

Specification For Approval

Customer name : _____

Product name : **NTC Thermistor**

Customer PN : _____

MFG PN : **CWFB0103FD1-801F2X**

MFG			Customer Confirmation		
Make	Check	Approval	Test	Check	Approval
HD CHENG	XR LU	DZ LING			

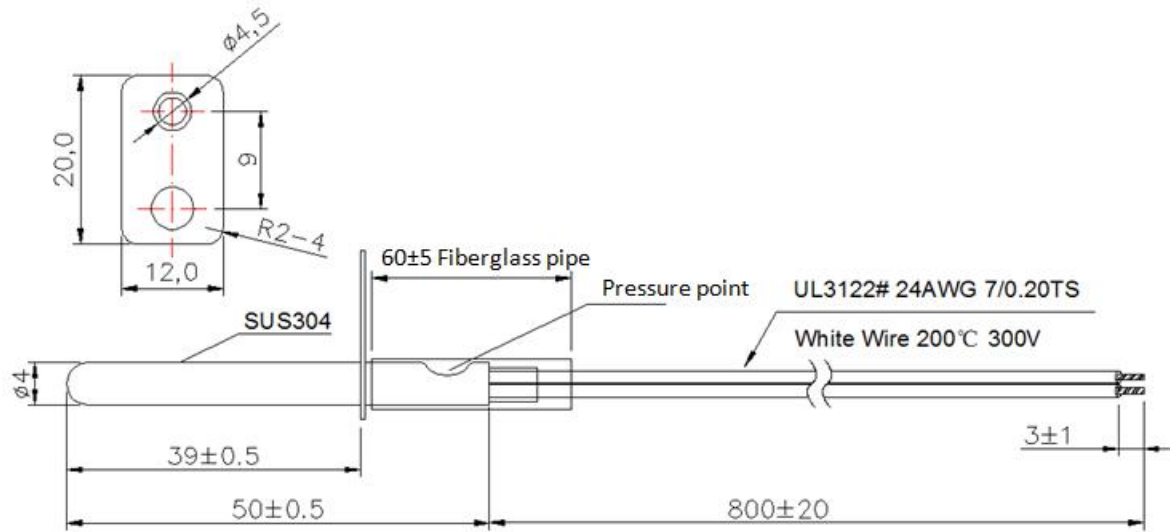
(Company name)

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

Version	Revise content	Forwarder	Date
A/1	Just made	Cheng	2017-07-14

1、 Overall Dimension

(Unit: mm)


2、 Material explanation

NO	COMPONENT	MATERIAL AND SPECIFICATIONS	Q'TY	REMARK
1.	Housing	$\phi 4 \times 50 + 12 \times 20$ Stainless steel	1	
2.	Element	R25=100K Ω ±1% B25/50=3950K±1% DD	1	
3.	Wire	UL3122# 24AWG 200°C 300V L=800mm	2	White
4.	Casing	$\phi 4$ 60±5 Fiberglass pipe	1	White
5.	Terminal	Peeling tin plating		

3、 Part Number :

$$\frac{\text{CWF}}{1} \quad \frac{-\times}{2} \quad \frac{\times}{3} \quad \frac{\times\times\times}{4} \quad \frac{\times}{5} \quad \frac{\times\times}{6} \quad \frac{\times\times\times\times}{7} \quad \frac{\times}{8}$$

(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 Resistance at 25°C (previous two digits are significant figures, The last digit specifies the number of zeros to follow.);

(5) Resistance tolerance (%);

(6) B Value (1:25/50; 2:25/85; 3:0/100; 4:0/50; 5:50/85; 6:100/200; 7:Other);

(7) Length Sign (unit is mm) ;

(8) Special code ;

4、Electrical Performance:

NO	Item	Sign	Test Conditions	Min.	Normal value	Max.	Unit
1.	Resistance at 25°C	R25	Ta=200±0.05°C P _T ≤ 0.1mw	9.9	10	10.1	KΩ
2.	B Value	B25/50	$B=LN \frac{R_{T1}}{R_{T2}} / \left(\frac{1}{T1} - \frac{1}{T2} \right)$	3910.5	3950	3989.5	k
3.	Dissipation factor	σ	Ta=25±0.5°C	2.5		/	mw/°C
4.	Time constant	τ	Ta=25±0.5°C	/	/	20	sec
5.	Insulation resistance	/	500VDC	100	/	/	MΩ
6.	Withstand voltage	/	1500V AC (3mA)	5	/	/	Sec
7.	Operating temp.range	/	/	-10	/	+200(head)	°C

5、Reliability Test

NO	Item	Technical requirements	Test conditions and method
1.	High temp. Test	ΔR/R25 ≤ ±3% ΔB/B ≤ ±3% No change with withstand voltage、 Insulation performance. Appearance without damage.	200±5°C, power on 500±24 hrs, DC0.2mA
2.	Low temp. tes		-10±5°C, power on 500±24 hrs, DC0.2mA
3.	Endure moisture test		Store in environment 55±2°C,90%-95%RH for 240±24 hrs
4.	Temp. cycle test		-20°C×30min→Room temp.×10min→ in 100°C water×30min→Room temp.×10min 10 cycles
5.	Load electrify test		Power on DC1mA, 500hrs in room temp. and humid.
6.	Tensile tests		Applying 2 kg force lasts 1 min.
7.	Drop test		Free fall into concrete floor from height 1M, 10 cycle.
8.	Vibration test		Frequency range: 10~55HZ Total amplitude 1.52mm 1 cycle 1 min, direction and time X、Y、Z axis 2Hr each.
9.	Bending test		Bend 180°binding site wire and epoxy resin. Back and forth 10 times

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.