Thermistor Based NTC Temperature Sensor 5K 10K For Refrigerator

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: Fast Response
- Application: Household Appliance
- 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: **Thermistor NTC Temperature Sensor**, **10K NTC Temperature Sensor**, **Refrigerator Thermistor Based Temperature Sensor**

Product Description

Simple Structure High Stability NTC Temperature Sensor Use For Refrigerator

Description

Thermistor probes are invaluable for sensing temperature levels in a variety of industries ranging from HVAC and food handling to automotive and laboratory research. In such applications, it's critical that the thermistor probe used is accurate to ensure reliable thermal monitoring.

A world-class provider of thermistors and thermistor probes and assemblies, We offers temperature probes designed and built from the ground up. The thermistors we use are created from a precise blend of raw materials and processed using proprietary techniques that result in superior discrete components, probes and assemblies.

We manufactures laboratory grade temperature probes, surface temperature sensing probes, micro probes, as well as many others designed to suit specific applications. Our application engineers are experts in the design of temperature sensing probes and assemblies utilizing thermistors as well as RTDs suitable for the most demanding applications.

Temp.deg.C	25deg.C
R Value	5k 10k
Shell Type	Epoxy-----mainly used for indoor Copper ----mainly used for outdoor
Application	air conditioner
Features	1. Wide operating temperature range, good stability and reliability. 2. Easy to installation and manipulation as the sealing can be done according to environment and conditions there it is applied by customer. 3. Accurate testing can reflect temperature change precisely. 4. Insulating resistance(MΩ): over 100MΩ at DC500 V 5. Working temperature range(°C): -10 to +105c 6. Dissipation factor(mw/°C): 1-2 (in still air)

►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.

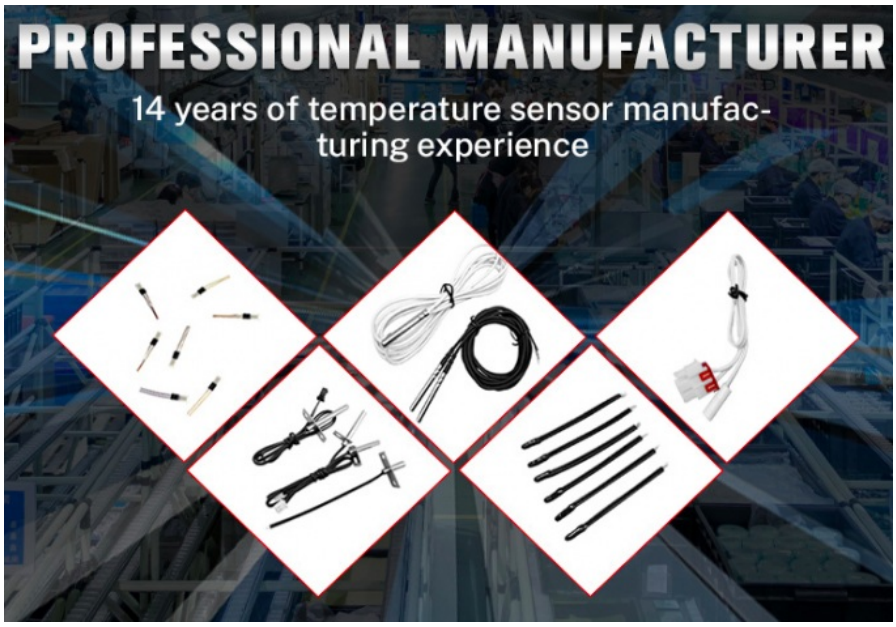
Working principle of temperature sensor

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	IEC60 539-1	Immerse samples in the constant temperature bath at 25 ,50 (or 85), test steady resistance,and calculate B value	Resistance tol ±1%
Free fall	IEC60 068-2-32	Fall height: 1.5±0.1m,Surface: Cement , 1 time	No obvious damage, R25 △R/R≤±1%
Insulation	IEC60 539-1	500V pressure on insulation shell test insulation resistance	>500MOhm
Withstand voltage	IEC60 539-1	Withstand voltage: 1500V/AC ,Leakage current:2mA Lasting: 60sec	No obvious damage
Tension	IEC60 068-2-21	Pull uniform speed at the end, F>4.0KG(requested by customer)	No obvious damage, R25 △R/R≤±1%
Vibration	Q/HB m 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	IEC60 068-2-78	Temp:40±2 Humidity:92-95%RH Time:1000±24Hour	No obvious damage, R25 △R/R≤±1%
Thermal time constant	EC605 39-1	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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