SPECIFICATION FOR APPROVAL

技术规格确认书

客户名称 Customer	
客户料号 Customer PN	42002-0024S
产品类型 Product Model	NTC Sensor
型号规格 Part Number	NSAB1802JD8-650T2I
文控编号 Specification file No.	
版本号 Version	V1

	DES.	CHK.	APP.
Manu.	RH LIANG	HO ZHANG	DZ LIN
User			

This Specification indicates the parameters, electrical properties, test condition, structure and dimension of the NTC Thermistors and Temperature Sensors manufactured by Uchi . it is sincerely for your confirmation got the spec. and accept as our company' s standard.

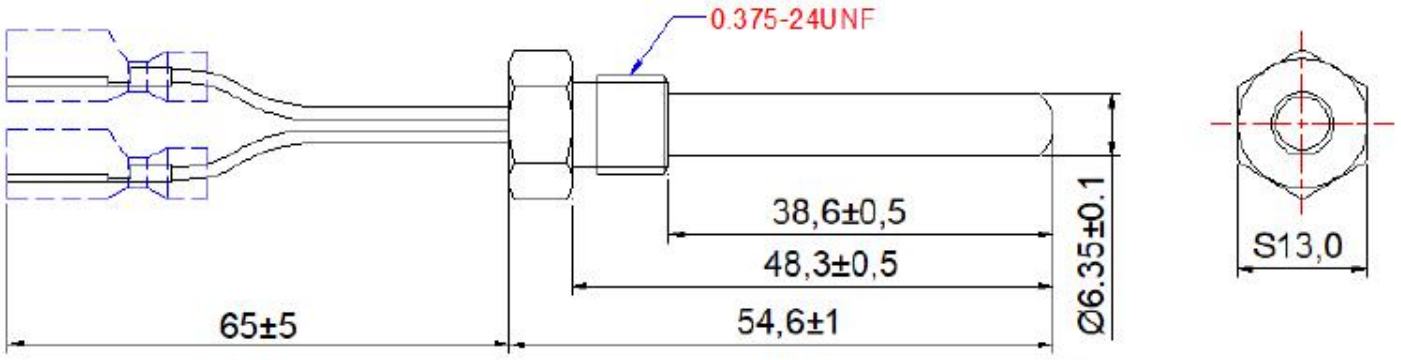
Any doubt, please contact us in due course, or if you change the usage of the products, or if the operational environment changed evidently, please inform us.

Revision record

Date 日期	Version 版本号	Revise Content 修订内容	Make 制作	Approval 批准
2019.08.27	V1	First Custom	HO ZHANG	DZ LIN

1、Overall Dimension

（Unit：mm）



2、Material explanation

NO	COMPONENT	MATERIAL AND SPECIFICATIONS	Q'TY	REMARK
2-1	ELEMENT	R200:8KΩ ±5%　R150/250:5300K ±3%　DDR	1 PCS	
2-2	LEAD WIRE	TPEF　AWG22*1C　320℃	65mm	(White)
2-3	COATING	Epoxy resin		(Black)
2-4	HOUSING	JM19105 Φ6.35*54.6+S13+24UNF　SUS304	1 PCS	
2-5	TERMINOL	AMP 250　#22-#18	2 PCS	(Red)

3、Part　Number ：

NS× - × × ××× × × ×××× ×

1　2 3　4　5 6　7　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 Resistance at 25℃ (previous two digits are significant figures, The last digit specifies the number of zeros to follow.)；

(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 200℃	R200	Ta=200±0.05℃ P_T≦0.1mw	7.6	8	8.4	kΩ
	Resistance at 150℃	R150	Ta=150±0.05℃ P_T≦0.1mw	/	29.65	/	kΩ
	Resistance at 250℃	R250	Ta=250±0.05℃ P_T≦0.1mw	/	2.705	/	kΩ
4-2.	B Value	B150/250	$B=LN\frac{R_{T1}}{R_{T2}}/(\frac{1}{T1}-\frac{1}{T2})$	5141	5300	5459	k
4-3.	Dissipation Coefficient	σ	In the air	3		/	mw/℃
4-4.	Time constant	τ	In the air	/	/	15	sec
4-5.	Insulation resistance	/	500VDC	100	/	/	MΩ
4-6.	Withstand voltage	/	1500V AC	5	/	/	Sec
4-7.	Operating temp.range	/	/	-30	/	+300	℃

5、Reliability Test

NO	Item	Technical requirements	Test conditions and method
5-1.	High temp. Test	ΔR/R25≤±3%	105±5℃，1000±24 hrs
5-2.	Low temp. tes	ΔB/B≤±3%	-30±5℃，1000±24 hrs
5-3.	Endure moisture test	No change with withstand voltage、 Insalution performance。 Appearance without damage.	Store in environment 65±2℃,90%-95%RH for 1000±24 hrs
5-4.	Temp. cycle test		Place the sample in -30℃ for 10 min, in 25℃ for 10 min and in 100 ℃ for 10 min. and repeat for 5 times.
5-5	Tensile tests	After tensile test, the sensor should be no damage and no falling.zero	Clamp wire at 50mm away from the inner edge of the connector terminal, then put 10N static tension between terminal and wire for 1min, along axial

		power resistance change rate should be less than ±1% in 25℃	direction.after the test, check if there is any borken wire, falling off or damage and measure zero-power re.
5-6	Drop test	No technical damage. zero power resistance change rate should be less than ±1% in 25℃	Drop the sensor from a meter high through axial and lateral direction to cement floor, each direction for 5 times.then check the appearance and measure zero-power resistance in 25℃
5-7	Vibration test		Frequency range ： 10-500HZ ， accelerated speed:10g，frequency sweep time: both X and Y for 30 min。recover for 4 hours after test, visual inspect the appearance of the sensor and measure zero-power resistance in 25℃

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 ℃ / + 40 ℃, relative humidity is not more than 80%, environment should not have acid, alkali and corrosion gas or radioactive source.

7、Attention on operation

7.1 It will bring extra heat and affect testing precision when the current pass through the sensor, With a view to it before selecting sensor.

7.2 When the product moves, the installation must be handled gently to avoid damage caused by pulling the product.

7.3 Product deformation, oxidation and other phenomena, can not be used, so as not to affect the temperature accuracy.

7.4 Excessive temperature variations should be avoided within the operating temperature range.

7.5 Do not use in corrosive gases (such as CO2,NH3,SOX,NOX, etc.) beyond specified conditions.

7.6 Do not use in electrolysis, salt, acid, alkaline and organic solvents beyond specified conditions.

7.7 In the limit temperature, the product can withstand too high or too low temperature shock in the short term, but can not put the product in the limit temperature for a long time, in order to avoid shortening the service life of the product.

If you need any help, please consult our sales staff or engineers, thank you!