SPECIFICATIONFOR APPROVAL

承 认 书

客户名称 (CUSTOMER):

产品名称 (PRODUCT ITEM): NTC 温度传感器

文件编号 (FILE NO) ： BYCZ2025051701

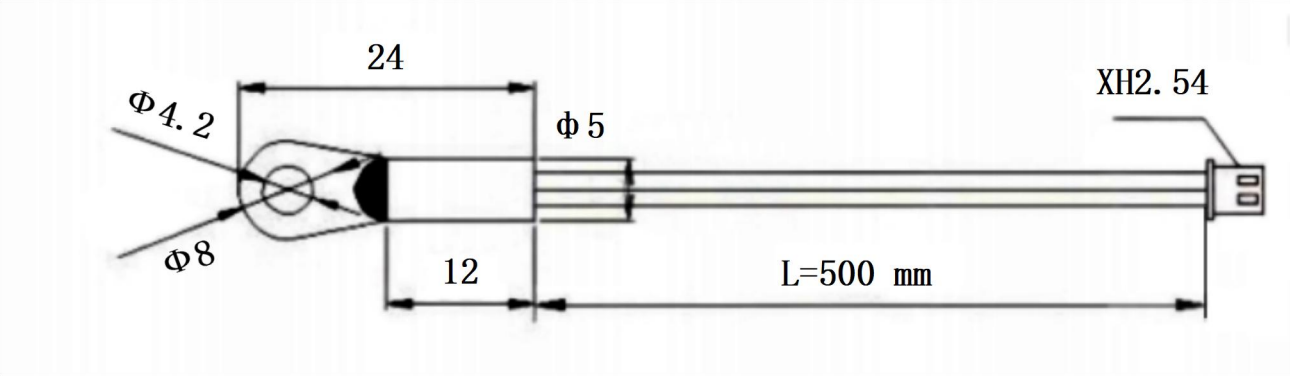
规格型号(PART NO):NTC 圆线耳-503F-B3950-B26L500-XH2.54

编辑日期 (DATE)：2025 年 5 月 17 日

客户确认(CUSTOMER CONFIRM)		批准 (APPROVE)
注: **承认书内容确认后,请盖骑缝章**		
客户确认栏(签字并盖章)		审核(CHECK)

1. 外形尺寸

(单位:mm)



2. 外形规格

序号	材料名称	规格/型号	数量	备注
1	热敏电阻	R25=50KΩ ±1% B25/50= 3950K ±1%	1PCS	
2	线环	5*12*24(4.2)接线环	1PCS	
3	环氧树脂	NB-1:NBH-1:NBX-1 包封料	/	
4	电线	26#2651 黑色线 L500mm 线长可按要求订制	1PCS	
5	端子	XH2.54-2Y 白色	1PCS	

3. 电气性能

序号	项目	符号	测试条件	最小值	正常值	最大值	单位
3-1	25℃的电阻值	R_{25}	Ta=25±0.05℃Pt≦0.1mw	49.5	50	50.5	kΩ
3-2	50℃的电阻值	R_{50}	Ta=50±0.05℃Pt≦0.1mw	17.5792	17.9397	18.3058	kΩ
3-3	B 值	$B_{(25/50)}$	$B = LN\frac{R_{T1}}{R_{T2}} / (\frac{1}{T1}-\frac{1}{T2})$	3910.5	3950	3989.5	k
3-4	耗散系数	σ	Ta=25±0.5℃	5	/	/	mw/℃
3-5	时间常数	τ	Ta=25±0.5℃	/	/	10	sec
3-6	绝缘电阻	/	500Vdc	100	/	/	
3-7	耐压测试	/	1500V AC，I=0.5mA	60	/	/	s
3-8	使用温度范围	/		-30	/	+105	℃

4. 可靠性测试

序号	项目	技术要求	测试条件及方法
4-1	高温试验	$\Delta R/R_{25}$ ≦±3%	100±5℃,通电 1000±24h,DC0.2mA
4-2	低温试验	$\Delta R/R_{25}$ ≦±3%	-30±5℃,通电 1000±24h,DC0.2mA
4-3	温度冷热循环试验	$\Delta R/R_{25}$ ≦±3%	-2℃×30→常温×10min→100℃水中×3min→常温×10min,来回共 10 循环周期
4-4	耐潮湿试验	$\Delta R/R_{25}$ ≦±3%	55±2℃,90%-95%RH 环境下放置 1000±24h

5. 机械性能

序号	项目	技术要求	测试条件及方法
5-1	拉力测试	树脂、不变形、无损伤	加载 10n(3F)1 分钟
		端子、不变形、无损伤	加载 10n(3F)1 分钟
5-2	落地测试	无可见性损伤	在 1 米的高度,让产品做自由落体运动,下落到 10mm 厚的橡木板上，5 次

6. 贮存方法

6.1 允许用任何方法运输,但要避免雨、雪的直接或间接的淋袭和机械损伤；

6.2 产品应贮存环境在温度为 10℃/+40℃,相对湿度不大于 80%,周围环境不应有酸性、碱性物质及腐蚀气体或辐射源。

TEMPERATURE VS RESISTANCE TABLE

Resistance 50k Ohms at 25deg. C

Resistance Tolerance + / -1%

B Value 3950K at 25/50 deg. C

B Value Tolerance + / - 1

Temp. (deg. C)	Rmax (k Ohms)	Rnor (k Ohms)	Rmin (k Ohms)
-40	1720.4968	1644.9799	1572.6204
-39	1609.3999	1539.7766	1473.0178
-38	1506.2157	1442.0018	1380.3876
-37	1410.3293	1351.0830	1294.1963
-36	1321.1794	1266.4968	1213.9561
-35	1238.2499	1187.7617	1139.2183
-34	1161.0673	1114.4360	1069.5708
-33	1089.1981	1046.1150	1004.6355
-32	1022.2430	982.4252	944.0639
-31	959.8356	923.0241	887.5356
-30	901.6390	867.5966	834.7560
-29	847.3433	815.8525	785.4534
-28	796.6630	767.5242	739.3771
-27	749.3354	722.3655	696.2966
-26	705.1183	680.1494	655.9989
-25	663.7885	640.6660	618.2872
-24	625.1400	603.7224	582.9802
-23	588.9828	569.1395	549.9099
-22	555.1415	536.7528	518.9213
-21	523.4540	506.4095	489.8710
-20	493.7704	477.9686	462.6263
-19	465.9522	451.2997	437.0642
-18	439.8712	426.2819	413.0711
-17	415.4087	402.8032	390.5413
-16	392.4548	380.7601	369.3770
-15	370.9079	360.0565	349.4877
-14	350.6734	340.6031	330.7890
-13	331.6639	322.3174	313.2029
-12	313.7983	305.1225	296.6568
-11	297.0011	288.9470	281.0832
-10	281.2024	273.7248	266.4194
-9	266.3371	259.3943	252.6072
-8	252.3449	245.8982	239.5922
-7	239.1695	233.1832	227.3239
-6	226.7588	221.1997	215.7554
-5	215.0640	209.9016	204.8427
-4	204.0399	199.2459	194.5452

-3	193.6442	189.1925	184.8246
-2	183.8378	179.7039	175.6455
-1	174.5840	170.7455	166.9747
0	165.8486	162.2846	158.7813
1	157.5997	154.2909	151.0365
2	149.8076	146.7361	143.7132
3	142.4446	139.5937	136.7861
4	135.4847	132.8389	130.2318
5	128.9037	126.4487	124.0281
6	122.6789	120.4015	118.1545
7	116.7891	114.6769	112.5916
8	111.2145	109.2560	107.3213
9	105.9367	104.1212	102.3267
10	100.9382	99.2559	97.5919
11	96.2028	94.6444	93.1020
12	91.7152	90.2722	88.8431
13	87.4613	86.1257	84.8020
14	83.4276	82.1920	80.9666
15	79.6015	78.4591	77.3253
16	75.9714	74.9157	73.8673
17	72.5262	71.5513	70.5823
18	69.2556	68.3558	67.4609
19	66.1497	65.3199	64.4941
20	63.1995	62.4349	61.6734
21	60.3963	59.6925	58.9909
22	57.7321	57.0848	56.4392
23	55.1994	54.6047	54.0111
24	52.7909	52.2453	51.7001
25	50.5000	50.0000	49.5000
26	48.3625	47.8628	47.3635
27	46.3266	45.8279	45.3301
28	44.3867	43.8900	43.3945
29	42.5380	42.0439	41.5514
30	40.7757	40.2849	39.7959
31	39.0954	38.6083	38.1235
32	37.4928	37.0100	36.5299
33	35.9639	35.4860	35.0108
34	34.5051	34.0323	33.5626
35	33.1127	32.6454	32.1815
36	31.7835	31.3220	30.8641
37	30.5142	30.0588	29.6071
38	29.3019	28.8527	28.4076
39	28.1438	27.7010	27.2626
40	27.0371	26.6010	26.1693

41	25.9793	25.5500	25.1252
42	24.9681	24.5456	24.1279
43	24.0012	23.5857	23.1750
44	23.0764	22.6679	22.2644
45	22.1917	21.7902	21.3939
46	21.3452	20.9508	20.5617
47	20.5350	20.1477	19.7658
48	19.7595	19.3793	19.0045
49	19.0169	18.6438	18.2762
50	18.3058	17.9397	17.5792
51	17.6247	17.2656	16.9122
52	16.9721	16.6200	16.2735
53	16.3467	16.0015	15.6620
54	15.7473	15.4090	15.0764
55	15.1727	14.8411	14.5153
56	14.6217	14.2969	13.9778
57	14.0933	13.7751	13.4626
58	13.5865	13.2748	12.9689
59	13.1002	12.7949	12.4955
60	12.6335	12.3346	12.0415
61	12.1857	11.8930	11.6062
62	11.7557	11.4692	11.1885
63	11.3429	11.0624	10.7878
64	10.9464	10.6719	10.4033
65	10.5656	10.2970	10.0342
66	10.1998	9.9369	9.6799
67	9.8482	9.5910	9.3396
68	9.5104	9.2588	9.0129
69	9.1856	8.9395	8.6990
70	8.8734	8.6326	8.3975
71	8.5732	8.3377	8.1077
72	8.2845	8.0541	7.8293
73	8.0068	7.7814	7.5616
74	7.7396	7.5192	7.3043
75	7.4825	7.2669	7.0568
76	7.2351	7.0242	6.8188
77	6.9969	6.7907	6.5899
78	6.7676	6.5659	6.3696
79	6.5468	6.3496	6.1577
80	6.3342	6.1413	5.9537
81	6.1294	5.9408	5.7574
82	5.9321	5.7476	5.5684
83	5.7420	5.5616	5.3864
84	5.5588	5.3824	5.2111

85	5.3822	5.2097	5.0423
86	5.2120	5.0433	4.8797
87	5.0478	4.8829	4.7230
88	4.8896	4.7283	4.5719
89	4.7370	4.5793	4.4264
90	4.5897	4.4355	4.2861
91	4.4477	4.2969	4.1508
92	4.3107	4.1632	4.0204
93	4.1784	4.0342	3.8946
94	4.0508	3.9097	3.7732
95	3.9276	3.7896	3.6562
96	3.8086	3.6737	3.5432
97	3.6937	3.5618	3.4343
98	3.5828	3.4538	3.3291
99	3.4756	3.3495	3.2275
100	3.3721	3.2487	3.1295
101	3.2721	3.1514	3.0348
102	3.1755	3.0574	2.9434
103	3.0821	2.9666	2.8552
104	2.9919	2.8789	2.7699
105	2.9046	2.7941	2.6875
106	2.8203	2.7121	2.6079
107	2.7387	2.6329	2.5310
108	2.6598	2.5563	2.4566
109	2.5835	2.4823	2.3847
110	2.5097	2.4106	2.3153
111	2.4383	2.3414	2.2481
112	2.3692	2.2744	2.1831
113	2.3023	2.2095	2.1203
114	2.2376	2.1468	2.0595
115	2.1750	2.0861	2.0007
116	2.1143	2.0274	1.9438
117	2.0556	1.9705	1.8887
118	1.9988	1.9155	1.8355
119	1.9437	1.8622	1.7839
120	1.8904	1.8106	1.7340