



OEM Practical Electric Heat Sensor , Waterproof NTC Component Electronics

Our Product Introduction

Basic Information

- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: Electric Temp 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

- Resistance Value: 1K, 5K, 10K, 50K, 100K, 15K
- Customized Support: OEM
- Usage: Temperature Sensor
- Temperature Range: -40~120°C
- Length: Custom Made
- Resistance Tolerance: F:±1%, G:±2%, H:±3%, J:±5%, K:±10%
- Highlight: **OEM Electric Heat Sensor,
Practical Electric Heat Sensor,
Waterproof NTC Component Electronics**

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Product Description

High Delicacy Electric Tool Temperature Sensor Fast Response High Precision Of Resistance And B Value

NTC temperature sensor not only outputs temperature signal, but also integrates humidity measurement, and the signal output is also changed from the original single signal to a variety of output forms, which can carry out long-distance communication, data can be recorded according to needs, upper limit alarm and automatic control, etc. function.

The intelligent integrated NTC temperature sensor used today adopts single-chip microcomputer technology, which is equipped with multiple analog-to-digital signal converters. Its measurement accuracy is higher, and the resolution is as high as 0.03 degrees. It can also integrate a calendar clock to realize multiple measurement modes. The output is more standardized and standardized, which can effectively suppress the interference of the surrounding environment on the temperature signal output, making the measurement value more accurate.

► Design considerations and procedure of temperature sensor:

1. Choose the shape according 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.

Features

Fast response time
Moisture proof, waterproof
Easily assemble
Customized available

Application

- Air conditioners, refrigerators, freezers, water heaters, water dispensers, heaters, dishwashers, disinfection cabinets, washing machines, dryers and other home appliances.
- Automobile air conditioner, water temperature sensor, intake air temperature sensor, engine
- Switching power supply, UPS uninterruptible power supply, frequency converter, electric boiler, etc.
- Intelligent toilet, electric blanket, etc.

Product Description

Type	NTC Temperature Sensor
Resistance	1K~5M Ω (1k 5k 4.7k 10k 20k 30k 50k 100k 150k 200k 300k) Customized
Beta Value	3380k 3435k 3500k 3950k 4050k 4150k 4250k 4450k Customized
Housing	Copper/Stainless/aluminum/Brass/Plastic/Nylon/Others Customized
Wire	20/22/24/26/28/30/32AWG PP/PVC/PTFE/PFA/TPE/FEP Customized
Connector	JST/SYP/MOLEX/DUPONT/TE Customized
Installation	Flanged/Surface/Threaded/Plastic/Straight/Film/LUG/SMD/THT Customized
Accuracy	0.1% 0.5% 1% 2% 3% 5% 10% Customized
Temperature range	-40~300 Customized
Wire Length	10mm~10000mm Customized



Applications

Temperature measurement and control of household air-conditioner, refrigerator, icebox, water heater, drinking machine, radiator, dishwasher, disinfectant, washing machine, drying machine, middle-or-low-temperature drying box and constant temperature box.

Conventional product electrical performance parameters

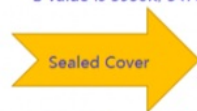
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Main technical parameters of sensor series thermistor:						
Model	Rated resistance value (R25)	B value		Operating temperature	Dissipation coefficient	Thermal time constant
	Resistance value (KΩ)	Allowable deviation (±%)	Nominal value (K)		(mW/°C)	(S)
CWF-102-3435	1		3435			
CWF-202-3435	2		3435			
CWF-2.252-3950	2.252		3950			
CWF-472-3950	4.7		3950			
CWF-502-3470	5		3470			
CWF-502-3950	5		3950			
CWF-682-3950	6.8		3950			
CWF-103-3435	10		3435			
CWF-103-3470	10		3470			
CWF-103-3600	10		3600			
CWF-103-3380	10		3380			
CWF-103-3977	10		3977			

CWF-103-4100	10	±1% ±2% ±3% ±5%	4100	-40℃ 120℃	≥3.0 in still air	≤6 .0 in sti ll air
CWF-153-3950	15		3950			
CWF-203-3950	20		3950			
CWF-233-3950	23		3950			
CWF-303-3950	30		3950			
CWF-333-3977	33		3977			
CWF-403-3950	40		3950			
CWF-473-4013	47		4013			
CWF-503-3977	50		3977			
CWF-503-3990	50		3990			
CWF-503-4050	50		4050			
CWF-104-3950	100		3950			
CWF-104-3990	100		3990			
CWF-104-4200	100		4200			
CWF-204-3892	200		3892			
CWF-204-3917	200		3917			

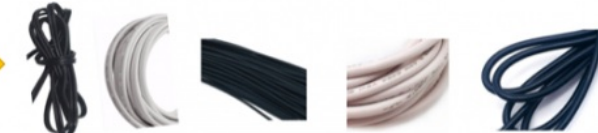
Materials:



Type: Diode type thermistor, Chip in glass type thermistor, Epoxy coated thermistor
Accuracy: ±2%, ±1% etc.
The thermistor divided into R value and B value. R value is 2K, 5K, 10K, 50K etc.,
B value is 3950K, 3470K, 3435K, 3977K etc.



ABS, stainless steel, Nickel-plated copper, Plastic head, can be waterproof effect.
Support for customization.



White Flat protective cable, PVC protective cable, TPE, Flat cable, silicone etc.
Support for customization.

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°C±0.005°C, test steady resistance	Resistance tol ±1%
B value	IEC60539-1	Immerse samples in the constant temperature bath at 25°C, 50°C (or 85°C), 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 $\Delta R/R \leq \pm 1\%$
Vibration	Q/HBm 108-94	Test frequency: 10~500Hz,swing: 1.2mm acceleration: 30m/s ² Direction X,Y,Z Time:8Hour/direction	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Steady humidity and heat	IEC60068-2-78	Temp:40±2°C Humidity:92-95%RH Time:1000±24Hour	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Thermal time constant	EC60539-1	Immerse in 25°C water,after thermal balance,immerse in 85°C,resistance arrives 63.2%,calculate total time	<10 sec
High temperature storage	IEC60068-2-2	Temp:125°C±5°C Time: 1000±24Hour	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Cold and thermal shock	IEC60068-2-14	-40°C~+125°C T1:30min Cycle time:1000	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Knock experimnt	IEC60068-2-77	Acceleration:250m/s ² Pulse lasting: 6ms Knock times: 1000 Recovery time: 2 Hour	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Low temperature storage	IEC60068-2-1	Temp: 40±2°C Time: 1000±24Hour	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$
Salt spray	IEC60068-2-11	Temp: 35±2°C Collection hour : 1.0mL~2.0mL Time: determine per as actual demand	No obvious damage, R25 $\Delta R/R \leq \pm 1\%$

PRODUCT CATEGORIES



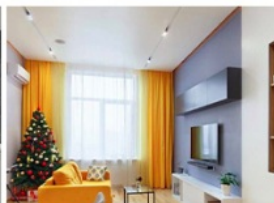
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TPE Temperature
Sensor

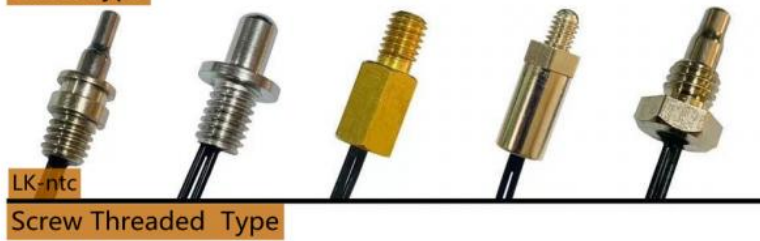
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PROFESSIONAL MANUFACTURER

14 years of temperature sensor manufacturing experience



Metal Case Options



TPE / Metal Case Options





CERTIFICATES



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