



产品规格承认书

客户名称:

品 名: 热敏电阻

型号规格: NTC 10K B=3435 $\pm$ 1% 漆包铜线长60mm 浸锡2.0mm

产品编码: MF52B103F3435L060-24

客户料号:

承认书编号: CX-NTC-250714-02

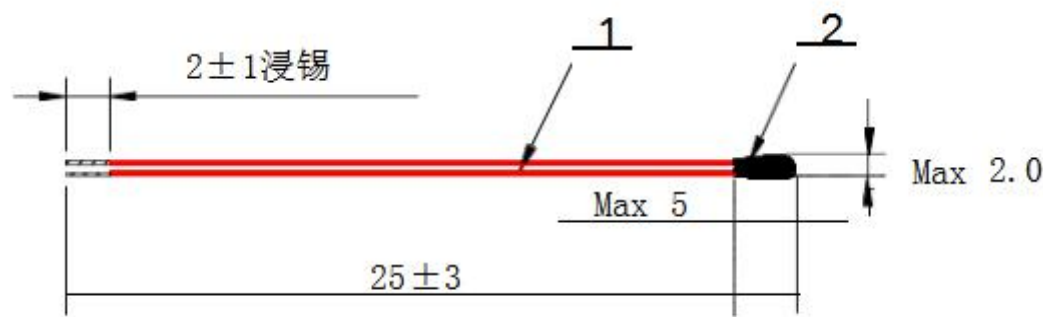
发行日期: 2025-8-16

东莞市成希电子有限公司			客户承认		
拟订	审核	核准	承认	审核	核准
傅映霞 2025-8-16	李丹 2025-8-16	徐滢涛 2025-8-16			



产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修定日期 Revision date	

1.产品外形图(Product Drawing)



2.材料清单(Material List)

序号 (NO.)	零件名称 (Part Name)	规格描述 (Specification Description)	用量 (Q'TY)	备注 (Remark)
1	引线	Φ0.28漆包线	2PCS	
2	树脂	黑色环氧树脂	/	
	电 阻	R25=10K Ω ±1%； B25/85=3435K±1%	1PCS	

产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)	MF52B103F3435L060-24	版 本 Edition	1.0
规格型号(Specification model)	103F-3435-60L	修定日期 Revision date	

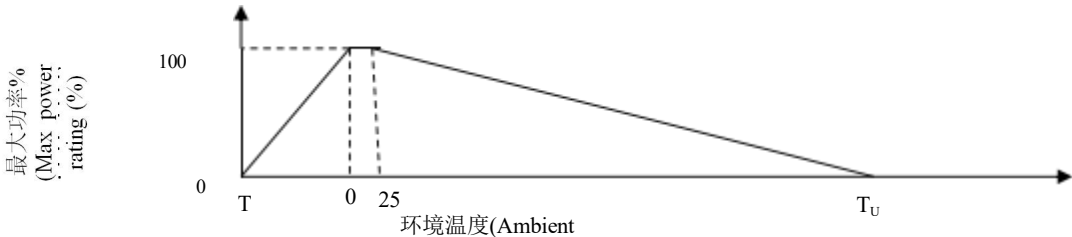
3. 电气性能(Electrical Characteristic)

序号 NO.	项目(Item)	代号 (Symbol)	测试条件 (Test Conditions)	最小值 (Min.)	中心值 (Nor.)	最大值 (Max.)	单位 (Unit)
3-1	25℃电阻值 (Resistance At 25℃)	R25	Ta=25℃±0.05℃ P _T ≤0.1mW	9.90	10.00	10.10	KΩ
3-2	85℃电阻值 (Resistance At 85℃)	R85	Ta=85℃±0.05℃ P _T ≤0.1mW	/	1.46	/	KΩ
3-3	B值 (B Value)	B _{25/85}	(1779.707* LnK)	3400.65	3435.00	3469.35	K
3-4	耗散系数 (Thermal Dissipation Constant)	δ	Ta=25℃ (in air)	0.7	/	/	mW/℃
3-5	响应时间-液体中 (Response Time-In liquid)	τ	25℃→85℃ T ₁ =25+(85-25)*63.2%=62.9℃	/	/	7	Sec
3-6	绝缘测试(Insulation test)	/	DC500V 3 Sec	50	/	/	MΩ
3-7	耐压测试 (Hi-Pot Test)	/	500V AC 5.0mA	/	/	5	Sec

4.最大使用等级(Ratings)

序号 NO.	项目 (Item)	规格 (Specification)	单位 (Unit)
4-1	成品工作温度范围 (Product Working Temp.Range)	-30 ~ +120	℃
4-2	最大额定功率(25℃) (Max.Dissipation power(25℃))	3.5	mW

最大功率(Maximum power rating (Pmax))



备注(Note): T_L = 工作环境最低温度 (Minimum Temp. of Operating Temp. Range (℃))

T_U = 工作环境最高温度(Maximum Temp. of Operating Temp. Range (℃))

产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修定日期 Revision date	

5.机械性试验（Mechanical Tests）

序号 NO.	项目 (Item)	技术要求 (Pass Criteria)	测试条件 (Test Conditions)
5-1	拉力测试 (Pull Test)	不松脱、 不变形 (NO loosening NO deformation)	传感器引线上挂0.5kg重物并保持至少10秒 (On the sensor lead 0.5 kg weight and keep at least 10 seconds)
5-2	自由落体测试(30mm引线) (Drop Test-30mm Wire)	外观应无明显损伤,性能测试的要求 (Appearance should be no visible damage, performance test requirements)	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 (Drop on a 10mm thick wooden board from a height of 1m for 5 times)
5-3	弯曲试验 Bending test		沿电线方向,用2N的力,任意方向弯曲90°来回3次 (Flex the lead wire with a force of 2N (0.2kg*f) to an angle of 90 deg for 3 times.)

6. 可靠性测试(Reliability Tests)

序号 NO.	项目 (Item)	技术要求 (Pass Criteria)	测试条件 (Test Conditions)
6-1	高温储存 (High Temperature Storage)	$\Delta R/R25 \leq \pm 3\%$ $\Delta B/B25/85 \leq \pm 3\%$ 相对初始值 (Relative to the initial value)	120±3℃，1000±24h 取出产品后在常态下恢复1H(Take out the product under normal recovery after 1H)
6-2	低温储存 (low Temperature Storage)		-30±3℃，1000±24h 取出产品后在常态下恢复1H(Take out the product under normal recovery after 1H)
6-3	恒温恒湿测试 (Humidity test)	$\Delta R/R25 \leq \pm 3\%$ $\Delta B/B25/85 \leq \pm 3\%$ 相对初始值(Relative to the initial value)	40±2℃，相对湿度90%～95%的环境中放置1000H,取出充分除去表面水滴并在常态下恢复1H; (40 + 2℃, relative humidity 90% ~ 95% of the environment to place 1000 h, remove sufficient to remove surface water droplets and recovery under normal 1H)
6-4	温度冲击试验 (in air)	$\Delta R/R25 \leq \pm 3\%$ $\Delta B/B25/85 \leq \pm 3\%$ 相对初始值(Relative to the initial value)	顺序:常温25℃--高温120±2℃放置10min—室温25℃放置5min—低温-30±2℃放置10min—室温25℃放置5min,循环20次后,取出在常温下恢复1H; (Order:room 25℃, high temperature to 120℃±2℃ for 10min -- room 25℃ for 5min -- low -30℃±2℃ for 10min -- room 25℃ for 5min, circulation after 20 times, take back 1H at room temperature;)

产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修定日期 Revision	

7.烙铁焊接条件(Soldering Iron setting)

序号 NO.	项目 (Item)	测试条件 (settings /parameters)
7-1	烙铁温度 (Temperature of Soldering Iron-tip)	T≤360℃
7-2	焊接时间 (Soldering Time)	S≤3Sec
7-3	距电阻的距离 (Distance From Thermistor)	L≥10mm

8.产品储存条件(Storage Conditions)

8-1 储存条件(Storage Conditions) :

- 1.储存温度(Ambicnt Temperature): -10℃~+40℃
- 2.相对湿度(Relative Humidity): ≡ 75%RH
- 3.远离腐蚀和阳光照射(Keep away from corrosive atmosphere and sunlight)

8-2 储存时间(Period of Storage):

- 1.正常放置1年(Normal placed 1 year)
- 2.放置超过正常时间或储存环境发生变化时,使用前需重新测试后方可使用(Placed more than normal time or storage environment changes, Can be used only need to test before use.)

产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修定日期 Revision date	

9.产品使用条件及注意事项(Product use conditions and the matters needing attention)

9.1 产品使用的最大工作温度，最大功率等，均依照规格书要求作业，不可超出规格书之范围；

(The maximum service temperature of product use, the maximum power to wait, all in accordance with the specification requirements homework, shall not exceed the scope of specification)

9.2 产品移动·安装必须轻拿轻放，不可用力拉动;注意保护头部电阻；

(Product mobile, installation must be handled with care not pulling force,attention to protect the head ntc resistance;)

9.3 外壳发生变形·氧化等现象时，不要使用，以免影响感温精度；

(Cap occur deformation, oxidation etc. Phenomenon, do not use, so as not to affect the temperature accuracy)

9.4 产品外观发现变形·破损时，不可使用，以免影响电性能；

(Product appearance found deformation, breakage, do not use, lest affect performance)

9.5 在操作温度范围内，应尽量避免过于激烈的温度变化；

(Avoid from exceeding radical temperature change,which is beyond operation temperature range)

9.6 不可施加过度振动的压力；

(Do not add excessive vibration shocking pressure;)

9.7 避免过度拉伸,弯曲导线；

(Avoid from excessive pulling and bending of the lead wire)

9.8 不要使用在有腐蚀性气体(CO₂,NH₃,Sox,NOx)超出指定的条件。不要使用在电解、盐、酸、碱性和有机溶剂超出指定的条件；

(Do not use in corrosiveness gas atmosphere (CO₂,NH₃,Sox,NOx) beyond the designated condition.) Do not use at the place where the sensor touches the electrolytic,brine,acid,alkaline and organic solvent beyond the designated condition;)

9.9 尽可能避免使用在有水·高湿及其它带腐蚀性的环境中；

(As far as possible avoid using in water, high humidity and other have rot environment.)

9.10 通过负温度系数温度传感器的电流会引起组件自身发热而产生测量误差，因此需在使用前将此因素考虑在内。

(Through the negative temperature coefficient temperature sensor current will cause element own fever and produce measurement error, therefore need before use this factor into consideration.)

9.11 产品储存时间超过一年，为确保使用正常且精度不受影响，建议重新检测后投入使用；

(Product storage time more than a year, in order to ensure the use of normal and precision is not affected, recommends testing after put into use;)

9.12 产品废弃时,需找专门的回收公司或发回原生产工厂进行处理；

(Waste products, need to find a recycling company specialized or back to the original production plant for processing;)

9.13 如果有任何不清楚的地方,请咨询到我们公司的销售主管或工程师。

(If there is anything remaining unclear, please contact to our company's sales supervisor/engineer.)

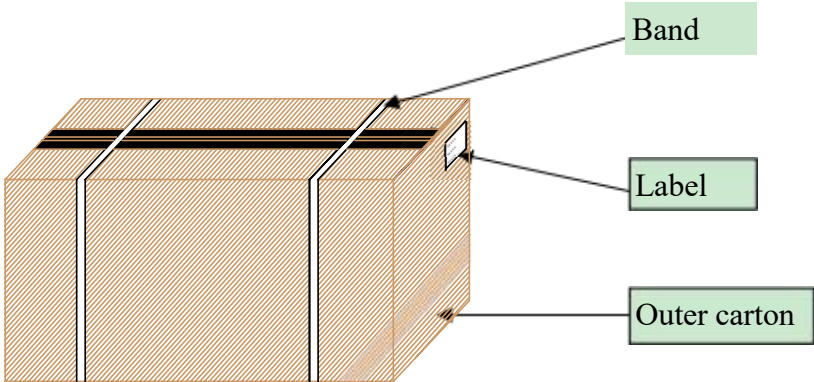
产品名称(Product Name)	NTC 温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修定日期 Revision	

10.包装(Packing)

10-1 内包装袋:PE袋(PE bag)

- 1.1000PCS/袋（1000PCS/bag）。
- 2.最小包装上签产品标签及客户料号(Label with product name and customer number)
- 3.具体包装数量在批量交货前再次确认,确保包装经济、安全(The specific number of packages in the batch to confirm again before delivery, to ensure that the packaging economy and safety.)

10.2 外包装箱(Outer packing container)



10-3 以上包装为预估包装，正式交货前请允许根据实际数量更改包装要求。
(Actual size and quantity may subject to be changed according to the final production situation.)

产品名称(Product Name)	NTC温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修订日期 Revision date	

R-T Table

R25=10KΩ±1% , B25/85=3435K±1%							
Temp. (deg. C)	Rmin (kΩ)	Rnor (kΩ)	Rmax (kΩ)	Temp. (deg. C)	Rmin (kΩ)	Rnor (kΩ)	Rmax (kΩ)
-55	476.131	500.130	525.285	-17	58.249	59.900	61.591
-54	449.575	471.961	495.412	-16	55.527	57.073	58.657
-53	424.099	444.955	466.789	-15	52.950	54.398	55.881
-52	399.782	419.191	439.499	-14	50.509	51.866	53.254
-51	376.664	394.713	413.586	-13	48.196	49.468	50.768
-50	354.759	371.534	389.063	-12	46.004	47.196	48.413
-49	334.061	349.645	365.919	-11	43.925	45.042	46.182
-48	314.547	329.020	344.125	-10	41.953	43.000	44.068
-47	296.181	309.621	323.639	-9	40.081	41.062	42.063
-46	278.922	291.402	304.410	-8	38.304	39.224	40.161
-45	262.720	274.309	286.381	-7	36.617	37.479	38.357
-44	247.524	258.287	269.492	-6	35.014	35.822	36.644
-43	233.280	243.278	253.680	-5	33.490	34.247	35.018
-42	219.934	229.223	238.882	-4	32.041	32.751	33.474
-41	207.432	216.066	225.037	-3	30.664	31.329	32.006
-40	195.722	203.750	212.085	-2	29.354	29.977	30.611
-39	184.755	192.220	199.967	-1	28.107	28.691	29.285
-38	174.482	181.427	188.630	0	26.963	27.513	28.070
-37	164.856	171.320	178.020	1	25.790	26.303	26.825
-36	155.836	161.854	168.087	2	24.714	25.195	25.683
-35	147.379	152.984	158.787	3	23.688	24.139	24.597
-34	139.447	144.670	150.073	4	22.711	23.134	23.562
-33	132.005	136.874	141.907	5	21.780	22.176	22.577
-32	125.020	129.559	134.250	6	20.892	21.263	21.638
-31	118.460	122.694	127.067	7	20.045	20.392	20.744
-30	112.296	116.247	120.325	8	19.237	19.562	19.891
-29	106.501	110.189	113.994	9	18.466	18.771	19.078
-28	101.050	104.494	108.045	10	17.731	18.016	18.303
-27	95.920	99.137	102.452	11	17.028	17.295	17.564
-26	91.090	94.096	97.192	12	16.358	16.607	16.858
-25	86.540	89.350	92.241	13	15.717	15.950	16.185
-24	82.251	84.877	87.579	14	15.105	15.323	15.542
-23	78.206	80.662	83.187	15	14.520	14.724	14.929
-22	74.389	76.687	79.047	16	13.961	14.151	14.343
-21	70.785	72.935	75.143	17	13.427	13.604	13.783
-20	67.382	69.394	71.459	18	12.916	13.081	13.248
-19	64.166	66.049	67.981	19	12.427	12.581	12.736
-18	61.125	62.888	64.696	20	11.959	12.103	12.248

产品名称(Product Name)	NTC温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修订日期 Revision date	

R-T Table

R25=10KΩ±1% , B25/85=3435K±1%							
Temp. (deg. C)	Rmin (kΩ)	Rnor (kΩ)	Rmax (kΩ)	Temp. (deg. C)	Rmin (kΩ)	Rnor (kΩ)	Rmax (kΩ)
21	11.512	11.646	11.780	59	3.059	3.126	3.194
22	11.084	11.208	11.333	60	2.965	3.030	3.098
23	10.673	10.789	10.906	61	2.873	2.938	3.004
24	10.281	10.389	10.496	62	2.785	2.849	2.914
25	9.900	10.000	10.100	63	2.700	2.763	2.827
26	9.537	9.637	9.737	64	2.618	2.680	2.743
27	9.185	9.285	9.385	65	2.539	2.600	2.661
28	8.848	8.948	9.047	66	2.463	2.522	2.583
29	8.526	8.624	8.724	67	2.389	2.448	2.507
30	8.216	8.315	8.413	68	2.318	2.376	2.434
31	7.920	8.018	8.116	69	2.250	2.306	2.363
32	7.636	7.733	7.830	70	2.183	2.239	2.295
33	7.363	7.459	7.556	71	2.119	2.174	2.229
34	7.102	7.197	7.293	72	2.058	2.111	2.165
35	6.851	6.946	7.041	73	1.998	2.050	2.104
36	6.611	6.704	6.798	74	1.940	1.992	2.044
37	6.380	6.473	6.566	75	1.884	1.935	1.987
38	6.159	6.250	6.342	76	1.830	1.880	1.931
39	5.946	6.036	6.128	77	1.778	1.827	1.877
40	5.742	5.831	5.921	78	1.728	1.776	1.825
41	5.546	5.634	5.723	79	1.679	1.726	1.774
42	5.357	5.444	5.532	80	1.632	1.678	1.725
43	5.176	5.262	5.349	81	1.586	1.632	1.678
44	5.002	5.087	5.173	82	1.542	1.587	1.632
45	4.835	4.918	5.003	83	1.500	1.543	1.588
46	4.674	4.756	4.840	84	1.458	1.501	1.545
47	4.519	4.601	4.683	85	1.418	1.461	1.504
48	4.371	4.451	4.532	86	1.380	1.421	1.464
49	4.228	4.306	4.386	87	1.342	1.383	1.425
50	4.090	4.168	4.246	88	1.306	1.346	1.387
51	3.957	4.034	4.111	89	1.271	1.310	1.350
52	3.830	3.905	3.981	90	1.237	1.275	1.315
53	3.707	3.781	3.856	91	1.204	1.242	1.281
54	3.589	3.662	3.736	92	1.172	1.209	1.247
55	3.475	3.546	3.619	93	1.141	1.178	1.215
56	3.365	3.436	3.507	94	1.111	1.147	1.184
57	3.259	3.329	3.399	95	1.082	1.118	1.154
58	3.157	3.226	3.295	96	1.054	1.089	1.124

产品名称(Product Name)	NTC温度传感器组件(NTC Sensor Module)		
产品编码(Product code)		版 本 Edition	1.0
规格型号(Specification model)	103F-3435-25L	修订日期 Revision date	

R-T Table

R25=10KΩ±1% , B25/85=3435K±1%							
Temp. (deg. C)	Rmin (k Ω)	Rnor (kΩ)	Rmax (kΩ)	Temp. (deg. C)	Rmin (kΩ)	Rnor (kΩ)	Rmax (kΩ)
97	1.027	1.061	1.096	112	0.705	0.731	0.758
98	1.001	1.034	1.068	113	0.689	0.714	0.741
99	0.975	1.008	1.042	114	0.672	0.698	0.724
100	0.950	0.983	1.016	115	0.657	0.681	0.707
101	0.926	0.958	0.990	116	0.641	0.666	0.691
102	0.903	0.934	0.966	117	0.627	0.651	0.675
103	0.880	0.911	0.942	118	0.612	0.636	0.660
104	0.859	0.888	0.919	119	0.598	0.621	0.645
105	0.837	0.867	0.897	120	0.585	0.607	0.631
106	0.817	0.846	0.875	121	0.572	0.594	0.617
107	0.797	0.825	0.854	122	0.559	0.581	0.604
108	0.777	0.805	0.834	123	0.546	0.568	0.590
109	0.758	0.786	0.814	124	0.534	0.556	0.578
110	0.740	0.767	0.795	125	0.523	0.544	0.565
111	0.723	0.749	0.776				