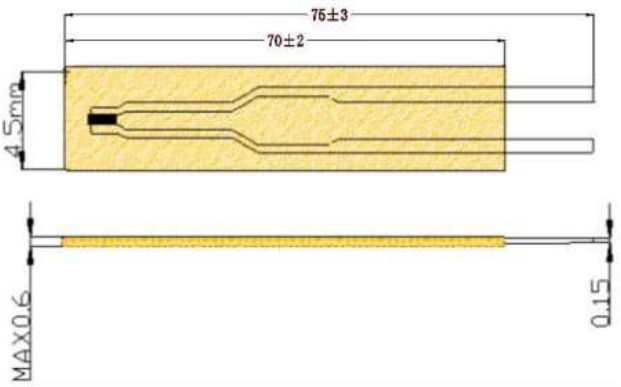
APPLICATION: BATTERY PACK, IN HIGH TEMPERATURE APPLICTIONS. POWER ELECTRONICS, HEAT SINK AND CONSUMER ELECTRONICs.

Product Drawing



Electrical Specification

Sl No	Description	Test Condition	Min	Nor	Max	Unit
1	Resistance @25°C	T: 25°C ±0.03°C I_{max}: 0.1mA	9900	10000	10100	Ω
2	β Value(25/85):	T: 25°C ±0.03°C T: 85°C ±0.03°C I_{max}: 0.1mA	3400.65	3435	3469.35	K
3	Insulation Resistance	Insulation resistance between element & covering moulding will be minimum of 100 MΩ.	100	---	---	MΩ
4	Dielectric Voltage strength	The sensor will pass Dielectric test at 1000VAC for 1 second.	---	1000 AC	---	V
5	Dissipation Factor	in air	---	Approx. 3.5	---	mW/°C
6	Thermal Time Constant	in air	---	Approx. 5		s
7	Maximum Power Rating	At 25°C	---	---	5	mW
8	Operating Temperature	---	-30	---	120	°C

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RT CHART

Temp (°C)	Res (kΩ) Nom	Temp (°C)	Res (kΩ) Nom	Temp (°C)	Res (kΩ) Nom	Temp (°C)	Res (kΩ) Nom
-40	203.22	20	12.10	70	2.23	120	0.60
-30	116.95	25	10.00	80	1.67		
-20	69.90	30	8.31	85	1.45		
-10	43.21	40	5.82	90	1.27		
0	27.54	50	4.16	100	0.97		
10	18.03	60	3.02	110	0.76		

Soldering

1. Soldering Temperature: 260°C Max.
2. Soldering Duration: 6.0 Second Max.
3. Preheat Temperature: 160°C for 3.0 Sec.

Reliability tests

1. **Dry Heat**

   After the test samples were exposed in air at 95 ℃ for 1,000 hours, the change ratio of the rated zero-power resistance shall be within ±1% of the initial value.

2. **Damp heat**

   After the test samples were exposed in the humidity of 95% at 40℃ for 1,000 hours, the change ratio of the rated zero-power resistance shall be within ±1% of the initial value.

3. **Cold**

   After the test samples were exposed in air at -30℃ for 1,000 hours, the change ratio of the rated zero-power resistance shall be within ±1% of the initial value.

4. **Humidity load**

   After DC 1mA current was applied to the test samples in the temperature of 40℃ and the humidity of 95% for 1,000 hours, the change ratio of the rated zero-power resistance shall be within ±2% of the initial value.

5. **Change of temperature**

One cycle of the change of temperature shall be carried our in the order of the following conditions.

- Room ambient temperature.(Initial value)
- At -30℃, for 30 minutes.
- Room ambient temperature, for 3 minutes.
- At + 90℃, for 30 minutes.
- Room ambient temperature, for 3 minutes.

After 100 cycles of change of temperature, the change ratio of the rated zero-power resistance shall be within ±1% of initial value.

6. **Robustness of Terminations (Tensile to horizontal direction)**

Hold the thermistor body so that lead wire shall be horizontal. After 1kgloadingweight was applied to the lead wire horizontally for 10 seconds, there shall be no visible damage.

7. **Free fall**

After three times natural fall to a maple board from50cmhigh, there shall be no visible damage.

Special Note

Product comply with RoHS directive