

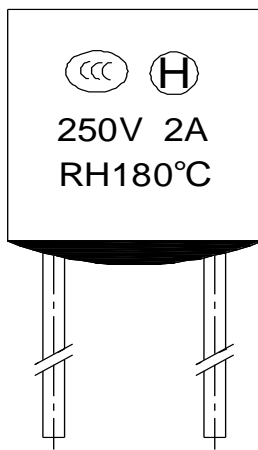
## 1. SCOPE

This specification defines the technical requirements of TZ-P series thermal-link that are produced according to TZ-P series thermal-link.

## 2. MATERIAL& STRUCTURE

- 1 Fusing Agent
- 2 Fusing Point
- 3 Lead Wire
- 4 Brass Solder
- 5 Plastic Shell
- 6 Epoxy Sealing

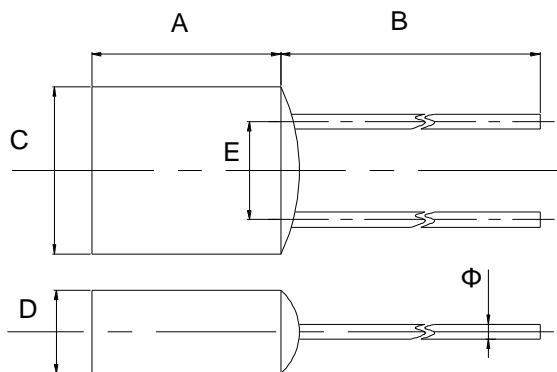
## 3. PRODUCT APPEARANCE



Printing content shall contain Trade Mark, Type, Rated Temperature, Rated Voltage, Rated Current, Safety Approval Logo. Marking shall be legible. Sealing Resin should be spread evenly filled. Tin plated layer of lead wire is good, without oxidation black spots. Shell without damage, perforated.

## 4 DIMENSION & TEMPERATURE PERFORMANCES

### 4.1 DIMENSION (mm)



A	B	C	D
7.0	According to the customer requirement	6.0	2.7
6.1		6.0	2.7
4.4		5.3	2.2

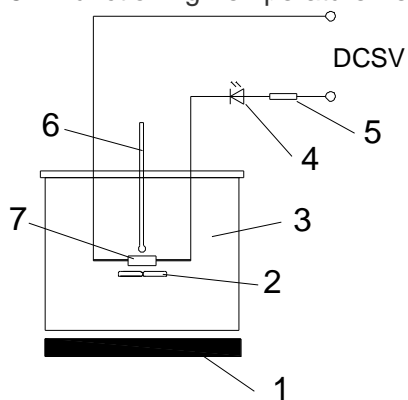
#### 4.2 Temperature Characteristics

Type	Rated Functioning Temp. $T_f(^{\circ}\text{C})$	Fusing-off Temp. $(^{\circ}\text{C})$	Holding Temp. $T_h(^{\circ}\text{C})$	Maximum Temp. Limit $T_m(^{\circ}\text{C})$	Rated Voltage AC (V)	Rated Current (A)	Safety Approvals		
							TUV	VDE	CCC
TZ-P75	75	73±2	48	180	250	1, 2, 3	○	○	●
TZ-P85	85	80±2	55	180			○	○	●
TZ-P92	92	87±2	60	180			○	○	●
TZ-P105	105	100±2	75	180			○	○	●
TZ-P115	115	111±2	80	180			○		●
TZ-P125	125	121±2	90	180			○		●
TZ-P130	130	126±1	92	180			○		●
TZ-P135	135	130±1	95	180			○	○	●
TZ-P140	140	136±1	102	180			○		●
TZ-P145	145	140±1	105	180			○		●
TZ-P150	150	145±1	115	180			○		●
TZ-P152	152	147±1	115	180			○	○	○

● Denotes for Approved ○ Denotes for pending

### 5 TEST EQUIPMENT AND TEST ITEM

#### 5.1 Functioning Temperature Test Equipment



1. Heater
2. Stirrer
3. Oil Bath
4. Light-emitting Diode
5. Current-limiting Resistance
6. Thermometer
7. Sample

## 5.2 Test Item

Test conditions: Temperature  $25\pm 10\%$ , Relative Humidity  $65\pm 15\%$

### 5.2.1 Functioning Temperature Test

Functioning Temperature is Tested according to IEC60691. put the oil bath in the constant temperature oven to measure.

### 5.2.2 Dimension

Sample's dimension be conducted by micrometer/vernier caliper.

### 5.2.3 Appearance

Compliance is checked by inspection.

### 5.2.4 Insulation Resistance

Insulation resistance shall be measured with a D.C. voltage of 500V by SP-3A digital megohm meter. The measured between the open terminals is not less than  $0.2M\Omega$ .

### 5.2.5 Dielectric Strength

Dielectric strength shall be measured by ZNY-12 voltage tester and the test voltage shall be applied for 1 minute, sample shall have no defects such as damage, breakdown.

### 5.2.6 Tensile Test

Tensile Test be conducted by push-pull detector, 1.5 pounds of tensile force shall be applied to Lead wire for 1 minute and it is not damaged.

### 5.2.7 Bending/twist test

Lead wire shall be bent through  $90^\circ$  at a location 10 mm from the body of the thermal-link and then twisted through  $180^\circ$ , it is not damaged.

## 6 INSPECTION

### 6.1 Lot Definition

The products which are produced of same material in the same manufacturing conditions can be 1 lot.

### 6.2 Inspection Mode

Appearance: one hundred percent inspection on line.

Characteristics: Products is inspected in spot check and Performance index test  $Ac=0$ .

### 6.3 Inspection Quantity

Samples are inspected according to MIL-STD-105ES3, product are inspected 50EA when the quantity is not less than 150,000EA, it is inspected 32EA when the quantity is less than 150,000EA.

## 7 TEST STANDARDS

Test Item	Unit	Standard	Test Equipment
Functioning Temperature		Tf +0/-10	Oven
High Voltage Test	V	1000+2U <sub>r</sub>	Voltage Tester
Insulation Resistance	MΩ	>2	Digital Megohm Meter
Resistance	mΩ	<1	Bridge Resistance Meter
High Voltage Test After Temperature Test	V	>500	Voltage Tester
Insulation Resistance After Temperature Test	MΩ	>0.2	Digital Megohm Meter
Bending / twist test	/	lead wire shall be bent through 90° at a location 10 mm from the body of the thermal-link and then twisted through 180°, it is not damaged.	Manual Operation

## 8 Inspection Report

We will providing the test report if customer require, the test report include functioning temperature, insulation resistance, voltage test, tensile and bending/twist test of lead wire test report.

## 9 PACKING & MARKING

### 9.1 Packing

100EA/little plastic bag→30 little plastic bags /inner box→15 inner boxes/ external carton

### 9.2 Marking

The markings for every thermal-link and packaging shall be prescribed as below:

- 1) Type
- 2) Rate Temperature
- 3) Rate Current & Voltage
- 4) Packing Quantity
- 5) Production Date

## 10 Storage & Storage Condition

The storage life of thermal-link is 12 month from customer put in storage. Thermal-link must be storage in 25 to 35 and relative humidity is 65% to 75%, the environment must be avoid sun exposure and pollution.