



Dongguan Ampfort Electronics Co., Ltd.

东莞市安伏特电子有限公司

No.: AFT-S- 1604125G

Version: A/3

Page: 3

Specification For Approval

Customer name : _____

Product name : NTC Thermistor

Customer PN : _____

MFG PN : NSAD0303KC-331X

MFG			Customer Confirmation		
Make	Check	Approval	Test	Check	Approval

(Company name)

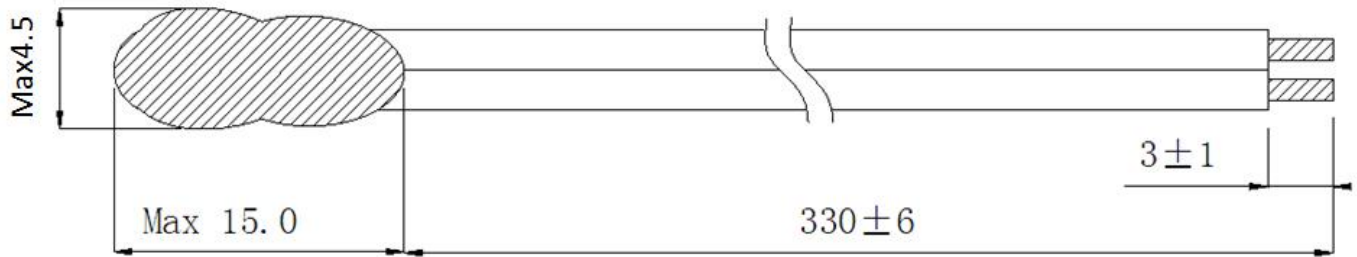
Confirm got the spec and accept as our company's warehouse accept standard.

Version	Revise content	Forwarder	Date
A/0	Just made	Cheng	2016-04-15
A/1	Wire insulation layer change	Cheng	2016-04-28
A/2	Change the head shape and wire length tolerance	Cheng	2016-04-28
A/3	Correct head size, add wire requirements	Cheng	2016-05-19



1、 Overall Dimension

(Unit: mm)



2、 Material explanation

NO	Material Name	Item/PN
2-1.	Element	R25=30K $\Omega \pm 10\%$ B25/50=3950 $\pm 1\%$
2-2.	Coating	Epoxy Resin (Black)
2-3.	Lead Wire	UL4411# 24AWG×2C 7*0.20mm 125°C 300V (Yellow) Diameter: 1.4 ± 0.05 * 2.9 ± 0.1 mm Meet SAEJ-1128

3、 Part Number :

NSA - $\frac{\times}{1}$ $\frac{\times}{2}$ $\frac{\times}{3}$ $\frac{\times}{4}$ $\frac{\times}{5}$ $\frac{\times}{6}$ $\frac{\times}{7}$ $\frac{\times}{8}$

- (1) NTC Thermistor Mark;
- (2) Head shape sign (B:Housing Type, D:Dip-Coating, M:Molding);
- (3) Series Type (0:Epoxy coating structure, 1:Epoxy coating structure(high temp)) ;
- (4) Nominal resistor is value at 25degree,unit is Ohm, previous two digital representation significant digitsofresistance, third digital representation the number of zero;
- (5) Resistance tolerance (%);
- (6) B Value constant sign In general, it is value of 25/50Deg, other conditions will remark and explain;
- (7) Length Sign, unit is mm ;
- (8) Special code ;



4、Electrical Performance:

NO	Item	Sign	Test Conditions	Min.	Normal value	Max.	Unit
4-1.	Resistance at 25°C	R25	Ta=25±0.05°C P _T ≤0.1mw	27.0	30.0	33.0	k Ω
4-2.	B Value	B25/50	$B=LN\frac{R_{T1}}{R_{T2}} / (\frac{1}{T1} - \frac{1}{T2})$	3910.5	3950	3989.5	k
4-3.	Dissipation factor	σ	Ta=25±0.5°C In still air	≅2			mw/°C
4-4.	Time constant	τ	Ta=25±0.5°C In still air	≅7			sec
4-5.	Operating temp.range	/	/	-20	/	+125	°C
4-6.	Insulation resistance	/	100V DC	100	/	/	M Ω
4-7.	Withstand voltage test	/	200V AC	5	/	/	Sec

5、Reliability Test

NO	Item	Technical requirements	Test conditions and method
5-1.	High temp. Test	ΔR/R25≤±3% ΔB/B≤±3% No change with withstand voltage、 Insulation performance. Appearance without damage.	100±5°C, power on 500±24 hrs, DC0.2mA
5-2.	Low temp. tes		-20±5°C, power on 500±24 hrs, DC0.2mA
5-3.	Endure moisture test		Store in environment 55±2°C,90%-95%RH for 500±24 hrs
5-4.	Temp. cycle test		-20°C×30min→Room temp.×10min→ in 100°C water×30min→Room temp.×10min 10 cycles
5-5.	Load electrify test		Power on DC1mA, 500hrs in room temp. and humid.
5-6.	Drop test		Free fall into concrete floor from height 1M , 10 cycle.
5-7.	Vibration test		Frequency range: 10~55HZ Total amplitude 1.52mm 1 cycle 1 min , direction and time X、Y、Z axis 2Hr each.
5-8.	Bending test		Bend 180°binding site wire and epoxy resin. Back and forth 10 times
5-9.	Tensile tests		Put 2 kg of force lasts 1 min

6、Storage Method

6.1 In the process of storage and transportation, per stack height is not more than 4 CTN products.

6.2 Available with all transport method, but avoid the rain, snow of direct or indirect leaching and mechanical damage.

6.3 Products should be stored in the temperature of environment - 10 °C / + 40 °C, relative humidity is not more than 80%, environment should not have acid, alkali and corrosion gas or radioactive source.