



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 :

MF58-502F3470

产品编号 PRODUCTCODE:

版次 REV.NO:

B0

日期 DATE:

2024-12-10

确认

CONFIRM

客户 CLIENT		供货商/制造商 MANUFACTOR	
品保部 Quality Dep.		规格书制作 Design	何齐齐
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	张居见
		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

[illegible]

1、产品型号说明 Product model specification

MF58- 502 F 3470

① ② ③ ④

- ① MF58: 玻壳型 NTC 热敏电阻器系列 (Series Glass shell NTC Thermistor)
- ② 502: 25℃ 的零功率电阻值 5KΩ (Zero Power Resistance at 25℃ is 5KΩ)
- 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 3470: B25/50 值 3470K (B25/50:3470K)

2、电气性能 Electrical Characteristics

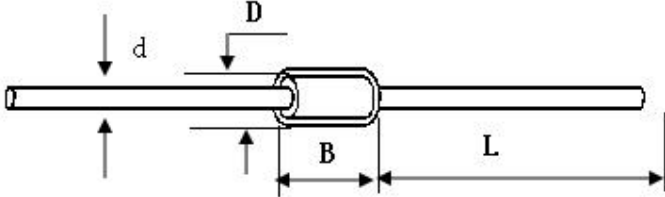
No.	项目 Item	符号 Symbol	测试条件 Test conditions	单位 Unit	性能要求 Requirements
2.1	25℃ 的零功率电阻值 Zero Power Resistance at 25℃	R _{25℃}	T _a =25±0.01℃ Test Power≤0.1mW	KΩ	5KΩ±1%
2.2	B 值 B-value	B _{25/50}	$B=[(T_a \times T_b)/(T_b - T_a)] \times \ln(R_a/R_b)$ T _a =25±0.01℃ T _b =50℃±0.01℃	K	3470±1%
2.3	耗散系数 Thermal 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	P _{max}	/	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:			
			确认 Confirm		日期 DATE	
产品型号 MODEL NO.			MF58-502F3470	审核 Approve:		日期 DATE

尺寸 Dimensions:

(Unit: mm)



$D\pm0.2$	$B\pm0.3$	$L\pm1.0$	$d\pm0.05$
1.8	3.7	28	0.5

技术要求 Technical requirements:

1) 零功率阻值: R25: 5K Ω $\pm$ 1% (Zero Power Resistance: R25: 5K Ω $\pm$ 1%);

2) B25/50 数值: 3470K $\pm$ 1% (B-value:B25/50: 3470K $\pm$ 1%);

3) 引线: Φ 0.5 镀锡铜包钢线 (Φ 0.5tinned 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) $W \times H = 125\text{mm} \times 90\text{mm}$	
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	TUV 认证（R50245892） TUVcertificate（R50245892）	
8.6	UL 认证（E240991） UL certificate（E240991）	
8.7	江苏省高新技术产品认证 High-tech product certificate in Jiangsu Province	

附表 I (Attachment I)

南京时恒电子科技有限公司

R25=5K Ω 精度: $\pm 1\%$ B25/50=3470K 精度: $\pm 1\%$ (SH-27A)

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	$-\Delta T$
-55	198.727	208.6	218.472	4.732	-4.732	0.742	-0.742
-54	186.828	195.98	205.133	4.67	-4.67	0.739	-0.739
-53	175.779	184.271	192.763	4.608	-4.608	0.735	-0.735
-52	165.521	173.407	181.292	4.547	-4.547	0.732	-0.732
-51	155.987	163.316	170.645	4.487	-4.487	0.728	-0.728
-50	147.113	153.93	160.746	4.428	-4.428	0.725	-0.725
-49	138.839	145.183	151.527	4.369	-4.369	0.721	-0.721
-48	131.11	137.018	142.926	4.311	-4.311	0.717	-0.717
-47	123.879	129.384	134.888	4.254	-4.254	0.714	-0.714
-46	117.103	122.234	127.365	4.197	-4.197	0.71	-0.71
-45	110.745	115.53	120.314	4.141	-4.141	0.706	-0.706
-44	104.774	109.236	113.698	4.085	-4.085	0.702	-0.702
-43	99.16	103.323	107.486	4.029	-4.029	0.698	-0.698
-42	93.879	97.764	101.649	3.974	-3.974	0.694	-0.694
-41	88.908	92.535	96.161	3.918	-3.918	0.69	-0.69
-40	83.901	87.27	90.638	3.86	-3.86	0.686	-0.686
-39	79.822	82.983	86.145	3.809	-3.809	0.681	-0.681
-38	75.671	78.624	81.577	3.755	-3.755	0.677	-0.677
-37	71.761	74.52	77.279	3.702	-3.702	0.672	-0.672
-36	68.077	70.655	73.233	3.649	-3.649	0.668	-0.668
-35	64.606	67.016	69.426	3.596	-3.596	0.664	-0.664
-34	61.336	63.589	65.842	3.543	-3.543	0.659	-0.659
-33	58.254	60.361	62.469	3.491	-3.491	0.654	-0.654
-32	55.349	57.321	59.292	3.439	-3.439	0.65	-0.65
-31	52.611	54.456	56.301	3.388	-3.388	0.645	-0.645
-30	50.029	51.757	53.484	3.337	-3.337	0.64	-0.64
-29	47.594	49.212	50.83	3.287	-3.287	0.635	-0.635
-28	45.297	46.813	48.328	3.237	-3.237	0.63	-0.63
-27	43.13	44.55	45.97	3.187	-3.187	0.625	-0.625
-26	41.084	42.415	43.746	3.138	-3.138	0.62	-0.62
-25	39.151	40.4	41.648	3.089	-3.089	0.615	-0.615
-24	37.325	38.496	39.667	3.041	-3.041	0.61	-0.61
-23	35.599	36.698	37.797	2.993	-2.993	0.604	-0.604
-22	33.967	34.998	36.029	2.946	-2.946	0.599	-0.599
-21	32.423	33.391	34.359	2.899	-2.899	0.593	-0.593
-20	30.96	31.87	32.779	2.852	-2.852	0.588	-0.588
-19	29.575	30.429	31.283	2.806	-2.806	0.582	-0.582

-18	28.263	29.065	29.867	2.76	-2.76	0.577	-0.577
-17	27.018	27.772	28.526	2.714	-2.714	0.571	-0.571
-16	25.837	26.545	27.254	2.669	-2.669	0.565	-0.565
-15	24.715	25.381	26.048	2.624	-2.624	0.559	-0.559
-14	23.65	24.277	24.903	2.58	-2.58	0.553	-0.553
-13	22.638	23.227	23.816	2.536	-2.536	0.547	-0.547
-12	21.675	22.229	22.783	2.492	-2.492	0.541	-0.541
-11	20.76	21.281	21.802	2.448	-2.448	0.535	-0.535
-10	19.822	20.31	20.797	2.401	-2.401	0.529	-0.529
-9	19.058	19.519	19.98	2.362	-2.362	0.522	-0.522
-8	18.267	18.7	19.134	2.319	-2.319	0.515	-0.515
-7	17.513	17.921	18.329	2.276	-2.276	0.509	-0.509
-6	16.794	17.177	17.561	2.234	-2.234	0.502	-0.502
-5	16.108	16.469	16.83	2.192	-2.192	0.496	-0.496
-4	15.453	15.792	16.132	2.15	-2.15	0.489	-0.489
-3	14.827	15.147	15.466	2.108	-2.108	0.482	-0.482
-2	14.23	14.531	14.831	2.066	-2.066	0.475	-0.475
-1	13.659	13.942	14.224	2.025	-2.025	0.468	-0.468
0	13.114	13.38	13.645	1.984	-1.984	0.461	-0.461
1	12.592	12.842	13.092	1.943	-1.943	0.454	-0.454
2	12.094	12.328	12.563	1.902	-1.902	0.447	-0.447
3	11.616	11.837	12.057	1.861	-1.861	0.44	-0.44
4	11.159	11.366	11.573	1.821	-1.821	0.432	-0.432
5	10.722	10.917	11.111	1.78	-1.78	0.425	-0.425
6	10.304	10.486	10.669	1.74	-1.74	0.418	-0.418
7	9.903	10.074	10.245	1.7	-1.7	0.41	-0.41
8	9.519	9.679	9.84	1.66	-1.66	0.402	-0.402
9	9.151	9.301	9.452	1.62	-1.62	0.395	-0.395
10	8.891	9.035	9.178	1.591	-1.591	0.383	-0.383
11	8.46	8.592	8.725	1.541	-1.541	0.379	-0.379
12	8.136	8.26	8.384	1.502	-1.502	0.371	-0.371
13	7.825	7.941	8.058	1.462	-1.462	0.364	-0.364
14	7.527	7.636	7.745	1.423	-1.423	0.356	-0.356
15	7.242	7.343	7.445	1.384	-1.384	0.348	-0.348
16	6.968	7.063	7.158	1.345	-1.345	0.339	-0.339
17	6.705	6.794	6.882	1.306	-1.306	0.331	-0.331
18	6.453	6.535	6.618	1.267	-1.267	0.323	-0.323
19	6.211	6.288	6.365	1.229	-1.229	0.315	-0.315
20	5.978	6.05	6.122	1.19	-1.19	0.306	-0.306
21	5.755	5.822	5.89	1.152	-1.152	0.298	-0.298
22	5.541	5.604	5.666	1.114	-1.114	0.289	-0.289
23	5.336	5.394	5.452	1.075	-1.075	0.281	-0.281

24	5.139	5.193	5.247	1.037	-1.037	0.272	-0.272
25	4.95	5	5.05	1	-1	0.264	-0.264
26	4.764	4.814	4.864	1.037	-1.037	0.275	-0.275
27	4.586	4.636	4.686	1.075	-1.075	0.286	-0.286
28	4.415	4.465	4.515	1.113	-1.113	0.298	-0.298
29	4.252	4.301	4.351	1.15	-1.15	0.309	-0.309
30	4.094	4.144	4.193	1.187	-1.187	0.321	-0.321
31	3.943	3.992	4.041	1.224	-1.224	0.333	-0.333
32	3.798	3.847	3.896	1.262	-1.262	0.345	-0.345
33	3.659	3.708	3.756	1.298	-1.298	0.356	-0.356
34	3.526	3.574	3.621	1.335	-1.335	0.368	-0.368
35	3.398	3.445	3.492	1.372	-1.372	0.38	-0.38
36	3.274	3.321	3.368	1.408	-1.408	0.392	-0.392
37	3.156	3.203	3.249	1.445	-1.445	0.405	-0.405
38	3.043	3.088	3.134	1.481	-1.481	0.417	-0.417
39	2.934	2.979	3.024	1.517	-1.517	0.429	-0.429
40	2.829	2.874	2.918	1.553	-1.553	0.442	-0.442
41	2.728	2.772	2.816	1.589	-1.589	0.454	-0.454
42	2.632	2.675	2.719	1.625	-1.625	0.467	-0.467
43	2.539	2.582	2.625	1.66	-1.66	0.479	-0.479
44	2.45	2.492	2.534	1.696	-1.696	0.492	-0.492
45	2.364	2.406	2.447	1.731	-1.731	0.505	-0.505
46	2.282	2.323	2.364	1.766	-1.766	0.518	-0.518
47	2.202	2.243	2.283	1.801	-1.801	0.53	-0.53
48	2.126	2.166	2.206	1.836	-1.836	0.544	-0.544
49	2.053	2.092	2.132	1.87	-1.87	0.557	-0.557
50	1.983	2.021	2.06	1.905	-1.905	0.57	-0.57
51	1.915	1.953	1.991	1.939	-1.939	0.583	-0.583
52	1.85	1.888	1.925	1.973	-1.973	0.596	-0.596
53	1.788	1.825	1.861	2.007	-2.007	0.61	-0.61
54	1.728	1.764	1.8	2.041	-2.041	0.623	-0.623
55	1.67	1.706	1.741	2.075	-2.075	0.637	-0.637
56	1.615	1.649	1.684	2.108	-2.108	0.65	-0.65
57	1.561	1.595	1.629	2.142	-2.142	0.664	-0.664
58	1.51	1.543	1.577	2.175	-2.175	0.678	-0.678
59	1.46	1.493	1.526	2.208	-2.208	0.692	-0.692
60	1.413	1.445	1.477	2.241	-2.241	0.706	-0.706
61	1.367	1.399	1.43	2.273	-2.273	0.72	-0.72
62	1.323	1.354	1.385	2.306	-2.306	0.734	-0.734
63	1.28	1.311	1.341	2.338	-2.338	0.748	-0.748
64	1.239	1.269	1.299	2.37	-2.37	0.762	-0.762
65	1.2	1.229	1.259	2.402	-2.402	0.777	-0.777

66	1.162	1.191	1.22	2.434	-2.434	0.791	-0.791
67	1.125	1.154	1.182	2.466	-2.466	0.806	-0.806
68	1.09	1.118	1.146	2.497	-2.497	0.82	-0.82
69	1.056	1.084	1.111	2.528	-2.528	0.835	-0.835
70	1.024	1.051	1.077	2.559	-2.559	0.85	-0.85
71	0.992	1.019	1.045	2.59	-2.59	0.864	-0.864
72	0.962	0.988	1.014	2.621	-2.621	0.879	-0.879
73	0.933	0.958	0.983	2.652	-2.652	0.894	-0.894
74	0.904	0.929	0.954	2.682	-2.682	0.909	-0.909
75	0.877	0.902	0.926	2.712	-2.712	0.924	-0.924
76	0.851	0.875	0.899	2.742	-2.742	0.94	-0.94
77	0.826	0.849	0.873	2.772	-2.772	0.955	-0.955
78	0.801	0.824	0.847	2.802	-2.802	0.97	-0.97
79	0.777	0.8	0.823	2.832	-2.832	0.986	-0.986
80	0.755	0.777	0.799	2.861	-2.861	1.001	-1.001
81	0.733	0.755	0.776	2.89	-2.89	1.017	-1.017
82	0.712	0.733	0.754	2.919	-2.919	1.032	-1.032
83	0.691	0.712	0.733	2.948	-2.948	1.048	-1.048
84	0.671	0.692	0.712	2.977	-2.977	1.064	-1.064
85	0.655	0.676	0.696	3.001	-3.001	1.081	-1.081
86	0.634	0.653	0.673	3.034	-3.034	1.096	-1.096
87	0.616	0.635	0.655	3.062	-3.062	1.112	-1.112
88	0.598	0.618	0.637	3.09	-3.09	1.128	-1.128
89	0.582	0.601	0.619	3.118	-3.118	1.144	-1.144
90	0.566	0.584	0.602	3.146	-3.146	1.16	-1.16
91	0.55	0.568	0.586	3.174	-3.174	1.177	-1.177
92	0.535	0.553	0.57	3.201	-3.201	1.193	-1.193
93	0.52	0.538	0.555	3.229	-3.229	1.209	-1.209
94	0.506	0.523	0.54	3.256	-3.256	1.226	-1.226
95	0.492	0.509	0.526	3.283	-3.283	1.243	-1.243
96	0.479	0.496	0.512	3.31	-3.31	1.259	-1.259
97	0.466	0.483	0.499	3.337	-3.337	1.276	-1.276
98	0.454	0.47	0.486	3.364	-3.364	1.293	-1.293
99	0.442	0.457	0.473	3.39	-3.39	1.31	-1.31
100	0.43	0.446	0.461	3.417	-3.417	1.327	-1.327
101	0.419	0.434	0.449	3.443	-3.443	1.344	-1.344
102	0.408	0.423	0.437	3.469	-3.469	1.361	-1.361
103	0.397	0.412	0.426	3.496	-3.496	1.378	-1.378
104	0.387	0.401	0.415	3.521	-3.521	1.395	-1.395
105	0.377	0.391	0.405	3.547	-3.547	1.413	-1.413
106	0.367	0.381	0.395	3.573	-3.573	1.43	-1.43
107	0.358	0.371	0.385	3.599	-3.599	1.448	-1.448



108	0.349	0.362	0.375	3.624	-3.624	1.465	-1.465
109	0.34	0.353	0.366	3.649	-3.649	1.483	-1.483
110	0.332	0.344	0.357	3.675	-3.675	1.501	-1.501
111	0.323	0.336	0.348	3.7	-3.7	1.518	-1.518
112	0.315	0.327	0.34	3.725	-3.725	1.536	-1.536
113	0.307	0.319	0.331	3.75	-3.75	1.554	-1.554
114	0.3	0.311	0.323	3.775	-3.775	1.572	-1.572
115	0.292	0.304	0.315	3.799	-3.799	1.59	-1.59
116	0.285	0.296	0.308	3.824	-3.824	1.608	-1.608
117	0.278	0.289	0.3	3.849	-3.849	1.626	-1.626
118	0.271	0.282	0.293	3.873	-3.873	1.645	-1.645
119	0.265	0.275	0.286	3.897	-3.897	1.663	-1.663
120	0.258	0.269	0.279	3.921	-3.921	1.681	-1.681
121	0.252	0.262	0.273	3.946	-3.946	1.7	-1.7
122	0.246	0.256	0.266	3.97	-3.97	1.718	-1.718
123	0.24	0.25	0.26	3.994	-3.994	1.737	-1.737
124	0.234	0.244	0.254	4.017	-4.017	1.756	-1.756
125	0.229	0.239	0.248	4.041	-4.041	1.774	-1.774
126	0.223	0.233	0.242	4.065	-4.065	1.793	-1.793
127	0.218	0.227	0.237	4.088	-4.088	1.812	-1.812
128	0.213	0.222	0.231	4.112	-4.112	1.831	-1.831
129	0.208	0.217	0.226	4.135	-4.135	1.85	-1.85
130	0.203	0.212	0.221	4.159	-4.159	1.869	-1.869
131	0.199	0.207	0.216	4.182	-4.182	1.889	-1.889
132	0.194	0.202	0.211	4.205	-4.205	1.908	-1.908
133	0.189	0.198	0.206	4.228	-4.228	1.927	-1.927
134	0.185	0.193	0.202	4.251	-4.251	1.946	-1.946
135	0.181	0.189	0.197	4.274	-4.274	1.966	-1.966
136	0.177	0.185	0.193	4.296	-4.296	1.985	-1.985
137	0.173	0.181	0.188	4.319	-4.319	2.005	-2.005
138	0.169	0.177	0.184	4.342	-4.342	2.025	-2.025
139	0.165	0.173	0.18	4.364	-4.364	2.044	-2.044
140	0.161	0.169	0.176	4.386	-4.386	2.064	-2.064
141	0.158	0.165	0.172	4.409	-4.409	2.084	-2.084
142	0.154	0.161	0.169	4.431	-4.431	2.104	-2.104
143	0.151	0.158	0.165	4.453	-4.453	2.124	-2.124
144	0.147	0.154	0.161	4.475	-4.475	2.144	-2.144
145	0.144	0.151	0.158	4.497	-4.497	2.164	-2.164
146	0.141	0.148	0.154	4.519	-4.519	2.185	-2.185
147	0.138	0.145	0.151	4.541	-4.541	2.205	-2.205
148	0.135	0.141	0.148	4.562	-4.562	2.225	-2.225
149	0.132	0.138	0.145	4.584	-4.584	2.246	-2.246





150	0.129	0.136	0.142	4.605	-4.605	2.266	-2.266
151	0.126	0.133	0.139	4.627	-4.627	2.287	-2.287
152	0.124	0.13	0.136	4.648	-4.648	2.308	-2.308
153	0.121	0.127	0.133	4.669	-4.669	2.328	-2.328
154	0.119	0.124	0.13	4.69	-4.69	2.349	-2.349
155	0.116	0.122	0.128	4.711	-4.711	2.37	-2.37
156	0.114	0.119	0.125	4.732	-4.732	2.391	-2.391
157	0.111	0.117	0.122	4.753	-4.753	2.412	-2.412
158	0.109	0.114	0.12	4.774	-4.774	2.433	-2.433
159	0.107	0.112	0.117	4.795	-4.795	2.455	-2.455
160	0.104	0.11	0.115	4.815	-4.815	2.476	-2.476
161	0.102	0.108	0.113	4.835	-4.835	2.497	-2.497
162	0.1	0.105	0.111	4.856	-4.856	2.519	-2.519
163	0.098	0.103	0.108	4.876	-4.876	2.54	-2.54
164	0.096	0.101	0.106	4.896	-4.896	2.562	-2.562
165	0.094	0.099	0.104	4.916	-4.916	2.583	-2.583
166	0.092	0.097	0.102	4.936	-4.936	2.605	-2.605
167	0.091	0.095	0.1	4.956	-4.956	2.627	-2.627
168	0.089	0.093	0.098	4.976	-4.976	2.649	-2.649
169	0.087	0.092	0.096	4.995	-4.995	2.671	-2.671
170	0.085	0.09	0.094	5.015	-5.015	2.693	-2.693
171	0.084	0.088	0.093	5.034	-5.034	2.715	-2.715
172	0.082	0.086	0.091	5.053	-5.053	2.737	-2.737
173	0.08	0.085	0.089	5.072	-5.072	2.759	-2.759
174	0.079	0.083	0.087	5.091	-5.091	2.782	-2.782
175	0.077	0.082	0.086	5.11	-5.11	2.804	-2.804
176	0.076	0.08	0.084	5.129	-5.129	2.826	-2.826
177	0.075	0.079	0.083	5.148	-5.148	2.849	-2.849
178	0.073	0.077	0.081	5.167	-5.167	2.872	-2.872
179	0.072	0.076	0.08	5.185	-5.185	2.894	-2.894
180	0.07	0.074	0.078	5.203	-5.203	2.917	-2.917
181	0.069	0.073	0.077	5.222	-5.222	2.94	-2.94
182	0.068	0.072	0.075	5.24	-5.24	2.963	-2.963
183	0.067	0.07	0.074	5.258	-5.258	2.986	-2.986
184	0.065	0.069	0.073	5.276	-5.276	3.009	-3.009
185	0.064	0.068	0.072	5.294	-5.294	3.032	-3.032
186	0.063	0.067	0.07	5.311	-5.311	3.056	-3.056
187	0.062	0.066	0.069	5.329	-5.329	3.079	-3.079
188	0.061	0.064	0.068	5.347	-5.347	3.102	-3.102
189	0.06	0.063	0.067	5.364	-5.364	3.126	-3.126
190	0.059	0.062	0.066	5.381	-5.381	3.149	-3.149
191	0.058	0.061	0.064	5.399	-5.399	3.173	-3.173

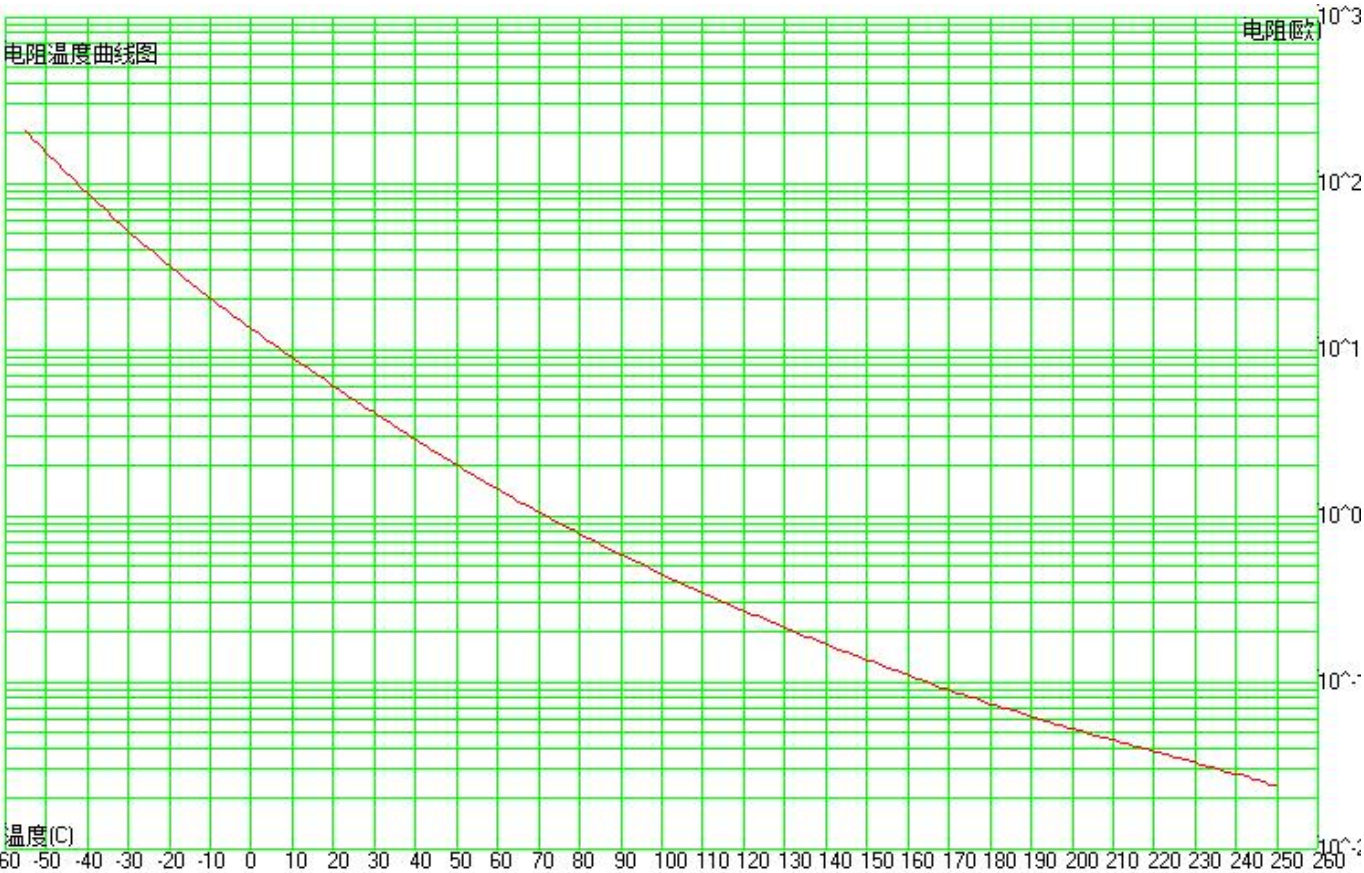




192	0.057	0.06	0.063	5.416	-5.416	3.197	-3.197
193	0.056	0.059	0.062	5.433	-5.433	3.22	-3.22
194	0.055	0.058	0.061	5.45	-5.45	3.244	-3.244
195	0.054	0.057	0.06	5.466	-5.466	3.268	-3.268
196	0.053	0.056	0.059	5.483	-5.483	3.292	-3.292
197	0.052	0.055	0.058	5.5	-5.5	3.316	-3.316
198	0.051	0.054	0.057	5.516	-5.516	3.34	-3.34
199	0.05	0.053	0.056	5.533	-5.533	3.365	-3.365
200	0.05	0.053	0.055	5.549	-5.549	3.389	-3.389
201	0.049	0.052	0.055	5.565	-5.565	3.413	-3.413
202	0.048	0.051	0.054	5.581	-5.581	3.438	-3.438
203	0.047	0.05	0.053	5.597	-5.597	3.462	-3.462
204	0.046	0.049	0.052	5.613	-5.613	3.487	-3.487
205	0.046	0.048	0.051	5.629	-5.629	3.512	-3.512
206	0.045	0.048	0.05	5.645	-5.645	3.537	-3.537
207	0.044	0.047	0.05	5.661	-5.661	3.561	-3.561
208	0.044	0.046	0.049	5.677	-5.677	3.586	-3.586
209	0.043	0.045	0.048	5.692	-5.692	3.611	-3.611
210	0.042	0.045	0.047	5.708	-5.708	3.636	-3.636
211	0.041	0.044	0.047	5.723	-5.723	3.661	-3.661
212	0.041	0.043	0.046	5.739	-5.739	3.687	-3.687
213	0.04	0.043	0.045	5.754	-5.754	3.712	-3.712
214	0.04	0.042	0.044	5.77	-5.77	3.737	-3.737
215	0.039	0.041	0.044	5.785	-5.785	3.763	-3.763
216	0.038	0.041	0.043	5.8	-5.8	3.788	-3.788
217	0.038	0.04	0.042	5.816	-5.816	3.814	-3.814
218	0.037	0.04	0.042	5.831	-5.831	3.839	-3.839
219	0.037	0.039	0.041	5.846	-5.846	3.865	-3.865
220	0.036	0.038	0.041	5.861	-5.861	3.891	-3.891
221	0.035	0.038	0.04	5.876	-5.876	3.917	-3.917
222	0.035	0.037	0.039	5.891	-5.891	3.942	-3.942
223	0.034	0.037	0.039	5.907	-5.907	3.968	-3.968
224	0.034	0.036	0.038	5.922	-5.922	3.994	-3.994
225	0.033	0.035	0.038	5.937	-5.937	4.021	-4.021
226	0.033	0.035	0.037	5.952	-5.952	4.047	-4.047
227	0.032	0.034	0.036	5.967	-5.967	4.073	-4.073
228	0.032	0.034	0.036	5.982	-5.982	4.099	-4.099
229	0.031	0.033	0.035	5.998	-5.998	4.125	-4.125
230	0.031	0.033	0.035	6.013	-6.013	4.152	-4.152
231	0.03	0.032	0.034	6.028	-6.028	4.178	-4.178
232	0.03	0.032	0.034	6.044	-6.044	4.205	-4.205
233	0.029	0.031	0.033	6.059	-6.059	4.231	-4.231



234	0.029	0.031	0.033	6.075	-6.075	4.258	-4.258
235	0.028	0.03	0.032	6.09	-6.09	4.285	-4.285
236	0.028	0.03	0.032	6.106	-6.106	4.311	-4.311
237	0.028	0.029	0.031	6.122	-6.122	4.338	-4.338
238	0.027	0.029	0.031	6.137	-6.137	4.365	-4.365
239	0.027	0.028	0.03	6.153	-6.153	4.392	-4.392
240	0.026	0.028	0.03	6.169	-6.169	4.419	-4.419
241	0.026	0.028	0.029	6.186	-6.186	4.446	-4.446
242	0.025	0.027	0.029	6.202	-6.202	4.473	-4.473
243	0.025	0.027	0.028	6.218	-6.218	4.5	-4.5
244	0.025	0.026	0.028	6.235	-6.235	4.527	-4.527
245	0.024	0.026	0.027	6.252	-6.252	4.554	-4.554
246	0.024	0.025	0.027	6.269	-6.269	4.581	-4.581
247	0.023	0.025	0.026	6.286	-6.286	4.608	-4.608
248	0.023	0.024	0.026	6.303	-6.303	4.636	-4.636
249	0.022	0.024	0.026	6.321	-6.321	4.663	-4.663
250	0.022	0.024	0.025	6.338	-6.338	4.69	-4.69



附表 II (Attachment II)

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

