

Specification For Approval

Customer name : _____

Product name : NTC Thermistor

Customer PN : _____

MFG PN : MF53-104F-3950

MFG			Customer Confirmation		
Make	Check	Approval	Test	Check	Approval

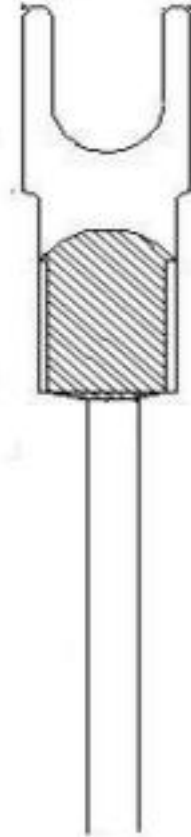
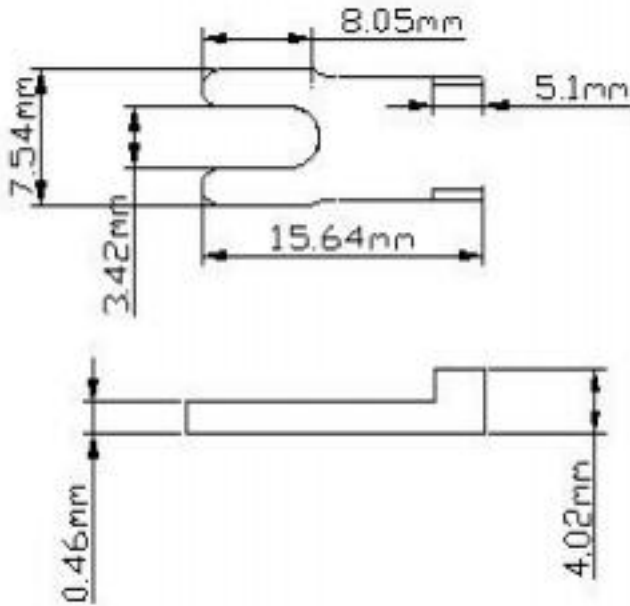
(Company name)

Confirm got the spec and accept as our company's warehouse accept standard.

Version	Revise content	Forwarder	Date
A/0	Just made	Terry	2018.7.5

1、 Overall Dimension

(Unit: mm)



2、 Material explanation

NO	Material Name	Item/PN
1	Element	R25=100KΩ±1% B25/50=3950±1%
2	Coating	Epoxy resin NB-1 Black
3	Housing	U shape plug in metal

3、 Electrical Performance:

NO	Item	Sign	Test Conditions	Min.	Normal value	Max.	Unit
1.	Resistance at 25°C	R25	Ta=25±0.05°C P _T ≤ 0.1mw	99	100	101	kΩ
2.	B Value	B25/50	$B=LN \frac{R_{T1}}{R_{T2}} / (\frac{1}{T1} - \frac{1}{T2})$	3910.5	3950	3989.5	k
3.	Dissipation factor	σ	In still air	≥2			mw/°C
4.	Time constant	τ	In still air	≤7			sec
5.	Operating temp.range	/	/	-55	/	+125	°C
6	Insulation resistance	/	100V DC 1min	≥100			MΩ
7.	Maximum rated power	Pmax	/	≤50			mW

4、 Reliability Test

NO	Item	Technical requirements	Test conditions and method
1.	Weldability	R25 $\Delta R/R \leq \pm 2\%$	Temperature: 245°C±5°C, Time:2-3Sec
2.	Resistance To Soldering Heat	R25 $\Delta R/R \leq \pm 2\%$	Tin stove temperature: $\leq 260 \pm 5^\circ\text{C}$, Immersion depth is $\leq 6\text{mm}$ distance far away with body, Time:5±1Sec
3	Steady State Temperatur	R25 $\Delta R/R \leq \pm 2\%$	Temperature:40±2°C; Humidity:93±2%, Time:500H
4	Temp. cycle test	R25 $\Delta R/R \leq \pm 2\%$	-55±3°C×30min \longleftrightarrow 25±3°C×5min×125±3°C×30min×25±3°C×5min× 5 cycles
5.	High temperature storage	R25 $\Delta R/R \leq \pm 2\%$	Temperature:125±5°C; Time:1000H
6	Low temperature storage	R25 $\Delta R/R \leq \pm 2\%$	Temperature:-55°C; Time:1000H
7	Drop test	No visible damage	Free fall into concrete floor from height 1M , 5 cycle。
8	Bending test		Bend 90°binding site wire and epoxy resin。 Back and forth 3 times
9	Tensile tests		Fixed resistors at both ends ,Pull: 5±1N, Time: 10±1 Sec

5、 Using the matters needing attention

5.1 Application: temperature measurement and control.

5.2 Avoid self-heat and measuring error caused by current is too high go through thermistor chip.

5.3 When soldering by soldering iron, soldering point should be min 2mm distance away from coated layer,soldering temperature should be less than 300°C , soldering time should be less than 3sec.

5.4 Products should be stored in the temperature of environment - 10 °C / + 40 °C, relative humidity is not more than 75%, environment should not have acid, alkali and corrosion gas or radioactive source.