



Semiconductor Refrigeration Temperature Control Switch Carbon Fiber PTC Thermal Protector TB02-BB8D Temperature Switch

Our Product Introduction

Basic Information

- Place of Origin: Dong Guan China
- Brand Name: lin kun
- Certification: ROHS,UL
- Model Number: TB02-BB8D
- Minimum Order Quantity: 5000 PCS
- Price: 0.045 USD/ PCS
- Packaging Details: Bulk,500pcs per polybag
- Delivery Time: 7 workdays
- Payment Terms: T/T
- Supply Ability: 20,000,000PCS per week



Product Specification

- Type: Temperature Switch
- Application: Electronic
- Voltage: Small
- Voltage Characteristics: Safety Voltage
- Shape: SMD Type
- Fusing Speed: FF/Extra Fast
- Implementation Standard: National Standard
- Automatic Reset Function: Yes
- Maximum Voltage: 250 (V)
- Maximum Current: 5 (A)
- Holding Current: 2 (A)
- Operation Temperature: 30-180 ()
- Temperature Control Range: 30-180 ()
- Application Area: Household Appliances



More Images



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

Product Description

TB02 series temperature control switch thermal protector thermostat

TB02 series thermal protectors are small in size, sensitive in temperature and precise in protection. The lead temperature can be customized according to customer requirements. The structure is stable and is particularly suitable for various battery packs, battery protection boards, and products with small installation locations. Small in size, easy to install, fast in temperature sensing, stable in structure, lead temperature can be customized according to customer requirements, in line with environmental protection ROHS ISO9001 standards, normally open or normally closed optional.

1 Product Application

TB02 series temperature control switches are small in size, sensitive in temperature sensing, and provide accurate and reliable protection. They are particularly suitable for the safety protection of temperature sensing cables, battery protection boards, micromotors and transformers.

Wide range of applications

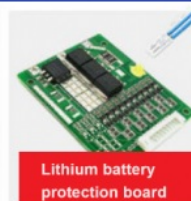
Applicable to all kinds of motor equipment



Switching power supply



Rechargeable battery pack



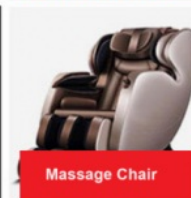
Lithium battery protection board



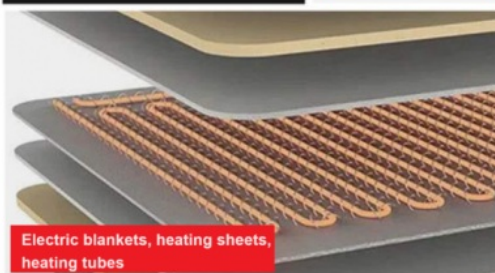
Electric motors

Application

Good products are made with care and come from good manufacturers



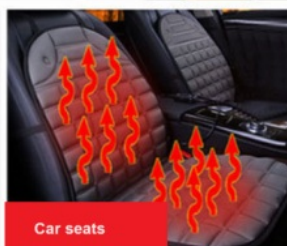
Massage Chair



Electric blankets, heating sheets, heating tubes



Power tools



Car seats



Tubular motors

Application scenarios

The product is micro and easy to install,
with a wide range of applications



Tubular motor



Electric blanket



Lithium battery
protection board



AC motor



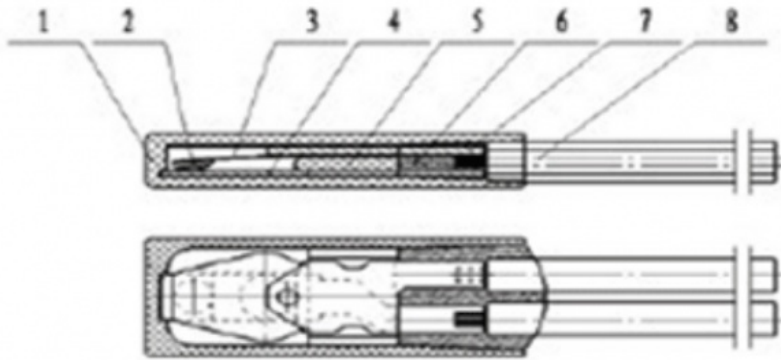
Water pump



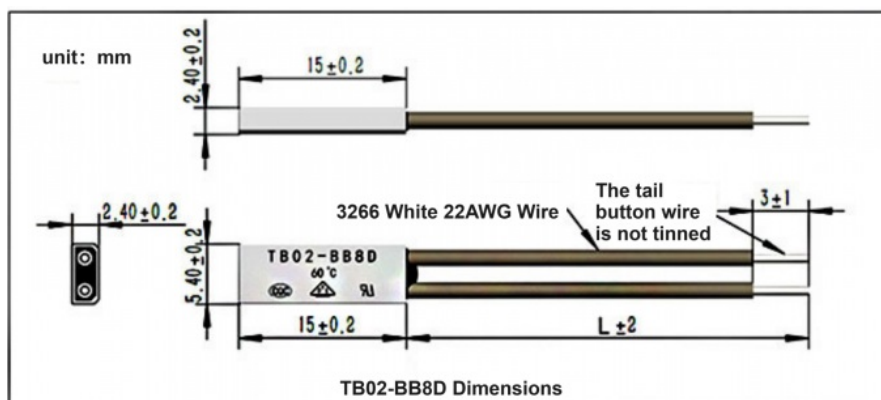
Heating pad

To support more scenarios, please contact us!

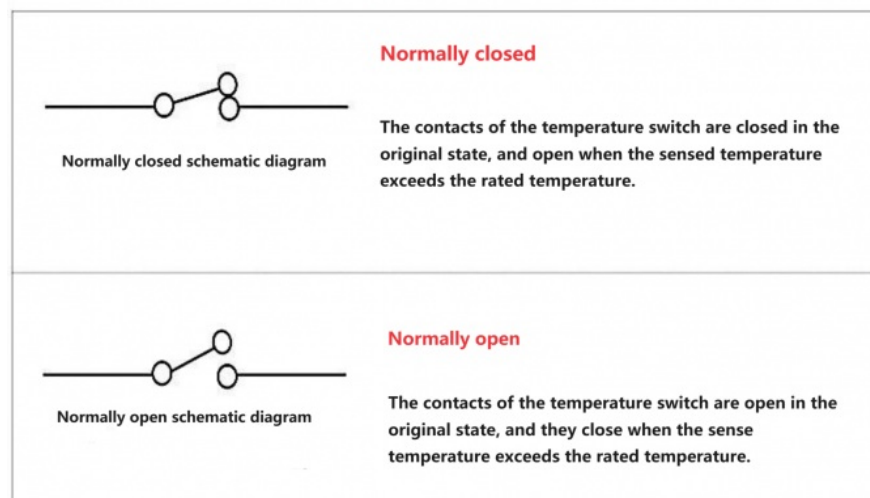
2 Appearance and structure:



Serial number	Part name	Material name	Serial number	Part name	Material name
1	Housing	PBT CRN7030	5	Fixed seat	PBT CRN7030
2	Moving contact	AgNi/BZn	6	Epoxy	9002A
3	Bimetallic strip	30R	7	Moving contact	BZn
4	Static contact	AgNi10/BZn	8	Wire	22# 3266



How to distinguish between normally closed and normally open



3. Performance

3.1 Technical parameters

Temperature tolerance: $\pm 3 \pm 5^\circ$

Action range: 35 -155 (one specification for every 5)

Contact internal resistance: ≤ 100 milliohms (the longer the line, the greater the internal resistance)

Lifespan: 10,000 times OR 100,000 times

Reset temperature: Action temperature drops 10 -25 (free reset)

Electrical strength: AC1500V / 1MIN without breakdown flicker

3.2 Rated operating temperature code and reset temperature:

Product model	Action temperature	Reset temperature	Product model	Action temperature	Reset temperature
TBO2-BB8D-30	30±3	≥20	TBO2-BB8D-80	80±5	55±15
TBO2-BB8D-35	35±3.5	≥25	TBO2-BB8D-85	85±5	60±15
TBO2-BB8D-40	40±4	≥30	TBO2-BB8D-90	90±5	65±15
TBO2-BB8D-45	45±4.5	≥33	TBO2-BB8D-95	95±5	70±15
TBO2-BB8D-50	50±5	≥35	TBO2-BB8D-100c	100±5	70±15
TBO2-BB8D-55	55±5	42±6	TBO2-BB8D-105	105±5	75±15
TBO2-BB8D-60	60±5	45±8	TBO2-BB8D-110	110±5	75±15
TBO2-BB8D-65	65±5	48±10	TBO2-BB8D-115	115±5	80±15
TBO2-BB8D-70	70±5	50±12	TBO2-BB8D-120	120±5	85±15
TBO2-BB8D-75	75±5	53±14	TBO2-BB8D-125	125±5	85±15
TBO2-BB8D-80	80±5	55±15	TBO2-BB8D-145	145±5	100±15
TBO2-BB8D-85	85±5	60±15	TBO2-BB8D-150	150±5	105±15
TBO2-BB8D-90	90±5	65±15	TBO2-BB8D-155	155±5	110±15

3.3 Dimensions:

5A/10A: Metal housing: 20×7.4×3.8mm 15×6.4×3.1 (excluding insulating sleeve)

Plastic housing: 20×7.4×3.8mm 15×7×3.5mm

Ceramic housing: 20×8.5×5mm

16A: Metal housing: 21.5×8×4.25mm (excluding insulating sleeve)

Plastic shell/metal shell size table

TB02	Height (mm)	Width (mm)	Length (mm)
15 long plastic case	15	5.4	2.4
12 long plastic case	12	5.4	2.4
10 long plastic case	10	5	2

There are many shell styles and sizes that are not listed in full. If you need any, please contact customer service.

3.4 Tensile test: The lead end of the product should be able to withstand a tensile force greater than or equal to 20N, and the wire should not break or slip out

3.5 Insulation voltage:

a The lead wires of the product should be able to withstand AC660V when disconnected, and last for 1min without breakdown and flashover;

b The lead wires of the product and the insulating shell can withstand AC1800v, and last for 1S without breakdown and flashover;

3.6 Insulation resistance: Under normal conditions, the insulation resistance between the lead wire and the insulating shell is above 100MQ. (The meter used is a DC500V megohmmeter)

3.7 Contact resistance: The contact resistance of the product should not exceed 50mQ.

3.8 High temperature resistance test: The product is placed in an air environment 50 higher than the rated operating temperature for 96h.

3.9 Low temperature resistance test: The product is placed in an air environment of -40 for 96h.

3.10 Vibration test: The thermal protector should be able to withstand an amplitude of 1.5mm, a frequency change of 10 to 55Hz, a scanning change cycle of 3 to 5 times/min, and vibration directions X, Y, and Z, with continuous vibration for 2 hours in each direction.

3.11 Drop test: The product falls freely from a height of 0.7m once.

3.12 Compression test: The product should be able to withstand a static pressure of 100N for 1min.

3.8, 3.9, 3.10, 3.11, and 3.12 should meet the following conditions after the tests:

a The disconnection temperature change should be within +7 of the initial value;

b The contact resistance should be below 100mQ;

c The appearance should not be significantly deformed;

d The wire should not be cracked or damaged.

4 Lifespan

Under the conditions of rated voltage, current and power factor of 0.7, the product is operated 10,000 times by an external heat source, and the following conditions should be met:

a The disconnection temperature change should be within +5 of the initial value;

b The contact resistance should be below 100mQ;

Continue the test until it can operate after 5,000 times.

5 Other matters:

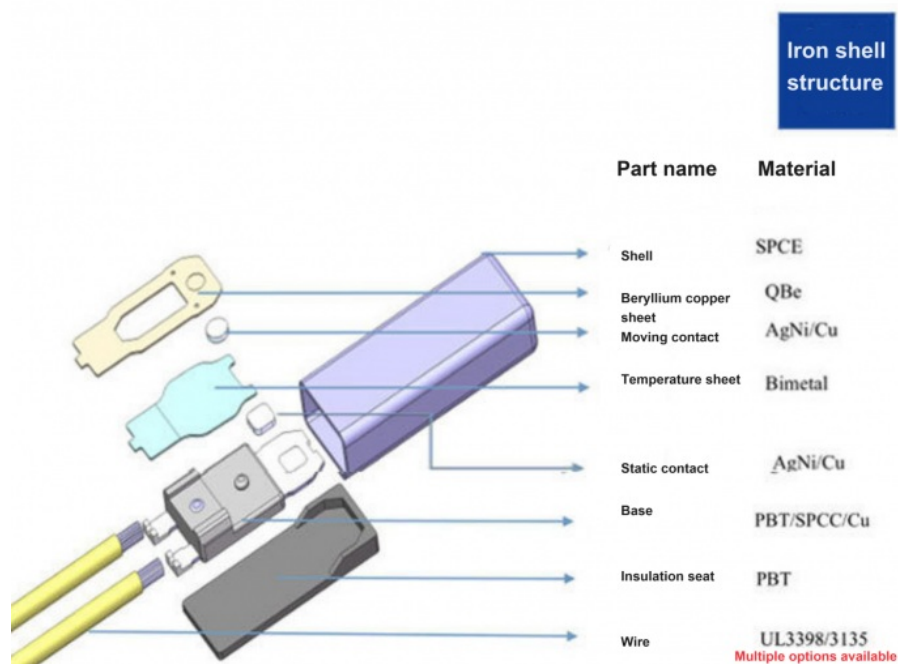
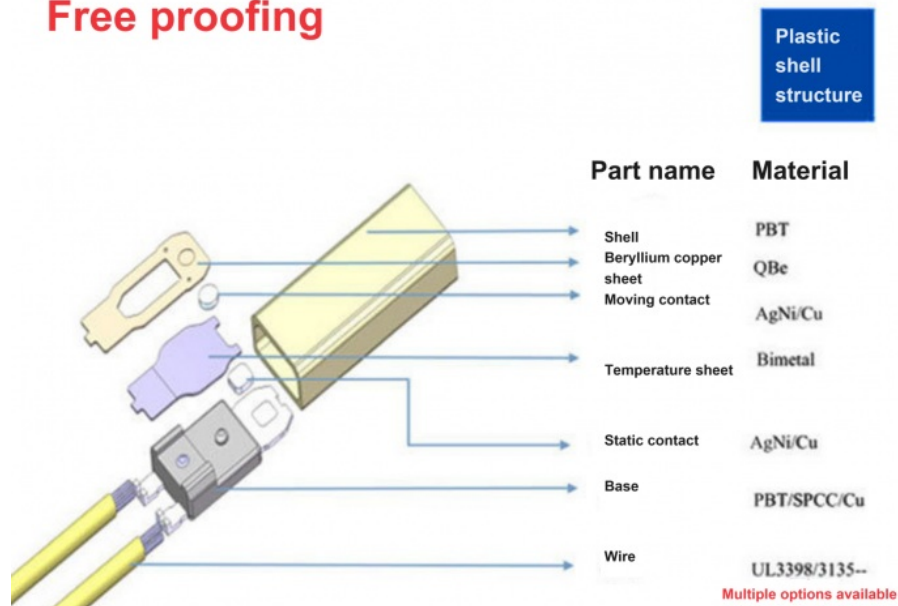
5.1 The heating rate of disconnection temperature detection should be controlled at 1 /1min;

5.2 The product cannot withstand strong impact and pressure during use;

6 Matters not covered by this standard or other requirements of customers shall be separately established.

Customized selection according to customer product requirements

Free proofing



There are also these:

Rechargeable battery packs, lithium battery protection boards

Curtain motors, tubular motors, electric motors (electric tools, etc.) PC circuit boards, temperature sensing cables

Heating pads, medical pads, electric blankets, electric heating clothing

Fluorescent lamp ballasts, transformers, etc.

Linkun Electronics provides you with personalized customization services.

Customized selection according to customer product requirements, **free**

proofing!

For details, please consult online customer service!





13423305709



huangju@lk-ptc.com



lk-thermistor.com

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