



南京时恒电子科技有限公司
Nanjing Shiheng Electronics Co.,Ltd.
规格承认书

APPROVAL SHEET

客户名称 CUSTOMER :

MF58 玻壳型 NTC 热敏电阻器

产品名称 PART NAME :

MF58 Glass shell NTC Thermistor

产品规格 PART NUMBER :

MF58- 104F3950

产品编号 PRODUCTCODE:

版次 REV.NO:

B0

日期 DATE:

2024-6-21

确认

CONFIRM

客户 CLIENT		供货商/制造商 MANUFACTOR	
品保部 Quality Dep.		规格书制作 Design	刘星月
制造部 Production Dep.		业务部审核 Checked by sales	
工程部 Engineering Dep.		技术部审核 Checked by R&D	程鹏
		品质部审核 Checked by QA	李少媛

南京时恒电子科技有限公司

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变更记录表

REVISED RECORD SHEET

[illegible]

1、产品型号说明 Product model specification

MF58 104 F 3950

① ② ③ ④

- ① MF58: 玻壳型 NTC 热敏电阻器系列 (Series Glass shell NTC Thermistor)
- ② 104: 25℃ 的零功率电阻值 100KΩ (Zero Power Resistance at 25℃ is 100KΩ)
- ③ F: 阻值精度代码 F-±1% G-±2% H-±3% J-±5% (Resistance precision code F-±1% G-±2% H-±3% J-±5%)
- ④ 3950: B25/50 值 3950K (B25/50:3950K)

2、电气性能 Electrical Characteristics

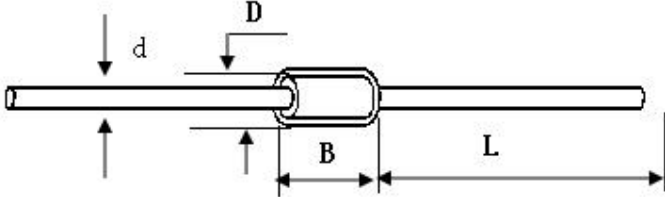
No.	项目 Item	符号 Symbol	测试条件 Test conditions	单位 Unit	性能要求 Requirements
2.1	25℃ 的零功率电阻值 Zero Power Resistance at 25℃	$R_{25^{\circ}\text{C}}$	$T_a=25\pm 0.01^{\circ}\text{C}$ Test Power $\leq 0.1\text{mW}$	KΩ	100KΩ $\pm 1\%$
2.2	B 值 B-value	$B_{25/50}$	$B=[(T_a \times T_b)/(T_b - T_a)] \times \ln(R_a/R_b)$ $T_a=25\pm 0.01^{\circ}\text{C}$ $T_b=50^{\circ}\text{C} \pm 0.01^{\circ}\text{C}$	K	3950 $\pm 1\%$
2.3	耗散系数 Thermal dissipation Coefficient	δ	静止空气中 In still air	mW/ ℃	约 1.8
2.4	时间常数 Thermal time constant	τ	静止空气中 In still air	sec	约 12
2.5	耐电压 withstand voltage	/	1500V/AC 1min	/	无击穿或飞弧 No breakthrough and flash over
2.6	绝缘电阻 Insulation resistance	/	500V/DC 1min	MΩ	≥ 500
2.7	工作温度范围 Operating temperature range	/	/	℃	-55℃ ~ 250℃
2.8	最大额定功率 Maximum rated power	Pmax	/	mW	50
2.9	阻温特性 R&T-table	/	/	/	见附表 I See attached table I
2.10	阻值误差&B 值误差 Resistance tolerance& B-value tolerance	/	/	/	见附表 II See attached table II

3、产品图纸 Product drawing

 产品图纸 Product drawing		客户确认 Customer confirm	客户名称 Customer:			
产品型号 MODEL NO. MF58-104F3950			确认		日期	
			Confirm		DATE	
			审核		日期	
			Approve:		DATE	

尺寸 Dimensions:

(Unit: mm)



$D \pm 0.2$	$B \pm 0.3$	$L \pm 1.0$	$d \pm 0.05$
1.8	3.7	28	0.5

技术要求 Technical requirements:

1) 零功率阻值: R25: $100K\Omega \pm 1\%$ (Zero Power Resistance: R25: $100K\Omega \pm 1\%$);

2) B25/50 数值: $3950K \pm 1\%$ (B-value: B25/50: $3950K \pm 1\%$);

3) 引线: $\phi 0.5$ 镀锡铜包钢线 ($\phi 0.5$ tinned copper-weld steel wire);

4) 封装: 玻壳封装 (Glass shell package);

5) 符合 RoHS 环保要求 (Meet environmental protection requirements: RoHS)。

更新履历 Revised record sheet				
版本 REV. NO	更新时间 REV. DATE	更新内容 Change content	申请人 Applicant	批准人 Approved
A0	2015. 4. 10	版本制定。 ersion formulation	王月婷	李少媛
B0	2022. 4. 1	更新规格书版本格式, 增加版次管控 Update for version form of datasheet, add to management and control for number of edition	王月婷	李少媛

4、可靠性 Reliability

No.	项目 Item	试验标准	试验条件及方法 Test conditions and methods	性能要求 Requirements
4.1	引出端强度 Terminal strength	IEC60068-2-21	固定电阻端, 拉力: 10 ± 1 N, 时间: 10 ± 1 秒 Fixed resistor end, Pull strength: 10 ± 1 N, time: 10 ± 1 sec	无可见性损伤 No obvious damage $ \Delta R_{25}/R_{25} \leq 2\%$
4.2	可焊性 Solderability	IEC60068-2-20	温度 $245 \pm 5^\circ\text{C}$ 时间 2-3 秒 temperature : $245 \pm 5^\circ\text{C}$ for 2-3sec	着锡面积 $\geq 95\%$ Coverage area $\geq 95\%$.
4.3	耐焊接热 Withstand weiling temp	IEC60068-2-20	锡锅温度: $260 \pm 5^\circ\text{C}$, 浸入深度距电阻体 6mm, 时间 5 ± 1 秒 Temperature of tin pot: $260 \pm 5^\circ\text{C}$, insert depth from body of resistance 6mm, time 5 ± 1 seconds	$ \Delta R_{25}/R_{25} \leq 2\%$
4.4	稳态湿热 Steady humidity and heat	IEC60068-2-78	温度: $40^\circ\text{C} \pm 2^\circ\text{C}$, 湿度: $93 \pm 2\%$, 时间: 500 小时 Temp: $40^\circ\text{C} \pm 2^\circ\text{C}$, humidity: $93 \pm 2\%$, Time : 500hrs	$ \Delta R_{25}/R_{25} \leq 2\%$
4.5	温度快速变化 Rapid changes in temperature	IEC60068-2-14	-55°C 30min $\rightarrow$ 25°C 5min $\rightarrow$ 250°C 30min $\rightarrow$ 25°C 5min, 5cycles	$ \Delta R_{25}/R_{25} \leq 2\%$
4.6	高温储存 High temperature storage	IEC60068-2-2	温度: $250^\circ\text{C} \pm 5^\circ\text{C}$ 时间: 1000 小时 Temp : $250^\circ\text{C} \pm 5^\circ\text{C}$, Time : 1000hrs	$ \Delta R_{25}/R_{25} \leq 2\%$
4.7	低温储存 Low temperature storage	IEC60068-2-1	温度: -55°C 时间: 1000 小时 Temp : -55°C , Time : 1000hrs	$ \Delta R_{25}/R_{25} \leq 2\%$

▲注: 1) 稳态湿热及温度快速变化试验结束后, 样品需在常温环境下静置 2 小时后再做性能测试;

▲Note: 1) After the test of steady-state humid heat and rapid temperature change, the sample should be kept for 2 hours at room temperature before performance test ;

2) 高温存储及低温存储结束后, 需随测试环境自然恢复至常温, 再取出做性能测试。

2) After the test of high - and low-temperature storage is complete, and then take it out for performance test when the test environment naturally regain to normal temperature.

5、产品包装 Product packaging

5.1 包装方式 Packing Type

☒ 散装方式 Bulk Type ☐ 编带方式 Reel Type

5.2 包装规格 Packing specification

No.	包装规格 Packing specification	包装材料、尺寸 Packing material, size	产品数量 Quantity
1	包装袋 Packing bag	自封口袋(self sealing bag)	
2	编带包装盒 Reel Packing box	265mm*80mm*75mm	

6、安装&使用注意事项 Installation & Use precautions

6.1 本产品的用途：温度测量与控制；application:test and control for temperature

6.2 避免过大的电流引起元件自身发热而产生测量误差；

To avoid of testing tolerance caused by huge current upon the self-heat of component.

6.3 烙铁焊接时，焊接处距包封头部距离至少 2mm，焊接温度应低于 360℃，焊接时间<3ses；

When welded by soldering iron,weld spot should be 2mm at least from head,weld temperature should be under 360℃,time<3ses

6.4 若引线弯曲时，弯曲点应距玻壳端 2mm 以上，以免造成玻壳损伤；

In case of lead bending,the dot of bending should be above 2mm from glass shell to avoid of damaging for glass shell.

6.5 储存温度：-10℃ ~ 40℃；储存湿度：≤75% RH；

storage temp:-10℃ ~ 40℃；storage humidity:≤75% RH

6.6 避免存放在具有腐蚀性气体及光照的环境下；To avoid of leaving with such environment as corrosive gases and illumination

6.6 包装打开后需重新密封保存，贮存期 1 年，超过贮存期，可按本标准规定的项目重新检验，如符合要求仍可使用；

The packing need to be resealed since opened,storage period 1 year.once valid,it should be retest according to regulated of criterion and can be still used if meet the requirement.

6.7 如在加工过程中需使用热缩管，热缩管热缩时不可使用电吹风进行吹制，建议热缩工艺，将套好热缩管后的产品放入恒温烘箱中，按 110℃/10-12min 进行热缩；

In case of useing heat-shrink tube,hair drier is prohibited.we suggest that put the product with heat shrink into constant-temperature box and heat shrink under 110℃/10-12min

7、产品认证 Product certification

No.	项目 Projects	产品认证 Product certification
8.1	质量管理体系认证 Quality Management System Certification	ISO9001:2015
		IATF16949: 2016
8.2	环境管理体系认证 Environmental Management System Certification	ISO14001:2015
8.3	环保检测报告 Environmental test report	RoHS 2.0
8.4	CQC 认证 (CQC09001033986) CQC certificate (CQC09001033986)	
8.5	UL 认证 (E240991) UL certificate (E240991)	
8.6	TUV 认证 (R50245892) UL certificate (R50245892)	
8.7	江苏省高新技术产品认证 High-tech product certificate in Jiangsu Province	
8.8		

附表 I (Attachment I)

南京时恒电子科技有限公司

R25=100K Ω 精度: $\pm 1\%$ B25/50=3950K 精度: $\pm 1\%$ (P182-6B2)

温度($^{\circ}\text{C}$)	电阻(K Ω)			电阻精度(%)		温度精度($^{\circ}\text{C}$)	
	最小值	中心值	最大值	ΔR	$-\Delta R$	ΔT	$-\Delta T$
-40	2840.49	2971	3101.5	4.392	-4.392	0.658	-0.658
-39	2687.04	2808.85	2930.66	4.336	-4.336	0.653	-0.653
-38	2536.86	2650.25	2763.64	4.278	-4.278	0.648	-0.648
-37	2391.5	2496.84	2602.17	4.218	-4.218	0.643	-0.643
-36	2252.03	2349.73	2447.43	4.157	-4.157	0.639	-0.639
-35	2119.13	2209.64	2300.16	4.096	-4.096	0.634	-0.634
-34	1993.16	2076.95	2160.75	4.034	-4.034	0.629	-0.629
-33	1874.27	1951.8	2029.33	3.972	-3.972	0.624	-0.624
-32	1762.44	1834.15	1905.87	3.91	-3.91	0.619	-0.619
-31	1657.5	1723.83	1790.16	3.847	-3.847	0.614	-0.614
-30	1559.22	1620.57	1681.93	3.786	-3.786	0.609	-0.609
-29	1467.29	1524.05	1580.82	3.724	-3.724	0.604	-0.604
-28	1381.38	1433.91	1486.45	3.663	-3.663	0.599	-0.599
-27	1301.14	1349.78	1398.41	3.603	-3.603	0.594	-0.594
-26	1226.22	1271.26	1316.31	3.543	-3.543	0.589	-0.589
-25	1156.26	1198	1239.73	3.483	-3.483	0.583	-0.583
-24	1090.92	1129.61	1168.3	3.424	-3.424	0.578	-0.578
-23	1029.87	1065.75	1101.63	3.366	-3.366	0.573	-0.573
-22	972.806	1006.1	1039.39	3.309	-3.309	0.567	-0.567
-21	919.43	950.336	981.242	3.252	-3.252	0.561	-0.561
-20	869.472	898.174	926.876	3.195	-3.195	0.556	-0.556
-19	822.68	849.346	876.013	3.139	-3.139	0.55	-0.55
-18	778.818	803.604	828.39	3.084	-3.084	0.544	-0.544
-17	737.672	760.718	783.763	3.029	-3.029	0.538	-0.538



-16	699.043	720.477	741.912	2.975	-2.975	0.532	-0.532
-15	662.746	682.689	702.631	2.921	-2.921	0.526	-0.526
-14	628.615	647.175	665.734	2.867	-2.867	0.52	-0.52
-13	596.496	613.772	631.048	2.814	-2.814	0.514	-0.514
-12	566.246	582.331	598.416	2.762	-2.762	0.508	-0.508
-11	537.737	552.716	567.694	2.709	-2.709	0.501	-0.501
-10	510.85	524.8	538.749	2.658	-2.658	0.495	-0.495
-9	485.475	498.468	511.461	2.606	-2.606	0.488	-0.488
-8	461.512	473.615	485.718	2.555	-2.555	0.482	-0.482
-7	438.869	450.143	461.417	2.504	-2.504	0.475	-0.475
-6	417.461	427.964	438.466	2.454	-2.454	0.468	-0.468
-5	397.211	406.994	416.777	2.403	-2.403	0.462	-0.462
-4	378.045	387.158	396.271	2.353	-2.353	0.455	-0.455
-3	359.897	368.385	376.873	2.304	-2.304	0.448	-0.448
-2	342.707	350.612	358.517	2.254	-2.254	0.441	-0.441
-1	326.416	333.777	341.138	2.205	-2.205	0.434	-0.434
0	308.893	315.68	322.466	2.149	-2.149	0.428	-0.428
1	296.326	302.706	309.086	2.107	-2.107	0.419	-0.419
2	282.432	288.37	294.308	2.059	-2.059	0.412	-0.412
3	269.247	274.773	280.298	2.01	-2.01	0.405	-0.405
4	256.732	261.872	267.012	1.962	-1.962	0.397	-0.397
5	244.85	249.63	254.41	1.914	-1.914	0.39	-0.39
6	233.565	238.009	242.453	1.867	-1.867	0.383	-0.383
7	222.845	226.976	231.106	1.819	-1.819	0.375	-0.375
8	212.66	216.498	220.335	1.772	-1.772	0.367	-0.367
9	202.981	206.545	210.109	1.725	-1.725	0.36	-0.36
10	192.029	195.29	198.55	1.669	-1.669	0.355	-0.355
11	185.035	188.105	191.175	1.631	-1.631	0.344	-0.344
12	176.719	179.566	182.413	1.585	-1.585	0.336	-0.336





13	168.81	171.449	174.088	1.539	-1.539	0.328	-0.328
14	161.287	163.732	166.176	1.493	-1.493	0.32	-0.32
15	154.13	156.394	158.657	1.447	-1.447	0.312	-0.312
16	147.321	149.415	151.509	1.401	-1.401	0.304	-0.304
17	140.84	142.776	144.712	1.356	-1.356	0.296	-0.296
18	134.672	136.461	138.25	1.31	-1.31	0.288	-0.288
19	128.8	130.451	132.103	1.265	-1.265	0.279	-0.279
20	123.21	124.733	126.256	1.221	-1.221	0.271	-0.271
21	117.886	119.289	120.693	1.176	-1.176	0.263	-0.263
22	112.816	114.107	115.399	1.131	-1.131	0.254	-0.254
23	107.986	109.173	110.361	1.087	-1.087	0.246	-0.246
24	103.384	104.475	105.565	1.043	-1.043	0.237	-0.237
25	99	100	101	1	-1	0.229	-0.229
26	94.737	95.736	96.735	1.043	-1.043	0.24	-0.24
27	90.678	91.674	92.671	1.086	-1.086	0.251	-0.251
28	86.811	87.803	88.796	1.13	-1.13	0.263	-0.263
29	83.127	84.114	85.101	1.172	-1.172	0.274	-0.274
30	79.617	80.597	81.576	1.215	-1.215	0.286	-0.286
31	76.271	77.243	78.215	1.258	-1.258	0.298	-0.298
32	73.082	74.045	75.008	1.3	-1.3	0.31	-0.31
33	70.041	70.994	71.947	1.342	-1.342	0.321	-0.321
34	67.141	68.083	69.026	1.384	-1.384	0.333	-0.333
35	64.375	65.306	66.237	1.426	-1.426	0.345	-0.345
36	61.736	62.655	63.575	1.467	-1.467	0.358	-0.358
37	59.217	60.125	61.032	1.508	-1.508	0.37	-0.37
38	56.814	57.708	58.603	1.549	-1.549	0.382	-0.382
39	54.52	55.401	56.282	1.59	-1.59	0.394	-0.394
40	52.329	53.196	54.064	1.631	-1.631	0.407	-0.407
41	50.236	51.09	51.944	1.671	-1.671	0.419	-0.419



42	48.238	49.078	49.918	1.711	-1.711	0.432	-0.432
43	46.328	47.154	47.98	1.751	-1.751	0.444	-0.444
44	44.503	45.315	46.127	1.791	-1.791	0.457	-0.457
45	42.759	43.556	44.354	1.831	-1.831	0.47	-0.47
46	41.091	41.874	42.657	1.87	-1.87	0.483	-0.483
47	39.496	40.264	41.033	1.909	-1.909	0.495	-0.495
48	37.97	38.724	39.479	1.948	-1.948	0.508	-0.508
49	36.51	37.251	37.991	1.987	-1.987	0.521	-0.521
50	35.113	35.84	36.566	2.026	-2.026	0.535	-0.535
51	33.776	34.488	35.2	2.064	-2.064	0.548	-0.548
52	32.496	33.194	33.892	2.102	-2.102	0.561	-0.561
53	31.271	31.955	32.639	2.14	-2.14	0.574	-0.574
54	30.097	30.767	31.437	2.178	-2.178	0.588	-0.588
55	28.972	29.629	30.285	2.216	-2.216	0.601	-0.601
56	27.894	28.537	29.181	2.254	-2.254	0.615	-0.615
57	26.861	27.491	28.121	2.291	-2.291	0.628	-0.628
58	25.871	26.488	27.105	2.328	-2.328	0.642	-0.642
59	24.922	25.525	26.129	2.365	-2.365	0.656	-0.656
60	24.011	24.602	25.193	2.402	-2.402	0.67	-0.67
61	23.138	23.716	24.295	2.439	-2.439	0.683	-0.683
62	22.3	22.866	23.432	2.475	-2.475	0.697	-0.697
63	21.495	22.049	22.603	2.512	-2.512	0.711	-0.711
64	20.724	21.265	21.807	2.548	-2.548	0.725	-0.725
65	19.982	20.513	21.043	2.584	-2.584	0.74	-0.74
66	19.271	19.789	20.308	2.62	-2.62	0.754	-0.754
67	18.588	19.095	19.602	2.655	-2.655	0.768	-0.768
68	17.931	18.427	18.923	2.691	-2.691	0.782	-0.782
69	17.3	17.785	18.27	2.727	-2.727	0.797	-0.797
70	16.694	17.168	17.643	2.762	-2.762	0.811	-0.811



71	16.112	16.575	17.039	2.797	-2.797	0.826	-0.826
72	15.552	16.005	16.458	2.832	-2.832	0.841	-0.841
73	15.013	15.456	15.9	2.867	-2.867	0.855	-0.855
74	14.495	14.929	15.362	2.902	-2.902	0.87	-0.87
75	13.997	14.421	14.844	2.936	-2.936	0.885	-0.885
76	13.518	13.932	14.346	2.971	-2.971	0.9	-0.9
77	13.057	13.462	13.867	3.005	-3.005	0.915	-0.915
78	12.614	13.009	13.405	3.039	-3.039	0.93	-0.93
79	12.187	12.573	12.96	3.073	-3.073	0.945	-0.945
80	11.776	12.154	12.531	3.107	-3.107	0.96	-0.96
81	11.38	11.749	12.119	3.141	-3.141	0.975	-0.975
82	10.999	11.36	11.721	3.175	-3.175	0.991	-0.991
83	10.632	10.985	11.337	3.209	-3.209	1.006	-1.006
84	10.279	10.624	10.968	3.242	-3.242	1.022	-1.022
85	9.703	10.035	10.366	3.299	-3.299	1.034	-1.034
86	9.611	9.94	10.268	3.309	-3.309	1.053	-1.053
87	9.295	9.616	9.937	3.342	-3.342	1.068	-1.068
88	8.99	9.304	9.618	3.375	-3.375	1.084	-1.084
89	8.696	9.003	9.31	3.408	-3.408	1.1	-1.1
90	8.413	8.713	9.013	3.44	-3.44	1.116	-1.116
91	8.141	8.434	8.727	3.473	-3.473	1.132	-1.132
92	7.878	8.164	8.45	3.505	-3.505	1.148	-1.148
93	7.624	7.904	8.183	3.538	-3.538	1.164	-1.164
94	7.379	7.653	7.926	3.57	-3.57	1.18	-1.18
95	7.143	7.41	7.677	3.602	-3.602	1.196	-1.196
96	6.916	7.176	7.437	3.634	-3.634	1.212	-1.212
97	6.696	6.951	7.206	3.666	-3.666	1.229	-1.229
98	6.484	6.733	6.982	3.698	-3.698	1.245	-1.245
99	6.28	6.523	6.766	3.73	-3.73	1.262	-1.262





100	5.939	6.173	6.406	3.785	-3.785	1.275	-1.275
101	5.892	6.124	6.356	3.793	-3.793	1.295	-1.295
102	5.708	5.935	6.162	3.825	-3.825	1.312	-1.312
103	5.53	5.752	5.974	3.856	-3.856	1.328	-1.328
104	5.359	5.576	5.793	3.887	-3.887	1.345	-1.345
105	5.193	5.405	5.617	3.918	-3.918	1.362	-1.362
106	5.034	5.241	5.448	3.949	-3.949	1.379	-1.379
107	4.879	5.082	5.284	3.98	-3.98	1.396	-1.396
108	4.73	4.928	5.126	4.011	-4.011	1.413	-1.413
109	4.586	4.779	4.973	4.041	-4.041	1.431	-1.431
110	4.447	4.636	4.825	4.072	-4.072	1.448	-1.448
111	4.313	4.497	4.682	4.102	-4.102	1.465	-1.465
112	4.183	4.363	4.544	4.132	-4.132	1.483	-1.483
113	4.057	4.234	4.41	4.162	-4.162	1.5	-1.5
114	3.936	4.109	4.281	4.193	-4.193	1.518	-1.518
115	3.819	3.987	4.156	4.222	-4.222	1.535	-1.535
116	3.706	3.87	4.035	4.252	-4.252	1.553	-1.553
117	3.596	3.757	3.918	4.282	-4.282	1.571	-1.571
118	3.49	3.648	3.805	4.312	-4.312	1.589	-1.589
119	3.388	3.542	3.696	4.341	-4.341	1.606	-1.606
120	3.289	3.439	3.59	4.37	-4.37	1.624	-1.624
121	3.193	3.34	3.487	4.4	-4.4	1.642	-1.642
122	3.101	3.245	3.388	4.429	-4.429	1.661	-1.661
123	3.011	3.152	3.292	4.458	-4.458	1.679	-1.679
124	2.925	3.062	3.2	4.487	-4.487	1.697	-1.697
125	2.841	2.976	3.11	4.515	-4.515	1.715	-1.715
126	2.76	2.892	3.023	4.544	-4.544	1.734	-1.734
127	2.682	2.81	2.939	4.573	-4.573	1.752	-1.752
128	2.606	2.732	2.857	4.601	-4.601	1.771	-1.771





129	2.533	2.656	2.778	4.629	-4.629	1.789	-1.789
130	2.462	2.582	2.702	4.657	-4.657	1.808	-1.808
131	2.393	2.51	2.628	4.686	-4.686	1.827	-1.827
132	2.326	2.441	2.557	4.713	-4.713	1.846	-1.846
133	2.262	2.375	2.487	4.741	-4.741	1.865	-1.865
134	2.2	2.31	2.42	4.769	-4.769	1.884	-1.884
135	2.139	2.247	2.355	4.796	-4.796	1.903	-1.903
136	2.081	2.186	2.292	4.824	-4.824	1.922	-1.922
137	2.024	2.127	2.231	4.851	-4.851	1.941	-1.941
138	1.969	2.07	2.172	4.878	-4.878	1.96	-1.96
139	1.916	2.015	2.114	4.905	-4.905	1.98	-1.98
140	1.865	1.962	2.059	4.932	-4.932	1.999	-1.999
141	1.815	1.91	2.005	4.959	-4.959	2.019	-2.019
142	1.767	1.86	1.952	4.986	-4.986	2.038	-2.038
143	1.72	1.811	1.902	5.012	-5.012	2.058	-2.058
144	1.675	1.764	1.853	5.039	-5.039	2.078	-2.078
145	1.631	1.718	1.805	5.065	-5.065	2.097	-2.097
146	1.589	1.674	1.759	5.091	-5.091	2.117	-2.117
147	1.547	1.631	1.714	5.117	-5.117	2.137	-2.137
148	1.507	1.589	1.671	5.143	-5.143	2.157	-2.157
149	1.469	1.549	1.629	5.169	-5.169	2.177	-2.177
150	1.431	1.51	1.588	5.195	-5.195	2.198	-2.198
151	1.395	1.471	1.548	5.22	-5.22	2.218	-2.218
152	1.359	1.435	1.51	5.246	-5.246	2.238	-2.238
153	1.325	1.399	1.473	5.271	-5.271	2.259	-2.259
154	1.292	1.364	1.436	5.296	-5.296	2.279	-2.279
155	1.26	1.33	1.401	5.321	-5.321	2.3	-2.3
156	1.228	1.298	1.367	5.346	-5.346	2.32	-2.32
157	1.198	1.266	1.334	5.371	-5.371	2.341	-2.341





158	1.169	1.235	1.302	5.395	-5.395	2.362	-2.362
159	1.14	1.205	1.271	5.42	-5.42	2.382	-2.382
160	1.112	1.176	1.241	5.444	-5.444	2.403	-2.403
161	1.085	1.148	1.211	5.468	-5.468	2.424	-2.424
162	1.059	1.121	1.183	5.493	-5.493	2.445	-2.445
163	1.034	1.094	1.155	5.517	-5.517	2.467	-2.467
164	1.009	1.069	1.128	5.54	-5.54	2.488	-2.488
165	0.985	1.044	1.102	5.564	-5.564	2.509	-2.509
166	0.962	1.019	1.076	5.588	-5.588	2.53	-2.53
167	0.94	0.996	1.051	5.611	-5.611	2.552	-2.552
168	0.918	0.973	1.027	5.635	-5.635	2.573	-2.573
169	0.896	0.95	1.004	5.658	-5.658	2.595	-2.595
170	0.876	0.929	0.981	5.681	-5.681	2.617	-2.617
171	0.856	0.907	0.959	5.704	-5.704	2.638	-2.638
172	0.836	0.887	0.938	5.727	-5.727	2.66	-2.66
173	0.817	0.867	0.917	5.75	-5.75	2.682	-2.682
174	0.799	0.848	0.897	5.772	-5.772	2.704	-2.704
175	0.781	0.829	0.877	5.795	-5.795	2.726	-2.726
176	0.763	0.81	0.858	5.817	-5.817	2.748	-2.748
177	0.746	0.793	0.839	5.84	-5.84	2.77	-2.77
178	0.73	0.775	0.821	5.862	-5.862	2.793	-2.793
179	0.714	0.758	0.803	5.884	-5.884	2.815	-2.815
180	0.698	0.742	0.786	5.906	-5.906	2.837	-2.837
181	0.683	0.726	0.769	5.927	-5.927	2.86	-2.86
182	0.668	0.71	0.753	5.949	-5.949	2.882	-2.882
183	0.654	0.695	0.737	5.971	-5.971	2.905	-2.905
184	0.64	0.68	0.721	5.992	-5.992	2.928	-2.928
185	0.626	0.666	0.706	6.014	-6.014	2.95	-2.95
186	0.613	0.652	0.691	6.035	-6.035	2.973	-2.973





187	0.6	0.638	0.677	6.056	-6.056	2.996	-2.996
188	0.587	0.625	0.663	6.077	-6.077	3.019	-3.019
189	0.575	0.612	0.65	6.098	-6.098	3.042	-3.042
190	0.563	0.6	0.636	6.119	-6.119	3.065	-3.065
191	0.551	0.587	0.623	6.14	-6.14	3.089	-3.089
192	0.54	0.575	0.611	6.16	-6.16	3.112	-3.112
193	0.529	0.564	0.598	6.181	-6.181	3.135	-3.135
194	0.518	0.552	0.587	6.201	-6.201	3.159	-3.159
195	0.507	0.541	0.575	6.222	-6.222	3.182	-3.182
196	0.497	0.53	0.563	6.242	-6.242	3.206	-3.206
197	0.487	0.52	0.552	6.262	-6.262	3.229	-3.229
198	0.477	0.509	0.541	6.282	-6.282	3.253	-3.253
199	0.468	0.499	0.531	6.302	-6.302	3.277	-3.277
200	0.459	0.49	0.52	6.322	-6.322	3.301	-3.301
201	0.449	0.48	0.51	6.342	-6.342	3.325	-3.325
202	0.441	0.471	0.501	6.361	-6.361	3.349	-3.349
203	0.432	0.461	0.491	6.381	-6.381	3.373	-3.373
204	0.423	0.452	0.481	6.401	-6.401	3.397	-3.397
205	0.415	0.444	0.472	6.42	-6.42	3.421	-3.421
206	0.407	0.435	0.463	6.44	-6.44	3.446	-3.446
207	0.399	0.427	0.455	6.459	-6.459	3.47	-3.47
208	0.392	0.419	0.446	6.478	-6.478	3.494	-3.494
209	0.384	0.411	0.438	6.497	-6.497	3.519	-3.519
210	0.377	0.403	0.429	6.516	-6.516	3.544	-3.544
211	0.37	0.395	0.421	6.535	-6.535	3.568	-3.568
212	0.363	0.388	0.414	6.554	-6.554	3.593	-3.593
213	0.356	0.381	0.406	6.573	-6.573	3.618	-3.618
214	0.349	0.374	0.398	6.592	-6.592	3.643	-3.643
215	0.342	0.367	0.391	6.611	-6.611	3.668	-3.668

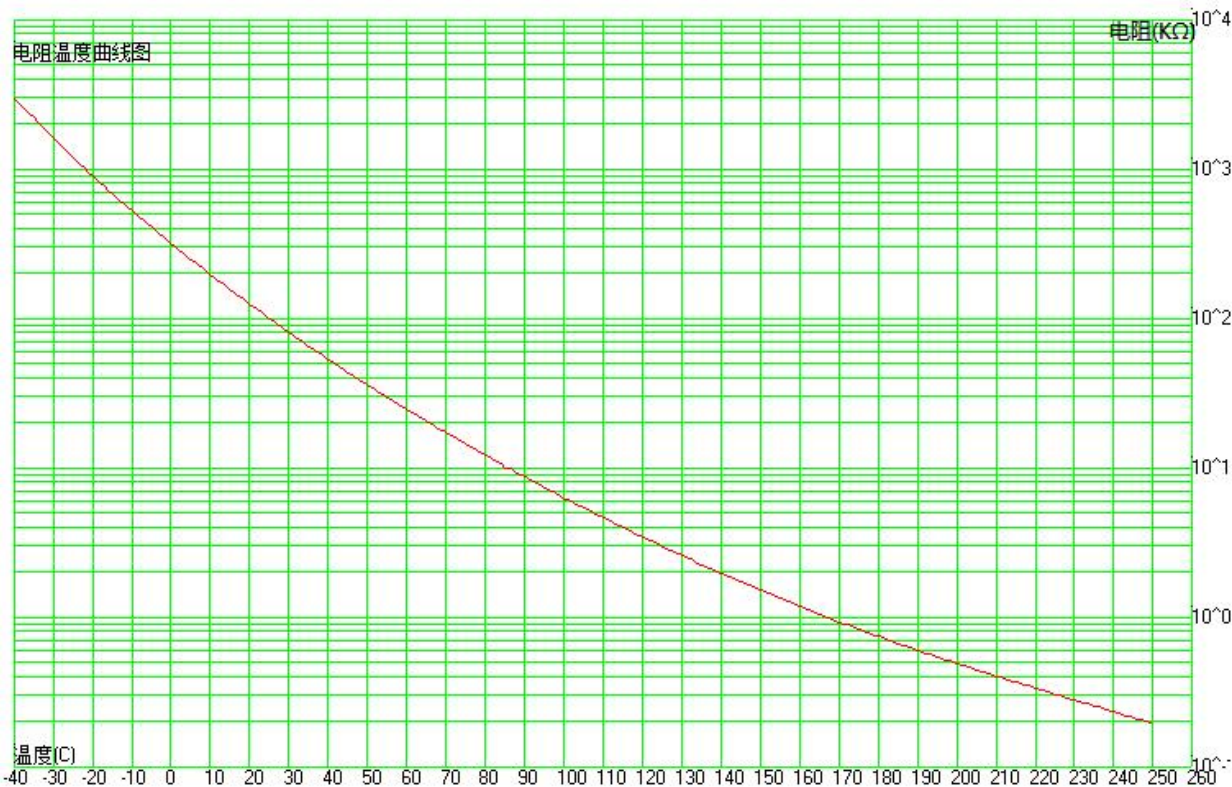




216	0.336	0.36	0.384	6.63	-6.63	3.693	-3.693
217	0.33	0.353	0.377	6.648	-6.648	3.718	-3.718
218	0.324	0.347	0.37	6.667	-6.667	3.743	-3.743
219	0.318	0.34	0.363	6.686	-6.686	3.768	-3.768
220	0.312	0.334	0.357	6.704	-6.704	3.793	-3.793
221	0.306	0.328	0.35	6.723	-6.723	3.819	-3.819
222	0.3	0.322	0.344	6.741	-6.741	3.844	-3.844
223	0.295	0.316	0.338	6.76	-6.76	3.87	-3.87
224	0.289	0.31	0.331	6.778	-6.778	3.895	-3.895
225	0.284	0.305	0.325	6.796	-6.796	3.921	-3.921
226	0.279	0.299	0.32	6.815	-6.815	3.947	-3.947
227	0.274	0.294	0.314	6.833	-6.833	3.972	-3.972
228	0.269	0.288	0.308	6.851	-6.851	3.998	-3.998
229	0.264	0.283	0.303	6.869	-6.869	4.024	-4.024
230	0.259	0.278	0.297	6.888	-6.888	4.05	-4.05
231	0.254	0.273	0.292	6.906	-6.906	4.076	-4.076
232	0.25	0.268	0.287	6.924	-6.924	4.102	-4.102
233	0.245	0.263	0.282	6.942	-6.942	4.128	-4.128
234	0.241	0.259	0.277	6.96	-6.96	4.155	-4.155
235	0.236	0.254	0.272	6.978	-6.978	4.181	-4.181
236	0.232	0.25	0.267	6.996	-6.996	4.207	-4.207
237	0.228	0.245	0.262	7.014	-7.014	4.234	-4.234
238	0.224	0.241	0.258	7.033	-7.033	4.26	-4.26
239	0.22	0.236	0.253	7.051	-7.051	4.287	-4.287
240	0.216	0.232	0.249	7.069	-7.069	4.314	-4.314
241	0.212	0.228	0.244	7.087	-7.087	4.34	-4.34
242	0.208	0.224	0.24	7.105	-7.105	4.367	-4.367
243	0.204	0.22	0.235	7.123	-7.123	4.394	-4.394
244	0.2	0.216	0.231	7.141	-7.141	4.421	-4.421



245	0.197	0.212	0.227	7.159	-7.159	4.448	-4.448
246	0.193	0.208	0.223	7.178	-7.178	4.475	-4.475
247	0.19	0.204	0.219	7.196	-7.196	4.502	-4.502
248	0.186	0.201	0.215	7.214	-7.214	4.529	-4.529
249	0.183	0.197	0.211	7.232	-7.232	4.556	-4.556
250	0.179	0.194	0.208	7.251	-7.251	4.583	-4.583



附表 II (Attachment II)

南京时恒电阻误差曲线图
Nanjing The curve of resistance tolerance

