



SMD MELF 100K OHM NTC Thermistor High Temperature Resistant Glass Sealed High Precision Fast Response

Our Product Introduction

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

Basic Information

- Place of Origin: China Dong Guan
- Brand Name: Lin Kun
- Certification: UL RoHS
- Model Number: MELF 104F3950
- Minimum Order Quantity: 2500PCS
- Price: Pls contact our sales
- Packaging Details: 2500 pcs per box.



Product Specification

- Product Name: SMD Glass Sealed NTC Thermistor
- Resistance At 25°C: 100K
- B Value 25/50: 3950/4100/4250
- Insulation Resistance: 100MΩ
- Thermal Time Constant: 8~12sec
- Thermal Dissipation Constant: 1.4mw/°C
- Operating Temperature Range: -40~+300°C
- R25°C Resistance Value Accuracy: 1 (±1%), 2 (±2%), 3 (±3%), 5 (±5%), 10 (±10%).
- Application: Automatic Work Facilities , Digital Equipment ,Rechargeable Battery
- Thermal Time Constant: Model A ≤10sec(in Still Air), Model B ≤5sec(in Still Air)
- Highlight: **100K NTC Thermistor, Glass Sealed NTC Thermistor,**



More Images



Product Description

Product Specification

SMD MELF 10K OHM High Temperature Resistant Glass Sealed High Precision Fast Response NTC Thermistor

MF59 Glass Encapsulated Thermistor NTC thermistor is a negative temperature coefficient thermistor. It uses a single high-purity material with a density close to the theoretical density and is a high-performance ceramic structure. Therefore, while achieving miniaturization, it also has the characteristics of small fluctuations in resistance with temperature, rapid response to temperature changes and other characteristics, which can achieve high sensitivity and high precision detection. Our company provides small, high-reliability products of various shapes and functions to meet customer requirements.

R25(Ω): 0.1K 1000K

Application: office automation equipment, digital equipment, rechargeable batteries

Product features:

- The NTC chip is encapsulated in glass and can be used in any harsh environment such as high temperature and high humidity.
- To ensure the heat resistance of the product, the product is encapsulated in glass and can work stably and reliably at a high temperature of 300°C.
- High temperature measurement accuracy, good stability and wide resistance range. The resistance accuracy is up to 0.3°C and the B value accuracy is up to 0.5%.
- The packaging method and results of its products determine its fast response speed and high sensitivity.
- Due to its small size and light weight.
- The resistance decreases with increasing temperature, also known as linear negative temperature coefficient thermistor.
- Due to the use of DHD, mechanical strength is guaranteed.
- No leads, easy to install through SMT automation

Scope of application

- Office automation equipment (such as laptops, copiers, printers, etc.)
- Air conditioning heating and cooling appliances.
- Digital devices (mobile phones, PDAs, etc.)
- LED lighting, lithium battery temperature protection, mobile phone rechargeable batteries (lithium batteries, nickel-metal hydride batteries, etc.).
- Hydraulic sensors, medical equipment, electronic cigarettes.
- Temperature compensation of instrument coils, integrated circuits, and quartz crystal oscillators

Product Specifications

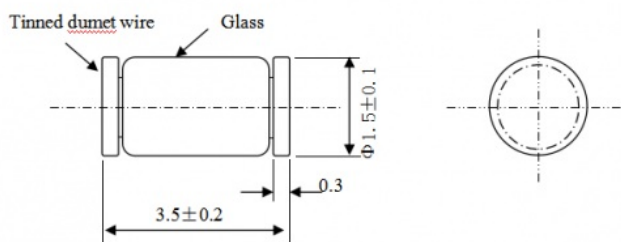
1.Scope

This specification deals with shape, dimensions, characteristics, inspection standard etc.

2.Specifications

104-3950-1					
NTC Thermistor	Resistance value		B value		
	100 kΩ	±1%	3950	±1%	B25/50

3.Shape and dimension(Unit:mm)



4. Specifications:

example:

LK---MELF- 104 - 3950 - 1

① ② ③ ④ ⑤

Among them, ① represents Linkun Electronic Technology Co., Ltd.

② Indicates NTC thermistor with glass seal.

③ Standard resistance value at 25°C (R25°C) For example: 104 means R25°C is 100KΩ.

④ B value (B25/50°C) For example: 3950 means B25/50°C is 3950K.

⑤ R25°C resistance value accuracy: 1 (±1%), 2 (±2%), 3 (±3%), 5 (±5%)

5.Electrical characteristics

	Item	Symbol	Test Condition	Min.	Nor.	Min.	Unit
a	Resistance at 25°C	R25	25±0.05°C	9.9	10	10.1	kΩ
b	Bvalue	B25/50		3400.7	3435	3469.4	k

c	Insulation resistance	/	500VDC	100	/	/	MΩ
d	Thermal time constant	τ	in still air	/	/	8~12	sec
e	Thermal dissipation constant	δ	in still air	1.4	/	/	mw/°C
f	Operating temperature range	/	/	-50	/	300	°C

6. Reliability

	Item	Specification	Method of Examination
6.1	high Temp. storage	* $\Delta R_{25}/R_{25} \leq \pm 2\%$	After storage at 250°C for 1000hrs
6.2	Low Temp. storage		After storage at -40°C for 1000hrs
6.3	High temperature and humidity		After storage at 60°C 95%RH for 1000hrs
6.4	Thermal shock	* $\Delta R_{25}/R_{25} \leq \pm 2\%$	100 cycles of following sequence -40°C 10min.---5min. room temp. ---200°C 10min.---5 min. room temp.
6.5	Vibration	* no visible damage * $\Delta R_{25}/R_{25} \leq \pm 2\%$	After vibrate test , Frequence 10-500Hz 15min.max amplitude 1.5mm ,in X and Y directions
6.6	Pulling	* no visible damage * $\Delta R_{25}/R_{25} \leq \pm 2\%$	After applying a force of 5N in the axial direction of thermistor, and maintain the force for 60sec.
6.7	Fall down	* no visible damage * $\Delta R_{25}/R_{25} \leq \pm 2\%$	After dropped freely onto wood floor from 1 meter height for 10 times

7. Outgoing Inspection

7.1 The product shall be inspected at every delivery lot inspection items, sampling quantities and sampling acceptable standard are as follows.

Inspection Item	Sampling acceptable Standard	Remarks
Resistance value	N=20,Ac=0,Re=1	4(a)
B value	N=10,Ac=0,Re=1	4(b)
Insulation Resistance	N=5,Ac=0,Re=1	4(c)
Shape & dimensions	N=5,Ac=0,Re=1	3
Appearance	N=5,Ac=0,Re=1	3

7.2 Inspection data

Inspection data will be issued for pay upon request.

8. Packing

Packing shall be done not to cause damage or soil during delivery

9. Product List:

Specification	R25°C (KΩ)	R25°C/50°C (K)	Dissipation coefficient(mW/°C)	Time constant (S)	Range of working temperature (°C)
MELF-202-3900-1	2K	3900	2.1 mW/°C in static air	5 10S in static air	—50 +350°C
MELF-502-4557-1	5K	4557			
MELF-103-3380-1	10K	3380			
MELF153-3600-1	15K	3600			
MELF-203-3850-1	20K	3850			
MELF-303-3900-1	30K	3900			
MELF-803-3500-1	80K	3500			
MELF-104-4100-1	100K	4100			
MELF-254-3950-1	250K	3950			

Note: NTC thermistors of various specifications can provide products with different R value and B value accuracy according to customer requirements

10. Precautions

- LK-59 series thermistors are glass-sealed, please do not shake or squeeze them to prevent the glass tube from breaking.
- Do not test the LK 59 thermistor in the air. The temperature difference in the air is large, and the measurement is very inaccurate. It often produces a deviation of more than 1-2°C. It must be measured with a high-precision constant temperature oil tank. After entering the constant temperature oil tank, the temperature of the constant temperature tank must be stable before measurement.
- The voltage should be as low as possible during measurement to reduce the measurement error caused by NTC self-heating.
- When measuring high temperature, it is necessary to use a thermometer to correct and check the temperature of the constant temperature

Product display:



Details display

1

High-quality Materials

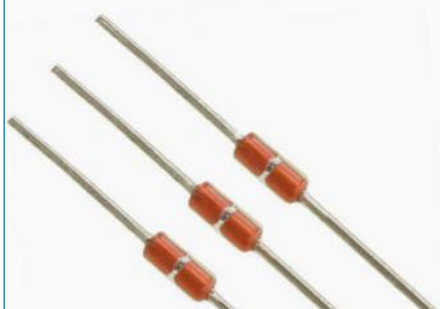
Made of high-quality materials, durable,
Quality is excellent, just to make you feel at ease when buying!



2

Product advantages

Wide resistance range
Strong surge resistance
Fast response time



3

Reliable performance

Quick response to overload
current

Stable and reliable performance

Strong impact resistance

Long service life



4

Stable quality

Our company has good
design and development
capabilities,
Excellent team integrating
design, research and
development and
production





The MF58 series products are the first in China to pass the 100,000-time durability test in the UL standard.

NTC/PTC Temperature sensor Type



tank.

