

# SPECIFICATION FOR APPROVAL

## 承认书

客户名称 (CUSTOMER):

产品名称 (PRODUCT ITEM): NTC 温度传感器

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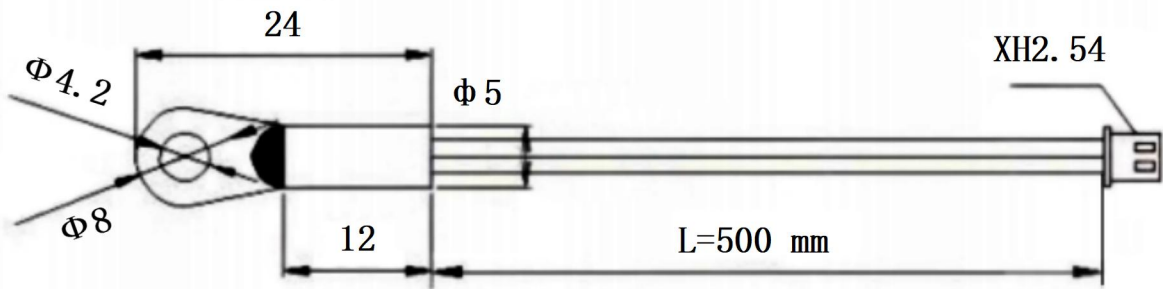
规格型号 (PART NO): NTC 圆线耳-104F-B3950-B26L500-XH2.54

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=100K $\Omega$ $\pm$ 1% B25/50= 3950K $\pm$ 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 L500 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°C 的电阻值	$R_{25}$	Ta=25 $\pm$ 0.05°C Pt $\leq$ 0.1mw	99	100	101	k $\Omega$
3-2	50°C 的电阻值	$R_{50}$	Ta=50 $\pm$ 0.05°C Pt $\leq$ 0.1mw	35.1631	35.8842	36.6163	k $\Omega$
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	$\sigma$	Ta=25 $\pm$ 0.5°C	5	/	/	mw/ °C
3-5	时间常数	$\tau$	Ta=25 $\pm$ 0.5°C	/	/	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	°C

## 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	$\Delta R/R_{25} \cong \pm 3\%$	100±5℃, 通电 1000±24h, DCO. 2mA
4-2	低温试验	$\Delta R/R_{25} \cong \pm 3\%$	-30±5℃, 通电 1000±24h, DCO. 2mA
4-3	温度冷热循环试验	$\Delta R/R_{25} \cong \pm 3\%$	-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	$\Delta R/R_{25} \cong \pm 3\%$	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 100k 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)
-20	1008.2715	975.8038	944.2871
-19	950.6732	920.5962	891.3817
-18	896.7294	868.8615	841.7754
-17	846.1864	820.3603	795.2428
-16	798.8093	774.8710	751.5750
-15	754.3810	732.1889	710.5786
-14	712.7005	692.1238	672.0741
-13	673.5814	654.4999	635.8954
-12	636.8513	619.1540	601.8883
-11	602.3502	585.9346	569.9095
-10	569.9298	554.7016	539.8262
-9	539.4526	525.3245	511.5153
-8	510.7906	497.6821	484.8615
-7	483.8254	471.6621	459.7586
-6	458.4467	447.1599	436.1073
-5	434.5519	424.0781	413.8153
-4	412.0460	402.3264	392.7968
-3	390.8401	381.8204	372.9716
-2	370.8519	362.4818	354.2653
-1	352.0045	344.2375	336.6083
0	334.2264	327.0195	319.9360
1	317.4508	310.7640	304.1877
2	301.6157	295.4121	289.3072
3	286.6631	280.9084	275.2418
4	272.5389	267.2014	261.9423
5	259.1926	254.2428	249.3626
6	246.5770	241.9877	237.4601
7	234.6482	230.3940	226.1943
8	223.3650	219.4224	215.5278
9	212.6890	209.0361	205.4255
10	202.5840	199.2007	195.8544
11	193.0167	189.8841	186.7836
12	183.9552	181.0559	178.1844
13	175.3704	172.6881	170.0298
14	167.2345	164.7540	162.2942
15	159.5216	157.2290	154.9539
16	152.2075	150.0898	147.9867

17	145.2694	143.3144	141.3716
18	138.6861	136.8825	135.0889
19	132.4375	130.7749	129.1202
20	126.5049	124.9734	123.4482
21	120.8705	119.4612	118.0564
22	115.5180	114.2223	112.9298
23	110.4316	109.2417	108.0537
24	105.5969	104.5053	103.4147
25	101.0000	100.0000	99.0000
26	96.7127	95.7132	94.7146
27	92.6306	91.6333	90.6378
28	88.7426	87.7492	86.7583
29	85.0386	84.0505	83.0655
30	81.5090	80.5274	79.5497
31	78.1446	77.1707	76.2012
32	74.9370	73.9717	73.0115
33	71.8779	70.9222	69.9721
34	68.9598	68.0144	67.0752
35	66.1755	65.2411	64.3134
36	63.5182	62.5954	61.6798
37	60.9814	60.0707	59.1677
38	58.5591	57.6610	56.7710
39	56.2456	55.3604	54.4837
40	54.0355	53.1635	52.3004
41	51.9235	51.0651	50.2158
42	49.9049	49.0602	48.2250
43	47.9752	47.1443	46.3232
44	46.1298	45.3130	44.5062
45	44.3649	43.5621	42.7696
46	42.6764	41.8878	41.1096
47	41.0607	40.2862	39.5224
48	39.5143	38.7539	38.0044
49	38.0339	37.2876	36.5524
50	36.6163	35.8842	35.1631
51	35.2587	34.5405	33.8335
52	33.9582	33.2538	32.5608
53	32.7121	32.0214	31.3423
54	31.5178	30.8408	30.1754
55	30.3731	29.7096	29.0576
56	29.2755	28.6253	27.9868
57	28.2230	27.5860	26.9607
58	27.2135	26.5895	25.9772
59	26.2450	25.6338	25.0343
60	25.3156	24.7171	24.1303

61	24.4237	23.8376	23.2633
62	23.5675	22.9937	22.4315
63	22.7454	22.1836	21.6336
64	21.9560	21.4061	20.8678
65	21.1977	20.6594	20.1328
66	20.4692	19.9424	19.4272
67	19.7693	19.2537	18.7497
68	19.0966	18.5920	18.0990
69	18.4499	17.9562	17.4740
70	17.8282	17.3452	16.8735
71	17.2304	16.7578	16.2965
72	16.6554	16.1930	15.7419
73	16.1023	15.6499	15.2087
74	15.5702	15.1276	14.6961
75	15.0581	14.6251	14.2032
76	14.5652	14.1417	13.7291
77	14.0907	13.6764	13.2729
78	13.6339	13.2286	12.8341
79	13.1940	12.7976	12.4118
80	12.7703	12.3825	12.0053
81	12.3622	11.9828	11.6139
82	11.9689	11.5978	11.2372
83	11.5900	11.2270	10.8743
84	11.2247	10.8697	10.5248
85	10.8727	10.5254	10.1881
86	10.5332	10.1935	9.8637
87	10.2059	9.8736	9.5511
88	9.8902	9.5652	9.2499
89	9.5858	9.2678	8.9594
90	9.2920	8.9809	8.6794
91	9.0085	8.7042	8.4094
92	8.7350	8.4373	8.1489
93	8.4710	8.1797	7.8977
94	8.2161	7.9312	7.6554
95	7.9700	7.6912	7.4215
96	7.7324	7.4596	7.1958
97	7.5029	7.2360	6.9780
98	7.2812	7.0201	6.7677
99	7.0670	6.8115	6.5647
100	6.8601	6.6101	6.3686
101	6.6601	6.4155	6.1793
102	6.4668	6.2274	5.9964
103	6.2799	6.0457	5.8197
104	6.0993	5.8701	5.6489

105	5.9246	5.7003	5.4839
106	5.7557	5.5362	5.3245
107	5.5923	5.3775	5.1703
108	5.4343	5.2240	5.0213
109	5.2814	5.0755	4.8772
110	5.1334	4.9319	4.7379
111	4.9903	4.7930	4.6031
112	4.8517	4.6586	4.4727
113	4.7175	4.5285	4.3466
114	4.5877	4.4026	4.2245
115	4.4619	4.2807	4.1064
116	4.3401	4.1627	3.9921
117	4.2222	4.0484	3.8815
118	4.1079	3.9378	3.7743
119	3.9972	3.8306	3.6706
120	3.8900	3.7268	3.5702
121	3.7861	3.6263	3.4729
122	3.6854	3.5289	3.3787
123	3.5877	3.4345	3.2874
124	3.4931	3.3430	3.1990
125	3.4014	3.2543	3.1133