Household Appliances Glass Encapsulated High Temperature Thermistor MF59 10K 100K Glass Shell Temperature Measurement NT

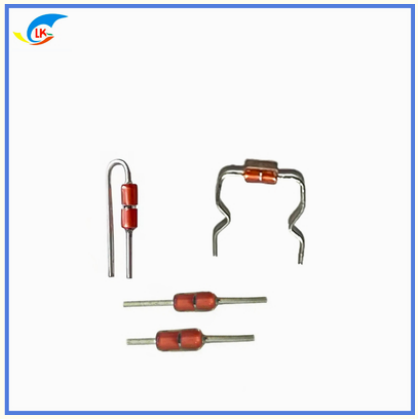
Our Product Introduction

Basic Information

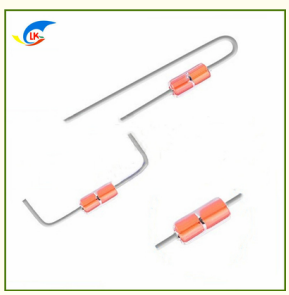
- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: Temperature NTC Thermistor
- Minimum Order Quantity: Negotiation
- Price: Negotiation
- Packaging Details: Export Package / Negotiation
- Delivery Time: Negotiation
- Payment Terms: T/T,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

Product Specification

- Resistance Value: 1K, 5K, 10K,15K,20K,30K, 50K, 100K,
- B-value 25/50: 3380/3950/3470/4150/4500 K
- Operating Temperature Range: -55~250℃
- Resistance Tolerance: F±1%,G:±2%, H:±3%,J:±5%,K:±10%
- Technology: Ceramic Composition
- Model Number: MF58/MF59
- Temperature Range: ±5%,±10%,±20%
- Highlight: **Electronic Glass Encapsulated NTC Thermistor**, **Practical Glass Encapsulated NTC Thermistor**, **Stable Glass Encapsulated Thermistor**



More Images



Our Product Introduction

for more products please visit us on lk-thermistor.com

Product Description

Hermetically Sealed Glass Package Small Volume MF58 Temperature NTC Thermistor

High Temp Thermistor Glass Shell Temp Measurement Ntc for Household Electrical Appliance Glass Encapsulated MF59 /MF58 NTC Sen

MF58 series NTC thermistor is made using semiconductor ceramic technology. The NTC chip is sealed in a glass (DO-35 diode packaging method). It is a high-precision thermal sensing device component with the same appearance as a 4148 diode.

(1) Product features

· The NTC chip is sealed in glass, so you can use it in any harsh environment without worry.
· To ensure excellent heat resistance, the product is encapsulated in glass and can work at high temperatures of 300°C with reliable stability.
· The resistance value accuracy is as high as 0.3°C, and the B value accuracy is as high as 0.5%.
· The packaging method and results of its products determine the fast response speed and high sensitivity.
· Due to its small size and light weight, it can be easily placed onto a printed circuit board automatically, making it suitable for automatic plug-in installation and large-scale production.
· After pulling the glass seal tape, the pins can be cut on the equipment.
· The resistance value decreases as the temperature increases, also known as a linear negative temperature coefficient thermistor.
· Since it is made of DHD, its mechanical strength is guaranteed
· Because the production line is fully mechanized, you will get satisfactory prices, materials and delivery times.

(2) Application scope

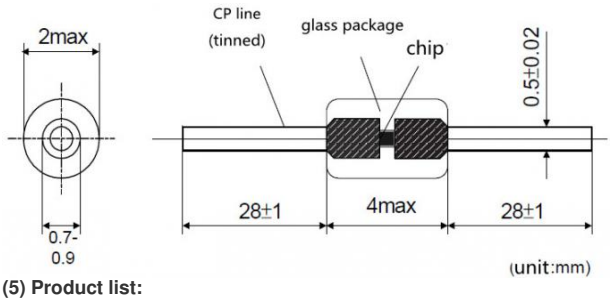
· Large and small household appliances (refrigerators, induction cookers, bread ovens, heaters, smart toilets, microwave ovens, electric fans, soy milk machines, electric water heaters, rice cookers, health pots, egg cookers, water dispensers, etc.) temperature control and thermal protection, etc. circuit.
· Temperature measurement and control circuits for medical, industrial and agricultural, environmental protection, food processing and other equipment.
· LED lighting, lithium battery temperature protection.
· Micro motor number control, quartz crystal oscillation and thermocouple and other temperature compensation circuits.

(3) Specifications

example:
LK --- MF58— 200K — 3950— 1
—— —— ——— ——— ——
① ② ③ ④ ⑤

Among them, ① represents Linkun Electronic Technology Co., Ltd.
②Indicates glass-encapsulated diode NTC thermistor.
③The standard resistance value at 25℃ (R25℃), for example: 233, that is, R25℃ is 23KΩ.
④B value (B25/50℃) For example: 4200 means B25/50℃ is 4200K.
⑤R25℃ resistance value accuracy: 1 (±1%), 2 (±2%), 3 (±3%), 5 (±5%), 10 (±10%).

(4) Structure and size

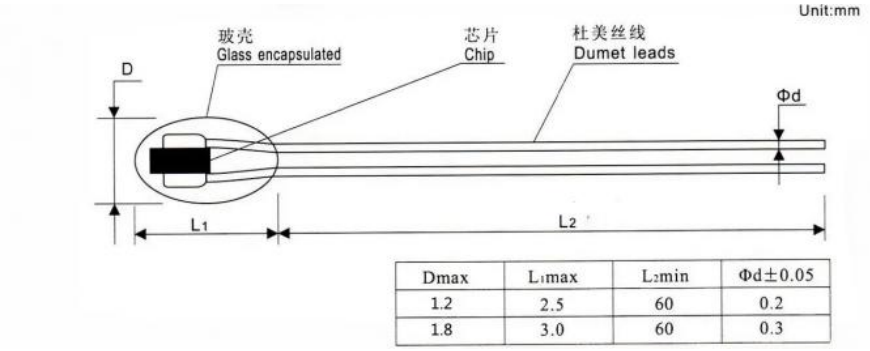


(5) Product list:

Specification	R25℃ (KΩ)	R25℃/50℃ (K)	Dissipation coefficient (mW/℃)	Time constant (S)	Range of working temperature (℃)
LK-202-3470-1	2KΩ	3470	2.1 mW/℃ in static air	10 20S in static air	—40 +300℃
LK-502-3500-1	5KΩ	3500			
LK-103-3550-1	10KΩ	3270			
LK-153-3600-1	15KΩ	3600			
LK-203-3850-1	20KΩ	3850			
LK-303-3900-1	30KΩ	3900			
LK-803-3500-1	80KΩ	3500			
LK-104-4100-1	100KΩ	4100			
LK-254-3950-1	250KΩ	3950			

Resistance - Temperature Characteristics

Applications based on resistance-time characteristics include temperature measurement, control and compensation. These also include the case of using NTC thermistors, making the temperature of the NTC temperature sensor related to some other physical phenomenon. This group of applications requires the thermistor to operate under zero power conditions, meaning that the current through it is kept as low as possible to avoid heating the probe.

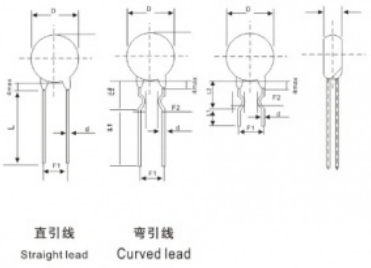


Dmax	L1max	L2min	Φd±0.05
1.2	2.5	60	0.2
1.8	3.0	60	0.3

Product parameters

P/N	R@25℃	Tolerance(%)	Beta Value	Tolerance(%)
MF11-050	5		2400	
MF11-100	10		2800	
MF11-150	15		2800	
MF11-200	20		2800	
MF11-220	22		2800	
MF11-270	27		3000	
MF11-330	33		3000	
MF11-390	39		3000	
MF11-470	47		3100	
MF11-500	50		3100	
MF11-680	68		3100	
MF11-820	82		3100	
MF11-101	100		3200	
MF11-121	120		3200	
MF11-151	150		3200	
MF11-201	200		3200	
MF11-221	220		3500	
MF11-271	270		3500	
MF11-331	330		3500	
MF11-391	390		3500	
MF11-471	470		3500	
MF11-501	500		3500	

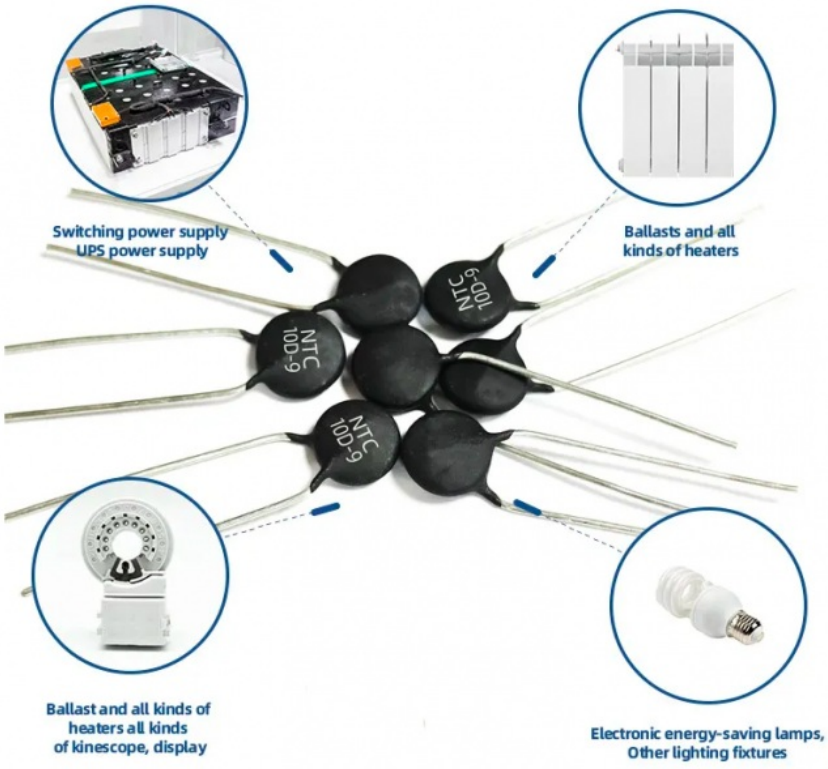
MF11-561	560	±5 ±10 ±20	3500	±5 ±10
MF11-681	680		3800	
MF11-821	820		3800	
MF11-102	1000		3800	
MF11-122	1200		3800	
MF11-152	1500		3800	
MF11-202	2000		4000	
MF11-222	2200		4000	
MF11-272	2700		4000	
MF11-302	3000		4000	
MF11-332	3300		4000	
MF11-392	3900		4000	
MF11-472	4700		4050	
MF11-502	5000		4050	
MF11-562	5600		4050	
MF11-682	6800		4050	
MF11-822	8200		4050	
MF11-103	10000		4050	
MF11-123	12000		4050	
MF11-153	15000		4150	
MF11-203	20000		4300	
MF11-303	30000		4300	
MF11-473	47000		4300	
MF11-503	50000		4300	
MF11-683	68000		4300	
MF11-104	100000		4500	
MF11-124	120000		4700	
MF11-154	150000		4700	
MF11-204	200000		4700	
MF11-304	300000		4700	
MF11-504	500000		4800	
MF11-105	1000000		4900	



尺寸 Dim(mm) / 代号 Sym / 型号 Part No	Dmax	T max	d ±0.05	F1 ±1	F2 ±1.5	直引线 Straight lead	弯引线 Curved lead	
						Lmin	L_1 min	L_2 ±2
Mf72-□D5	7.0	5	0.6/0.45	5/2.5	3	25	17/5	8/5
Mf72-□D7	9.0	5	0.6	5	3	25	17/5	8/5
Mf72-□D9	11.0	5.5	0.8/0.6	7.5/5	5/3	25	17/5	8/5
Mf72-□D11	13.0	5.5	0.8	7.5/5	5/3	25	17/5	8/5
Mf72-□D13	15.5	6	0.8	7.5	5	25	17/5	8/5
Mf72-□D15	17.5	6	0.8	10/7.5	5	25	17/5	8/5
Mf72-□D20	22.5	7	1.0	10/7.5	/	25	/	/
Mf72-□D25	27.5	8	1.0	10	/	25	/	/

Applications

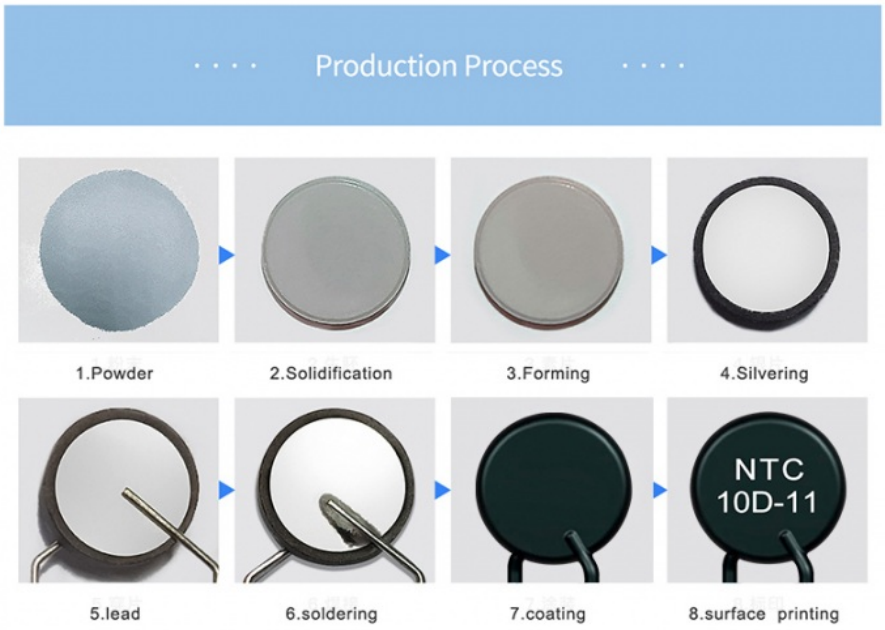
Coversion power-supply, switch power, ups power
Electronic energy saving lamps,electronic ballast and all kinds of electric heater
All kinds of RT, display
Bulb and other lighting lamps



Conventional product electrical performance parameters

Part No.Mf72	R 25	Max,Steady Stale Current(A)	Approx. R of Maz.Cur.	Dissi.Coef. (MW/°C)	Thermal time Constant(S)	Operating Temp.(°C)
5D5	5	1	0.353	6	20	
10D5	10	0.7	0.771	6	20	
60D5	60	0.3	1.878	6	18	
200D5	200	0.1	18.70	6	18	
5D7	5	2	0.283	10	30	
8D7	8	1	0.539	9	28	
10D7	10	1	0.616	9	27	
12D7	12	1	0.816	9	27	
16D7	16	0.7	1.003	9	27	
22D7	22	0.6	1.108	9	27	
33D7	33	0.5	1.485	10	28	
200D7	200	0.2	11.65	11	28	
3D9	3	4	0.120	11	35	
4D9	4	3	0.190	11	35	
5D9	5	3	0.210	11	34	
6D9	6	2	0.315	11	34	
8D9	8	2	0.400	11	32	
10D9	10	2	0.458	11	32	
12D9	12	1	0.652	11	32	
16D9	16	1	0.802	11	31	
20D9	20	1	0.864	11	30	
22D9	22	1	0.950	11	30	
30D9	30	1	1.022	11	30	
33D9	33	1	1.124	11	30	
50D9	50	1	1.252	11	30	
60D9	60	0.8	1.502	11	30	
80D9	80	0.8	2.010	11	30	
120D9	120	0.8	3.015	11	30	
200D9	200	0.5	5.007	11	32	
400D9	400	0.2	30.30	11	32	
2.5D11	2.5	5	0.095	13	43	
3D11	3	5	0.100	13	43	
4D11	4	4	0.150	13	44	
5D11	5	4	0.156	13	45	
6D11	6	3	0.240	13	45	

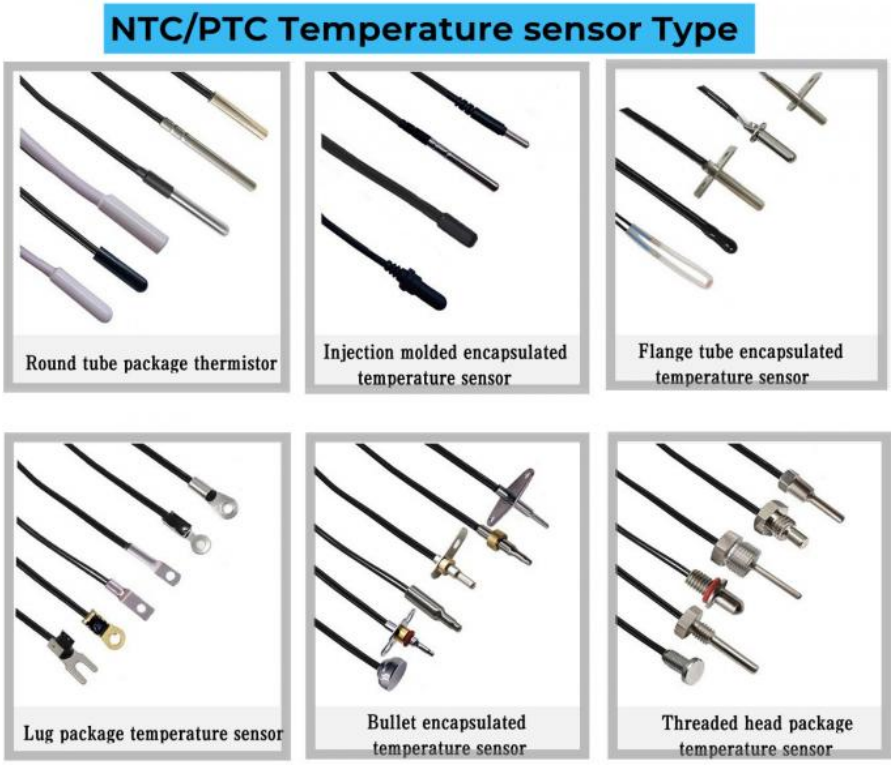
8D11	8	3	0.255	14	47	
10D11	10	3	0.275	14	47	
12D11	12	2	0.462	14	48	
16D11	16	2	0.470	14	50	
20D11	20	2	0.512	15	52	
22D11	22	2	0.563	15	52	
30D11	30	1.5	0.667	15	52	
33D11	33	1.5	0.734	15	52	
50D11	50	1.5	1.021	15	52	
60D11	60	1.5	1.215	15	52	
80D11	80	1.2	1.656	15	52	
1.3D13	1.3	7	0.062	13	52	
1.5D13	1.5	7	0.073	13	60	
2.5D13	2.5	6	0.088	13	160	-55~+200
3D13	3	6	0.092	14	60	
4D13	4	5	0.120	15	67	
5D13	5	5	0.125	15	68	
6D13	6	4	0.170	15	65	
7D13	7	4	0.188	15	65	
8D13	8	4	0.194	15	60	
10D13	10	4	0.206	15	65	
12D13	12	3	0.316	16	65	
15D13	15	3	0.335	16	60	
16D13	16	3	0.338	16	60	
20D13	20	3	0.372	16	65	
30D13	30	2.5	0.517	16	65	
47D13	47	2	0.810	17	65	
120D13	120	1.2	2.124	16	65	
1.3D15	1.3	8	0.048	18	65	
1.5D15	1.5	8	0.052	18	68	
3D15	3	7	0.075	18	69	
5D15	5	6	0.112	18	76	
6D15	6	5	0.155	20	76	
7D15	7	5	0.173	20	80	
8D15	8	5	0.178	20	80	
10D15	10	5	0.180	20	80	
12D15	12	4	0.250	20	80	
15D15	15	4	0.268	21	75	
16D15	16	4	0.276	21	75	
20D15	20	4	0.288	21	85	
30D15	30	3.5	0.438	21	70	
47D15	47	3	0.680	21	86	
120D15	120	1.8	1.652	22	87	
0.7D20	0.7	11	0.018	24	89	
1.3D20	1.3	9	0.037	24	88	
3D20	3	8	0.055	24	88	
5D20	5	7	0.087	24	87	
6D20	6	6	0.113	25	103	
8D20	8	6	0.142	25	105	
10D20	10	6	0.162	25	102	
12D20	12	5	0.195	25	100	
16D20	16	5	0.212	25	100	
0.7D25	0.7	12	0.014	30	120	
1.5D25	1.5	10	0.027	30	121	
3D25	3	9	0.044	32	124	
5D25	5	8	0.070	32	125	
8D25	8	7	0.114	33	125	
10D25	10	7	0.130	32	125	
12D25	12	6	0.156	32	126	
16D25	16	6	0.160	35	126	

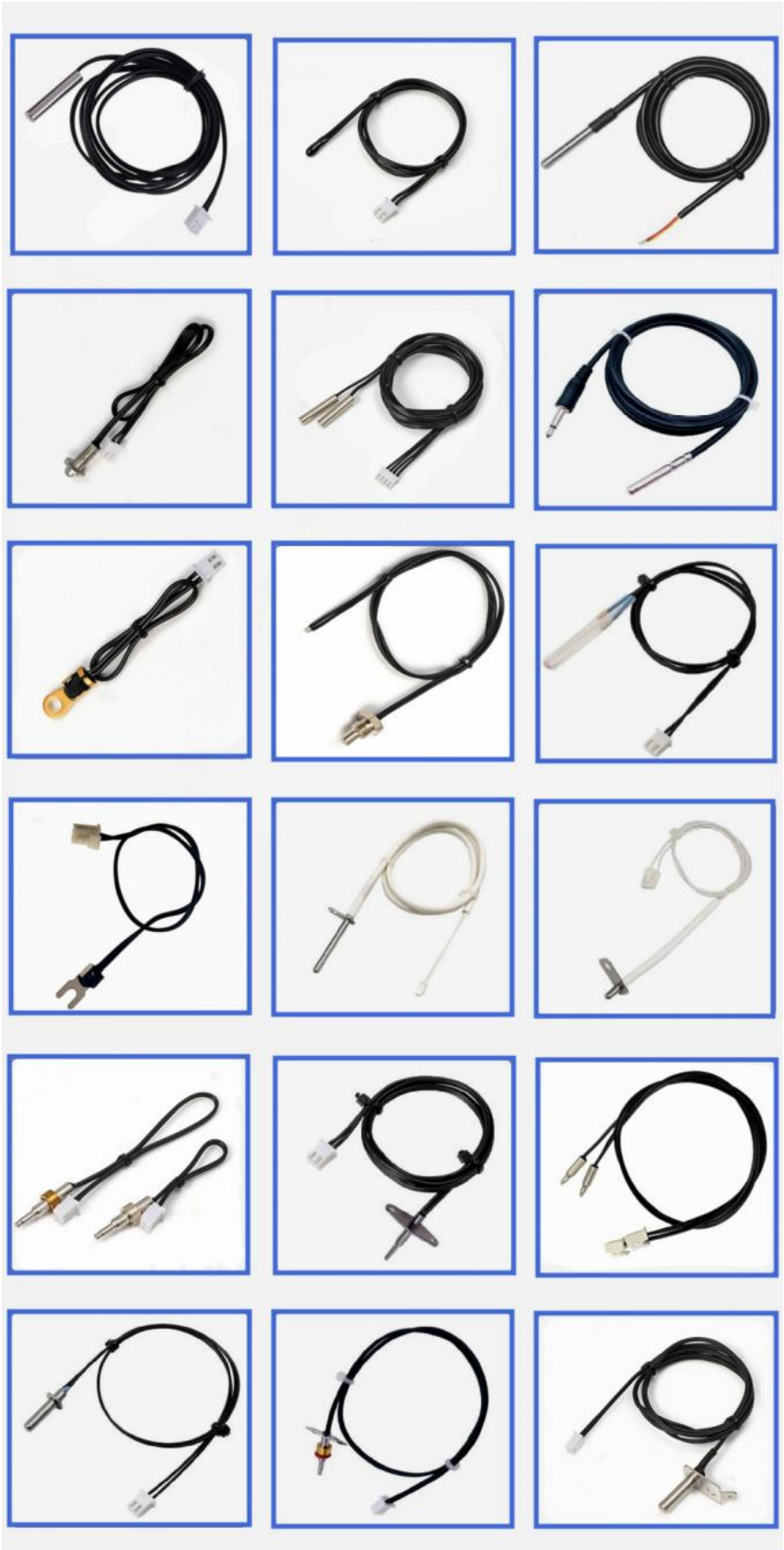


Negative temperature coefficient thermistor, also known as NTC thermistor, is a kind of sensor resistance whose resistance value decreases with the increase of temperature. Widely used in various electronic components, such as temperature sensors, resettable fuses and self-adjusting heaters, etc.

Note: NTC thermistors of various specifications can be provided with different R value and B value accuracy according to customer requirements.

Sensing element-NTC thermistor used

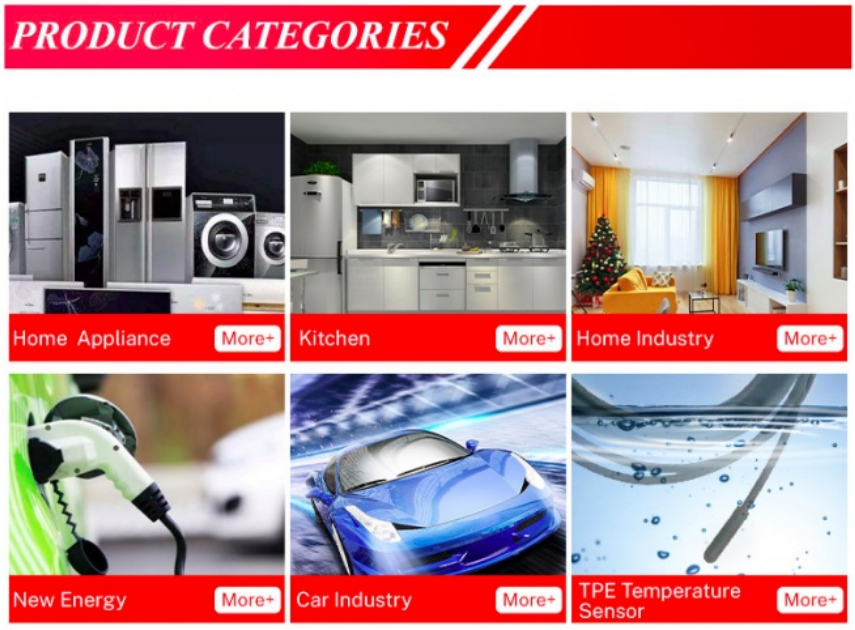




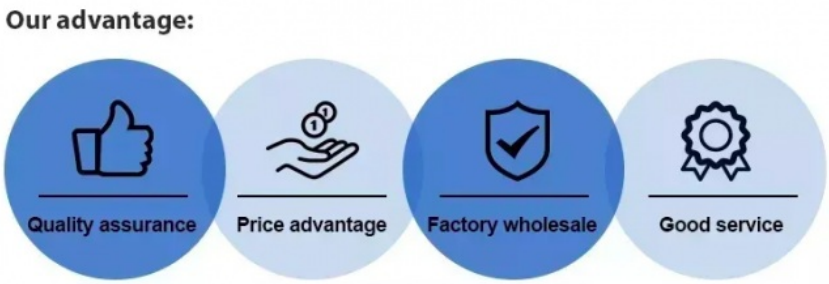
(5) Precautions

1. The MF58 series thermistor is sealed with glass. Please do not subject it to severe shock or squeezing to prevent the glass tube from breaking.
2. Welding method: Use the method of direct welding between the metal body and the body. Do not use soldering to avoid welding, and the welding time should be controlled within 3.5 seconds.
3. Do not test the MF58 thermistor in the air. The temperature difference in the air is large and the measurement is very inaccurate. There will often be a deviation of more than 1-2°C. A high-precision constant-temperature oil tank must be used for measurement. The measured NTC discharge After entering the constant-temperature oil tank, the temperature of the constant-temperature tank must be stable before measurement.
4. The voltage should be as low as possible during measurement to reduce the measurement error caused by NTC self-heating.
5. When measuring high temperature, a thermometer needs to be used to correct and check the temperature of the thermostatic bath.

NTC thermistors are used in a wide range of applications. They are used to measure temperature, control temperature and temperature compensation. They can also be used to detect the absence or presence of liquids, as a current limiting device in power circuits, temperature monitoring in automotive applications, and more. NTC sensors can be divided into three groups depending on the electrical characteristics used in the application.




CERTIFICATES
TUV
CE
TUV
CE
VERIFICATION OF CONFORMITY
CE
SGS
UL
VDE Prüf- und Zertifizierungsinstitut
ZEICHENGENEHMIGUNG
MARK APPROVAL
VDE
VDE
Certificate
of
Compliance
RoHS
ROHS



Dongguan Linkun Electronic Technology Co., Ltd.

13423305709 huangju@lk-ptc.com lk-thermistor.com

Room 101, No. 21, Huayuanzai Road, Chongmei, Chashan Town, Dongguan City, Guangdong Province