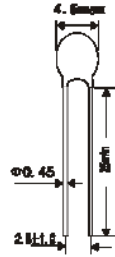


1: Characteristics

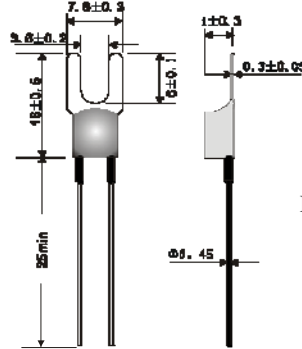
- 1.2 outlook: A-pin coated form、B-metal form.
2. Protection temperature: 60~130℃
3. Quick response.
4. Long stability.
5. Small dimension, convenient for installation.
6. Do not need to be reset after protection.



A- Pin form

Application

- 1.Switch power supply.
- 2.Electronic equipment (motor, transformer, etc)
- 3.Power parts.

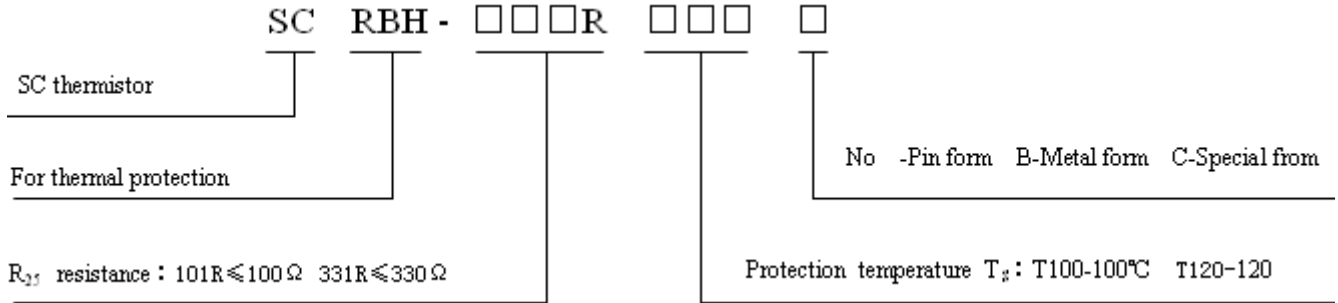


B-Metal form

Dimension

(unit: mm)

Part number explanation



Data Sheet

Part number	Max. voltage V_{max} (V)	Protection temperature T (°C)	Resistance R_{25} (Ω)	Resistance @ T_s -15°C R_{S-15} (Ω)	Resistance @ protection temperature R_s (Ω)	Max. current I_{max} (mA)
SCRBH-101R60	30	60	100max	330max	470min	100
SCRBH-101R70	30	70	100max	330max	470min	100
SCRBH-101R80	30	80	100max	330max	470min	100
SCRBH-101R90	30	90	100max	330max	470min	100
SCRBH-101R100	30	100	100max	330max	470min	100
SCRBH-101R110	30	110	100max	330max	470min	100
SCRBH-101R120	30	120	100max	330max	470min	100
SCRBH-101R130	30	130	100max	330max	470min	100
SCRBH-331R60	30	60	330max	1.5kmax	2.2kmin	100
SCRBH-331R70	30	70	330max	1.5kmax	2.2kmin	100
SCRBH-331R80	30	80	330max	1.5kmax	2.2kmin	100
SCRBH-331R90	30	90	330max	1.5kmax	2.2kmin	100
SCRBH-331R100	30	100	330max	1.5kmax	2.2kmin	100
SCRBH-331R110	30	110	330max	1.5kmax	2.2kmin	100
SCRBH-331R120	30	120	330max	1.5kmax	2.2kmin	100
SCRBH-331R130	30	130	330max	1.5kmax	2.2kmin	100

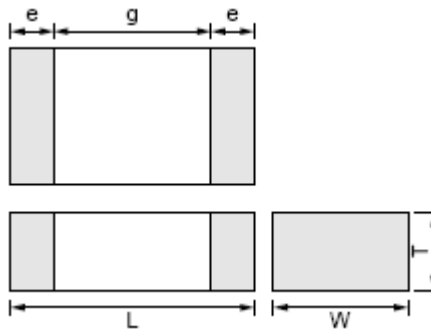
This chip PTC Thermistor is a reflow soldering SMD type for overheat sensing for power transistors, power diodes and power ICs in hybrid circuits.

2: Features

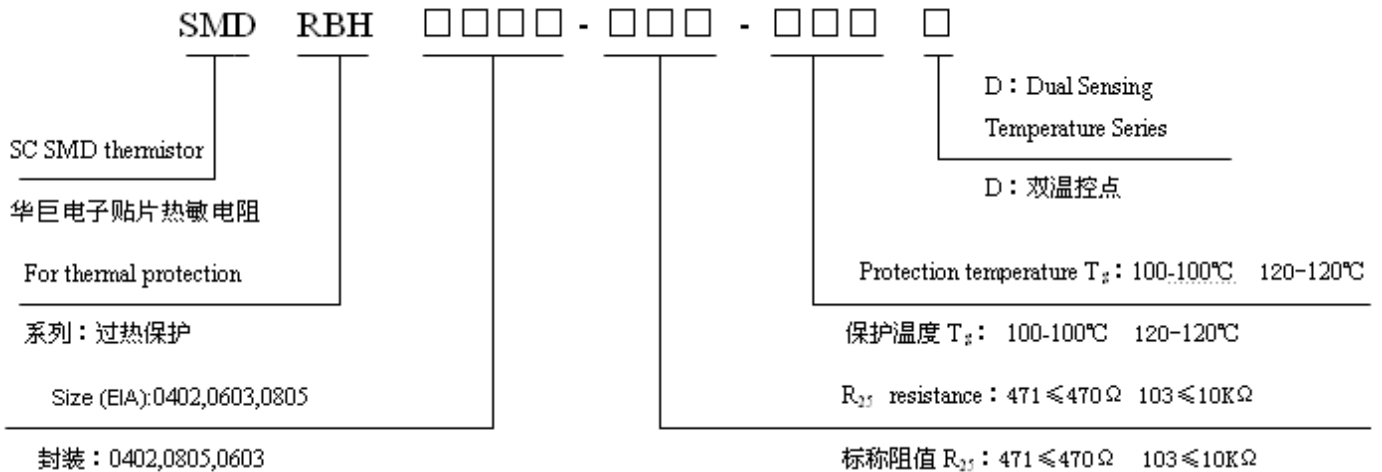
1. SMD type is helpful for miniaturizing circuits because of its small size and light weight.
2. Excellent thermal response due to small size
3. Solid-state construction provides excellent resistance to mechanical vibration and impact resistance.
4. Contactless operation provides noiseless operation



Dimension (unit: mm)



Type	L	W	T	e	g
0402	1.00 ± 0.10	0.50 ± 0.10	0.30 ± 0.10	0.20 ± 0.10	0.25 ± 0.10
0603	1.60 ± 0.15	0.80 ± 0.15	0.40 ± 0.10	0.30 ± 0.20	0.30 ± 0.20
0805	2.00 ± 0.20	1.25 ± 0.15	0.50 ± 0.10	0.40 ± 0.20	0.40 ± 0.20



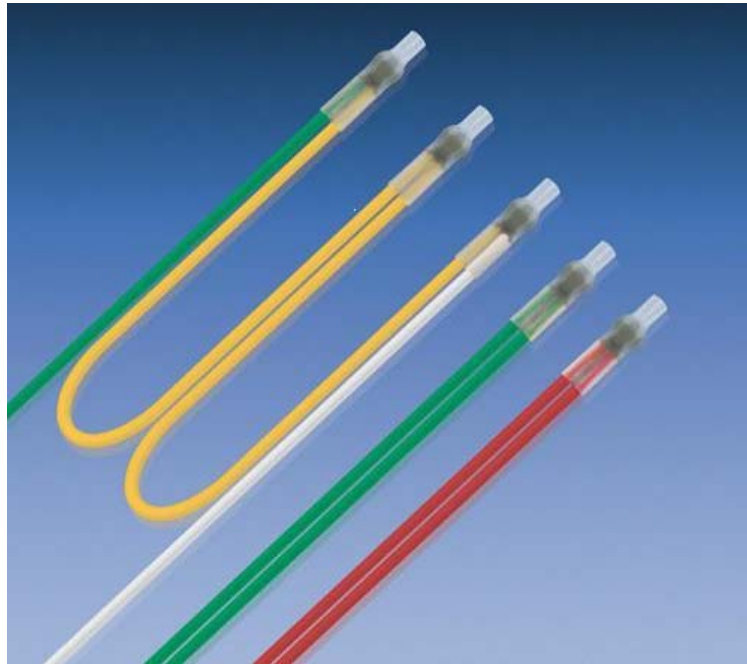
2.1 Single Sensing Temperature Series

Part Number	Maximum Voltage	Sensing Temperature	Resistance	TS-5(°C)		TS+5(°C)		Operating Temperature Range(°C)			
	Vmax (Vdc)	Ts (°C)	R25 (Ω)	TL(°C)	RL (Ω)	TH (°C)	RH (Ω)	(°C)			
SMDRBH-0402-471-105	32	105±5	470	100	≤4.7K	110	≥4.7K	-25~+120			
SMDRBH-0402-471-115		115±5		110		120		-25~+130			
SMDRBH-0402-471-125		125±5		120		130		-25~+140			
SMDRBH-0402-103-130		130±5	10K	125	≤4.7M	135	≥4.7M	-25~+145			
SMDRBH-0603-101-130	24	130±5	100	125	≤1K	135	≥1K	-25~+145			
SMDRBH-0603-221-105		105±5	220	100	≤2.2K	110	≥2.2K	-25~+120			
SMDRBH-0603-471-65	32	65±5	470	60	≤4.7K	70	≥4.7K	-25~+80			
SMDRBH-0603-471-75		75±5		70		80		-25~+90			
SMDRBH-0603-471-85		85±5		80		90		-25~+100			
SMDRBH-0603-471-95		95±5		90		100		-25~+110			
SMDRBH-0603-471-105		105±5		100		110		-25~+120			
SMDRBH-0603-471-115		115±5		110		120		-25~+130			
SMDRBH-0603-471-125		125±5		120		130		-25~+140			
SMDRBH-0603-471-135		135±5		130		140		-25~+150			
SMDRBH-0603-472-105		105±5		4.7K		100		≤47K	110	≥47K	-25~+120
SMDRBH-0603-103-110		110±5		10K		105		≤4.7M	115	≥4.7M	-25~+125
SMDRBH-0603-103-120		120±5				115			125		-25~+130
SMDRBH-0603-103-130		130±5				125			135		-25~+145
SMDRBH-0603-473-130		130±5		47K		125		≤4.7M		≥4.7M	-25~+145
SMDRBH-0805-101-110		24		110±5		100		105	≤1K	115	≥1K
SMDRBH-0805-101-115	115±5		110	120	-25~+130						
SMDRBH-0805-101-130	130±5		125	135	-25~+145						
SMDRBH-0805-471-65	32	65±5	470	60	≤4.7K	70	≥4.7K	-25~+80			
SMDRBH-0805-471-75		75±5		70		80		-25~+90			
SMDRBH-0805-471-85		85±5		80		90		-25~+100			
SMDRBH-0805-471-95		95±5		90		100		-25~+110			
SMDRBH-0805-471-105		105±5		100		110		-25~+120			
SMDRBH-0805-471-115		115±5		110		120		-25~+130			
SMDRBH-0805-471-125		125±5		120		130		-25~+140			
SMDRBH-0805-471-135		135±5		130		140		-25~+150			
SMDRBH-0805-103-130		130±5		10K		125		≤4.7M	135	≥4.7M	-25~+145

2.2 Dual Sensing Temperature Series

Part Number	Maximum Voltage	Resistance	Sensing Temperature1	Sensing Temperature2	Operating Temperature Range(°C)
	Vmax (Vdc)	R25 (Ω)	at 4.7K(°C)	at 4.7K(°C)	(°C)
			Ts1	Ts1	
SMDRBH-0402-541-115D	32	540	115±5	135±7	-25~+150
SMDRBH-0402-102-115D		1K	115±5	130±3	-25~+140
SMDRBH-0402-102-125D		1K	125±5	140±3	-25~+150
SMDRBH-0603-471-065D		470	65±5	80±7	-25~+90

3:Product For Motor Protect



Application

The sensors can be widely used at those work sites which need overheat protection. When the sensors are fixed in those facilities that need overheat protection, they are able to keep the facilities from accidents and damages caused by overheating.

Features

The sensors are the special ones used for overheat alarm and protection. They are made from the advanced technology introduced from abroad. PTC temperature-controlled sensors are made of mini heat-variable resistors. They are of small size, endurance strength, good stability and excellent sensitiveness. All the technical criteria have reached the level of the same products in the world.

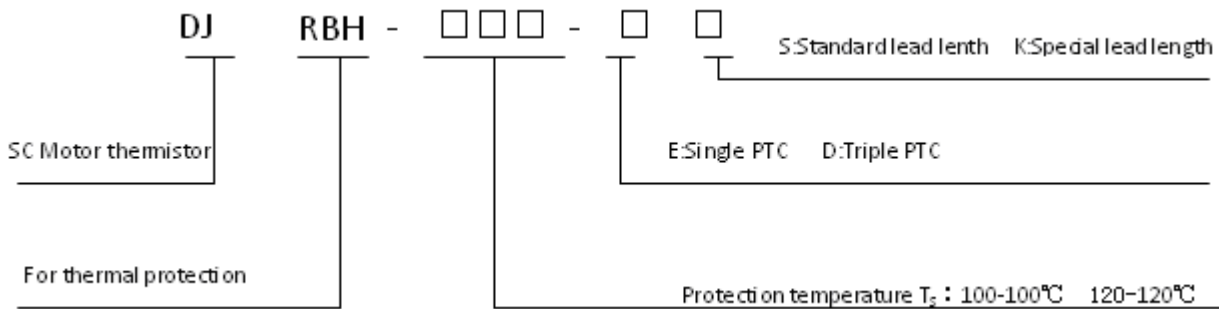
Usage

In operation, you may use one piece or several pieces connected in series, which can control the temperatures at different points and are good to reduce the cost.

Technical data

The controlled temperatures of the sensors range from TK30°C to TK180°C. There is a 5°C interval between the controlled-temperature TK according to the specification. We are able to make such sensors between one and six cores according to customers' requirements.

Indication of type



- 1:DJ-- SC Motor thermistor
- 2:RHB-- For thermal protection
- 3:140 Temperature of the temperature-controlled point (TK)
- 4:D 3-core Z 2-core E 1-core V 4-core S 6-core
- 5: S: Standard length of lead-out wire 500 200 200 500 Standard length of lead-out wire
- K: The length of customers' special lead-out wire

S:Standard lead length K:Special lead length

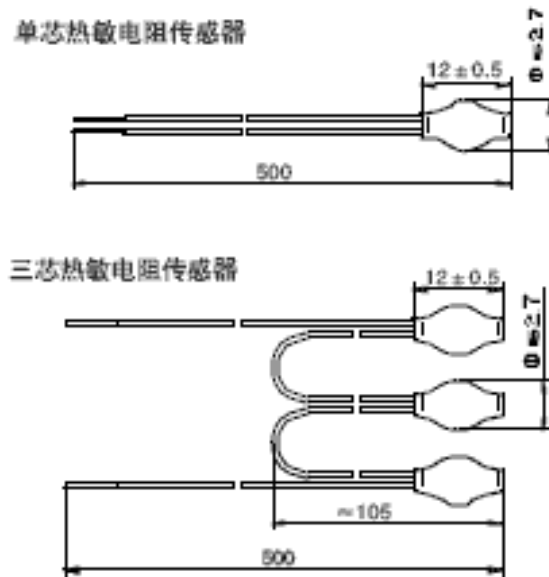
Note: The above examples of type are for the sensors which have 1 cores, the standard length of lead-out wire and the controlled-point of temperature is 140°C

3.1 Execution standard products

GB/T 7153-2002 《Directly heated positive step-function temperature coefficient thermistors-Part 1:Generic specification》

(Meet international standards DIN44081 / DIN44082)。

3.2 Dimensions, structure

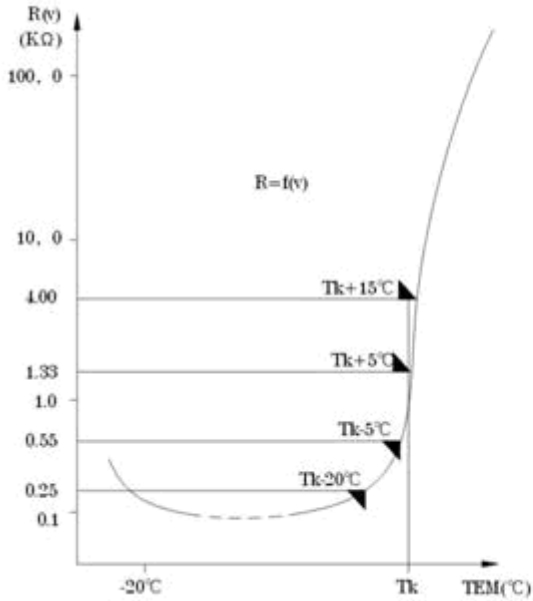


"L" by user determine length

3.3 Technical parameter

No.	Item	Technical requirements
1	Max.working voltage	30Vdc
2	Normal using voltage	≤2.5Vdc
3	Tk tolerance	±5
4	Resistance in normal temperature T=25℃±1℃ (V≤2.5V)	≤300Ω
5	TK-5℃ (V≤2.5V)	≤1650Ω
6	TK+5℃ (V≤2.5V)	≥3990Ω
7	TK+15℃ (V≤2.5V)	≥12KΩ
8	-20℃~TK-20℃ (V≤2.5V)	≤750Ω
9	Test voltage (DC)	≤2.5 Vdc
10	TK reaction time	<5 S
11	Insulation strength (AC)	2.5KV/5S
12	Maximum Storage Temperature	125℃
13	Minimum Storage Temperature	-25℃

6.4 Thermistor resistance-temperature characteristic curve



单芯WMZ6型热敏电阻的阻温曲线

在-20°C至Tk-20°C时, $R \leq 250 \Omega$;

在Tk-5°C时, $R \leq 550 \Omega$; 在Tk+5°C时, $R \geq 1330 \Omega$

在Tk+15°C时, $R \geq 4000 \Omega$; 以上测量电压为 $U \leq 2.5V DC$

Color Coding(For different temperature ratings)

TK	30	40	50	60	70	80	90	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	180
Color1	Brown	Brown	Brown	White	White	White	Green	Red	Blow	Brown	Blue	Gray	Red	Blue	Red	White	White	Black	Blue	Blue	Blue	White	White
Color2	Black	RED	Gray	Gray	Brown	White	Green	Red	Gray	Brown	Green	Gray	Green	Blue	Black	Blue	Black	Black	Black	Red	Brown	Green	Red

7:Packaging

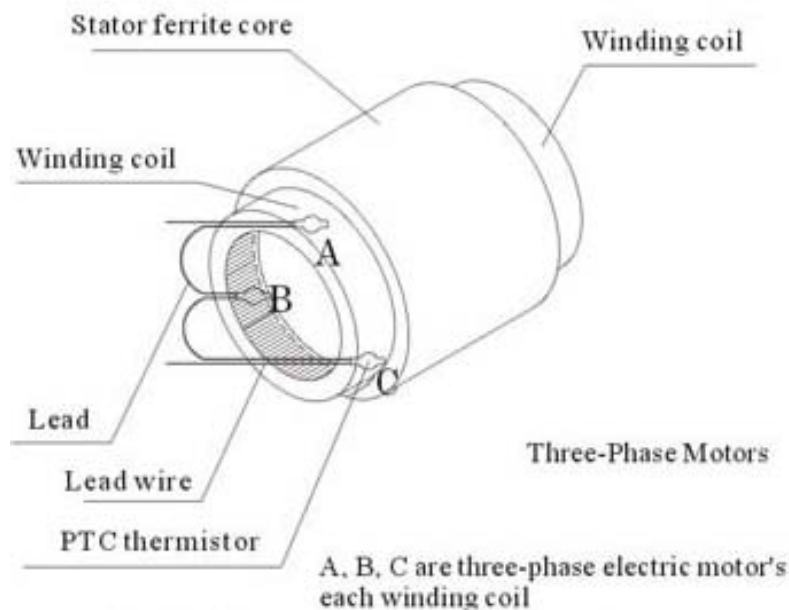
Put the products and quality certification in one plastic bag, and then seal it.;

The packing box containing the inspection reports, delivery receipts which includes the following items:

- a) The company trademark, name ;
- b) Production lot number ;
- c) Products code;
- e)Amount;
- f)The production date.

8: Installation

Installs the sensor part of PTC thermistor in the electric motor's coil (refer to picture)



* Embed thermistor in the coil, see the picture above.
Soak it together with the coil, then dry them completely.