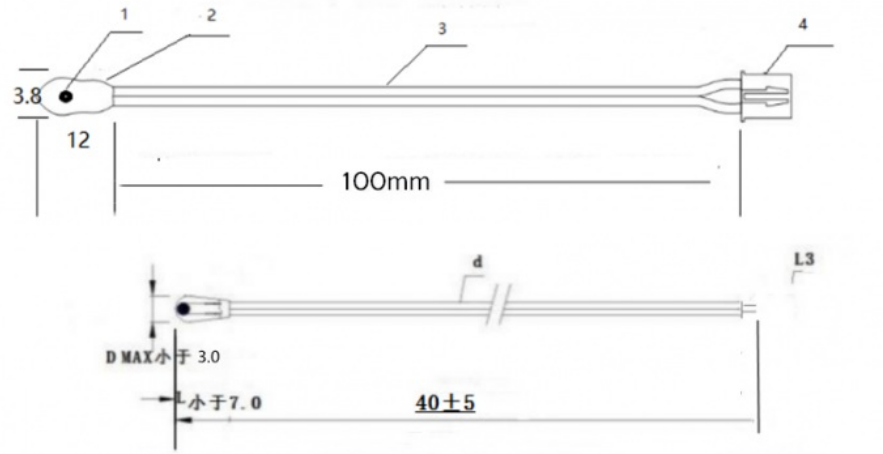
NTC temperature sensor is a kind of thermistor and probe. Its principle is: the resistance value drops rapidly as the temperature rises. It usually consists of 2 or 3 metal oxides, mixed in a fluid-like clay, and calcined in a high-temperature furnace to form a dense sintered ceramic. Actual size is very flexible, they can be as small as 0.010 inches or very small diameter. There is almost no limit to the maximum size, but usually under half an inch applies.



Type	NTC(thermistor) Temperature Sensor
Temperature range	-50℃ ~ +300℃ Customized
Accurancy	1% 5% 10%
RT(25℃)	1K 2K 2.2k 2.7k 3K 5K 7K 8K 12K 15K 20K 25K 30K 40K 47K 50K 60K 70K 100K 200K 230K 250K 470K 500K 1000K Customized
B value	3274 3435 3470 3928 3950 3977 4100 4200 4400 Customized
Probe Material	Stainless steel SS304 aluminum copper plastic epoxy glass
Installation	Flanged Surface Threaded Plastic Straight Film Customized
Wire Material	Heat shrinkable tube PVC tube glass fiber tube tube
Connector	Molex JST DuPont CWB CJT U type Customized
Waterproof	IP67 IP68

►Different NTC thermistor using in the NTC temperature sensors with the following different operating temperature:

Chip or MF52A,MF51E,MF55: temperature resist grade 125℃,actual temperature resist grade 150℃
MF58: temperature resist grade 200℃,actual temperature resist grade 250℃
MF51: temperature resist grade 200℃,actual temperature resist grade 250℃
Special MF51: temperature resist grade 250℃,actual temperature resist grade 300℃
Weldless chip:temperature resist grade 450℃,actual temperature resist grade 500℃

►Operating environment

In the environment of high temperature,high humidty and high corrosion,we suggest to use glass sealed type thermistor as the core element.And MF51 type will be the best NTC thermistor in high humidity environment.

►Design considerations and procedure of temperature sensor:

1. Choose the shape acoording to customer's design or assemble requirements, and confirm the thermistor.
2. Confirm the thermistor element and other materials according to customers' requirement
3. Choose the suitable resistance,B value and tolerance
4. Choose suitable moisture-proof and insulation technology to meet customer's requirement
5. Choose suitable encapsulation structure to meet performance requirements of mechanical shock resistance
6. Meet customer's special requirements.

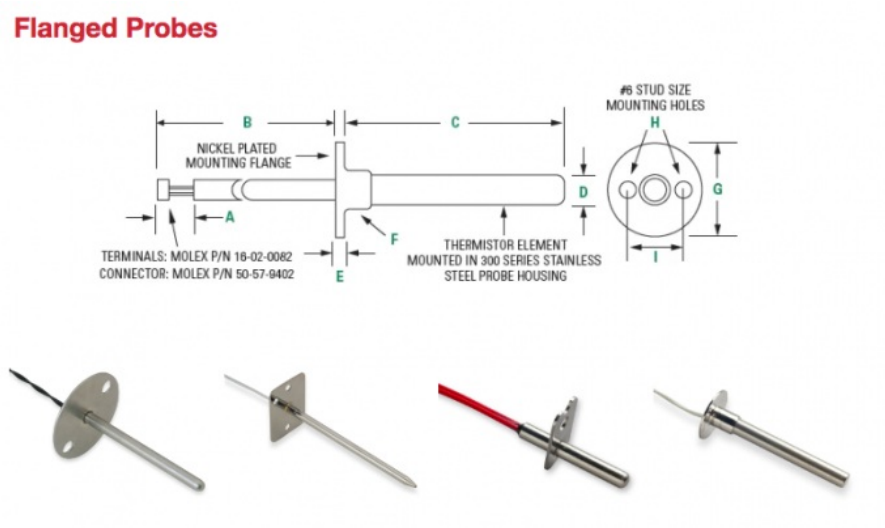

Flanged ntc temp sensor


Surface ntc temp sensor


Threaded ntc temp sensor

Working principle of temperature sensor

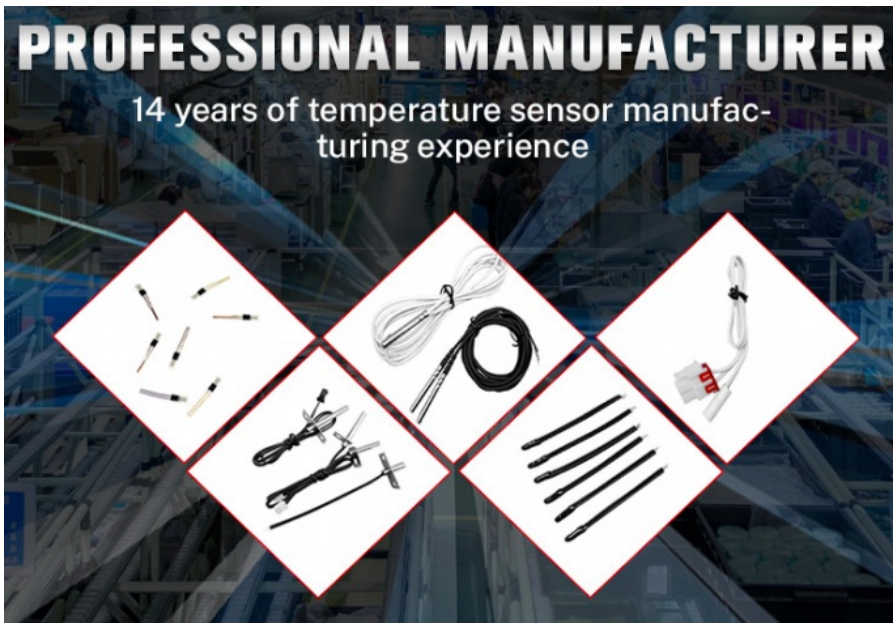
Using the NTC thermistor under a certain measurement power, the resistance value drops rapidly as the temperature rises. Utilizing this feature, the NTC thermistor can be used to determine the corresponding temperature by measuring its resistance value, so as to achieve the purpose of detecting and controlling the temperature.



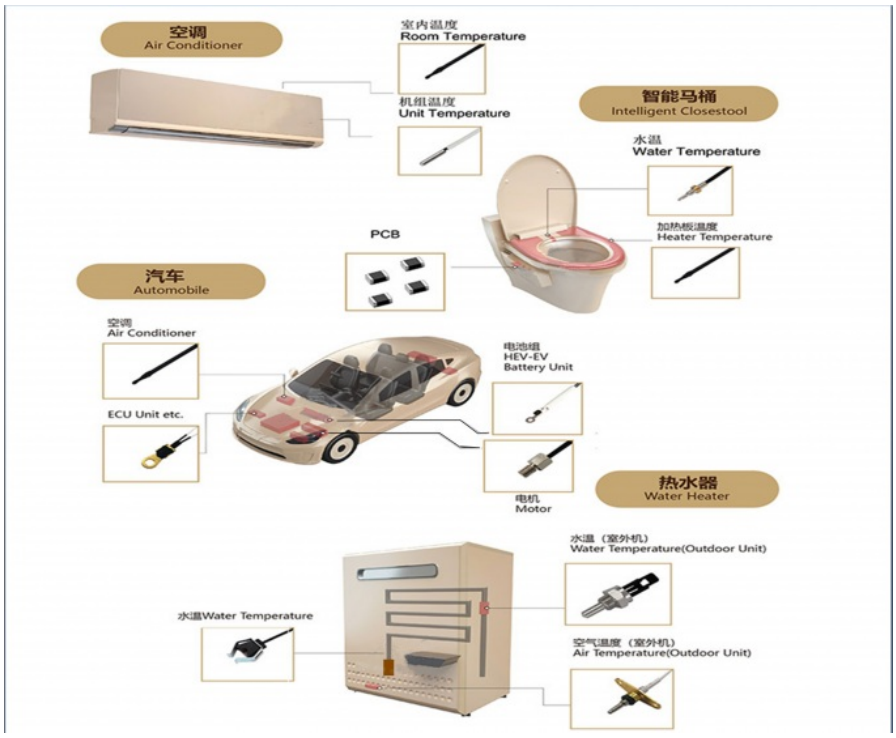
Reliability Test

Test Item	Test Standard	Test method	Performance requirements
Zero Power Resistance	IEC 60539-1	Immerse samples in the constant temperature bath at 25℃±0.005℃,test steady resistance	Resistance tol ±1%
B value	IEC60539-1	Immerse samples in the constant temperature bath at 25℃,50℃(or 85℃), test steady resistance,and calculate B value	Resistance tol ±1%
Free fall	IEC60068-2-32	Fall height: 1.5±0.1m,Surface: Cement , 1 time	No obvious damage, R25 △R/R≤±1%
Insulation	IEC60539-1	500V pressure on insulation shell test insulation resistance	>500MOhm
Withstand voltage	IEC60539-1	Withstand voltage: 1500V/AC ,Leakage current:2mA Lasting: 60sec	No obvious damage
Tension	IEC60068-2-21	Pull uniform speed at the end, F>4.0KG(requested by customer)	No obvious damage, R25 △R/R≤±1%
Vibration	Q/HBm 108-94	Test frequency: 10~500Hz,swing: 1.2mm acceleration: 30m/s2 Direction X,Y,Z Time:8Hour/direction	No obvious damage, R25 △R/R≤±1%
Steady humidity and heat	IEC60068-2-78	Temp:40±2℃ Humidity:92-95%RH Time:1000±24Hour	No obvious damage, R25 △R/R≤±1%
Thermal time constant	EC60539-1	Immerse in 25℃ water,after thermal balance,immerse in 85℃,resistance arrives 63.2%,calculate total time	<10 sec
High temperature storage	IEC60068-2-2	Temp:125℃±5℃ Time: 1000±24Hour	No obvious damage, R25 △R/R≤±1%
Cold and thermal shock	IEC60068-2-14	-40℃~+125℃ T1:30min Cycle time:1000	No obvious damage, R25 △R/R≤±1%
Knock experiment	IEC60068-2-77	Acceleration:250m/s2 Pulse lasting: 6ms Knock times: 1000 Recovery time: 2 Hour	No obvious damage, R25 △R/R≤±1%

Low temperature storage	IEC60068-2-1	Temp: 40±2℃ Time: 1000±24Hour	No obvious damage, R25 △R/R≤±1%
Salt spray	IEC60068-2-11	Temp: 35±2℃ Collection hour : 1.0mL~2.0mL Time: determine per as actual demand	No obvious damage, R25 △R/R≤±1%



Application



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