



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 :

产品名称 PART NAME :

产品规格 PART NUMBER :

产品编号 PRODUCTCODE:

版次 REV.NO:

日期 DATE:

MF51 玻封测温型 NTC 热敏电阻器
MF51 Glass shell NTC Thermistor

MF51-103F3435 (B)

B0

2024-2-23

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

MF51- 103 F 3435 B
 ① ② ③ ④ ⑤

- ① MF51: 玻封测温型 NTC 热敏电阻器 (Series Glass Seal shell NTC Thermistor)
 ② 103: 25℃ 的零功率电阻值 10KΩ (Zero Power Resistance at 25℃ is 10KΩ)
 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 3435: B25/85 值 3435K (B25/85:3435K)
 ⑤ B: 外形尺寸代码 (Shape and size code)

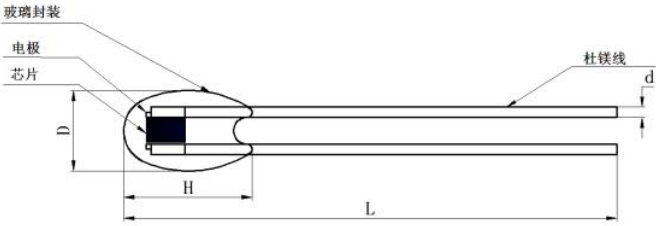
2、电气性能 Electrical Characteristics

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℃}	Ta=25±0.01℃ Test Power≤0.1mW	KΩ	10KΩ±1%
2.2	B 值 B-value	B _{25/85}	$B=[(T_a \times T_b)/(T_b - T_a)] \times \ln(R_a/R_b)$ Ta=25±0.01℃ Tb=85℃±0.01℃	K	3435±1%
2.3	耗散系数 Thermal dissipation Coefficient	δ	静止空气中 In still air	mW/ ℃	约 0.9
2.4	时间常数 Thermal time constant	τ	静止空气中 In still air	sec	约 9
2.5	耐电压 withstand voltage	/	500V/AC 1min	/	无击穿或飞弧 No breakthrough and flash over
2.6	绝缘电阻 Insulation resistance	/	50V/DC 1min	MΩ	≥10
2.7	工作温度范围 Operating temperature range	/	/	℃	-40℃ ~ 250℃
2.8	最大额定功率 Maximum rated power	P _{max}	/	mW	35
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.	MF51-103F3435 (B)	审核 Approve:		日期 DATE		

尺寸 Dimensions: (Unit: mm)



型 号	D	H	L	d
MF51-B	1.7±0.25	3.2±0.5	65±2.5	0.25±0.02

技术要求 Technical requirements:

- 1) 零功率阻值: R25: 10KΩ±1% (Zero Power Resistance: R25: 10KΩ±1%);
- 2) B25/85 数值: 3435K±1% (B-value: B25/85: 3435K±1%);
- 3) 引线: Φ0.25 杜镁线 (Φ0.25 Magnesite 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。 Version 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

试验项目	测试标准	试验条件/方法	性能要求															
高温存储试验 High temperature storage	IEC60068-2-2	Tu±5℃，1000±24 小时	无可见损伤 No obvious damage R/R≤±5%															
稳态湿热试验 Steady humidity and heat	IEC60068-2-78	40±2℃,92~95%RH，1000±24 小时	无可见损伤 No obvious damage R/R≤±3%															
温度急变试验 Rapid changes in temperature	IEC60068-2-14	温度急变按下表条件循环五个周期 The rapid change of temperature cycles five cycles according to the following table conditions <table><tr><td>步骤 Step</td><td>温度（℃） Temperature</td><td>周期（分钟） Period</td></tr><tr><td>1</td><td>TL±5</td><td>30±3</td></tr><tr><td>2</td><td>室温 Room Temperature</td><td>5±3</td></tr><tr><td>3</td><td>Tu±5</td><td>30±3</td></tr><tr><td>4</td><td>室温 Room Temperature</td><td>5±3</td></tr></table>	步骤 Step	温度（℃） Temperature	周期（分钟） Period	1	TL±5	30±3	2	室温 Room Temperature	5±3	3	Tu±5	30±3	4	室温 Room Temperature	5±3	无可见损伤 No obvious damage R/R≤±3%
步骤 Step	温度（℃） Temperature	周期（分钟） Period																
1	TL±5	30±3																
2	室温 Room Temperature	5±3																
3	Tu±5	30±3																
4	室温 Room Temperature	5±3																
最大功耗 Maximum power consumption	IEC60539-1-4.26.3	25±5℃，Pmax,1000±24 小时	无可见损伤 No obvious damage R/R≤±5%															

▲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
7.1	质量管理体系认证 Quality Management System Certification	ISO9001:2015
		IATF16949: 2016
7.2	环境管理体系认证 Environmental Management System Certification	ISO14001:2015
7.3	环保检测报告 Environmental test report	RoHS 2.0
7.4	CQC 认证 (CQC07001019009) CQC certificate (CQC07001019009)	
7.5	UL 认证 (E240991) UL certificate (E240991)	
7.6	TUV 认证 (R50245892) UL certificate (R50245892)	
7.7	江苏省高新技术产品认证 High-tech product certificate in Jiangsu Province	
7.8	AEC-Q200 认证 AEC-Q200certificate	20172052556G

附表 I (Attachment I)

南京时恒电子科技有限公司

R25=10K Ω 精度: $\pm 1\%$ B25/85=3435K 精度: $\pm 1\%$ (P174-9A)

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	475.553	500.13	524.706	4.914	-4.914	0.735	-0.735
-54	499.871	525.983	552.096	4.964	-4.964	0.727	-0.727
-53	499.875	525.987	552.1	4.964	-4.964	0.721	-0.721
-52	482.92	507.96	533.001	4.929	-4.929	0.716	-0.716
-51	455.932	479.28	502.628	4.871	-4.871	0.712	-0.712
-50	424.263	445.648	467.033	4.798	-4.798	0.709	-0.709
-49	391.531	410.916	430.3	4.717	-4.717	0.706	-0.706
-48	359.918	377.4	394.882	4.632	-4.632	0.703	-0.703
-47	330.571	346.315	362.059	4.546	-4.546	0.7	-0.7
-46	303.961	318.155	332.349	4.461	-4.461	0.697	-0.697
-45	280.158	292.988	305.817	4.378	-4.378	0.694	-0.694
-44	259.011	270.648	282.284	4.299	-4.299	0.691	-0.691
-43	240.265	250.86	261.455	4.223	-4.223	0.687	-0.687
-42	223.631	233.316	243	4.15	-4.15	0.684	-0.684
-41	208.82	217.706	226.591	4.081	-4.081	0.68	-0.68
-40	195.568	203.75	211.931	4.015	-4.015	0.677	-0.677
-39	183.642	191.197	198.753	3.951	-3.951	0.673	-0.673
-38	172.839	179.836	186.832	3.89	-3.89	0.668	-0.668
-37	162.991	169.484	175.977	3.83	-3.83	0.664	-0.664
-36	153.957	159.994	166.031	3.773	-3.773	0.66	-0.66
-35	145.62	151.241	156.863	3.716	-3.716	0.655	-0.655
-34	137.886	143.127	148.368	3.661	-3.661	0.651	-0.651
-33	130.678	135.569	140.46	3.607	-3.607	0.646	-0.646
-32	123.935	128.502	133.069	3.553	-3.553	0.641	-0.641
-31	117.606	121.873	126.139	3.5	-3.5	0.636	-0.636
-30	111.651	115.638	119.626	3.448	-3.448	0.631	-0.631
-29	106.035	109.763	113.491	3.396	-3.396	0.626	-0.626
-28	100.734	104.219	107.705	3.344	-3.344	0.621	-0.621
-27	95.723	98.982	102.242	3.292	-3.292	0.616	-0.616
-26	90.984	94.032	97.08	3.241	-3.241	0.611	-0.611
-25	86.499	89.35	92.2	3.19	-3.19	0.606	-0.606
-24	82.255	84.921	87.587	3.139	-3.139	0.6	-0.6
-23	78.238	80.731	83.225	3.088	-3.088	0.595	-0.595
-22	74.435	76.768	79.1	3.038	-3.038	0.59	-0.59
-21	70.836	73.018	75.201	2.988	-2.988	0.584	-0.584
-20	67.43	69.472	71.514	2.938	-2.938	0.579	-0.579
-19	64.207	66.118	68.028	2.889	-2.889	0.573	-0.573

-18	61.157	62.945	64.732	2.839	-2.839	0.568	-0.568
-17	58.271	59.944	61.617	2.791	-2.791	0.562	-0.562
-16	55.539	57.105	58.671	2.742	-2.742	0.556	-0.556
-15	52.954	54.42	55.886	2.694	-2.694	0.55	-0.55
-14	50.506	51.879	53.252	2.646	-2.646	0.544	-0.544
-13	48.188	49.474	50.76	2.599	-2.599	0.538	-0.538
-12	45.993	47.198	48.402	2.551	-2.551	0.532	-0.532
-11	43.914	45.042	46.17	2.505	-2.505	0.526	-0.526
-10	41.942	43	44.057	2.458	-2.458	0.52	-0.52
-9	40.073	41.064	42.055	2.412	-2.412	0.514	-0.514
-8	38.3	39.229	40.157	2.366	-2.366	0.508	-0.508
-7	36.617	37.488	38.358	2.321	-2.321	0.501	-0.501
-6	35.02	35.835	36.651	2.276	-2.276	0.495	-0.495
-5	33.502	34.267	35.031	2.231	-2.231	0.488	-0.488
-4	32.059	32.776	33.493	2.187	-2.187	0.482	-0.482
-3	30.688	31.36	32.032	2.143	-2.143	0.475	-0.475
-2	29.383	30.013	30.643	2.099	-2.099	0.468	-0.468
-1	28.141	28.732	29.322	2.055	-2.055	0.462	-0.462
0	26.959	27.513	28.066	2.012	-2.012	0.455	-0.455
1	25.833	26.352	26.87	1.969	-1.969	0.448	-0.448
2	24.759	25.246	25.732	1.926	-1.926	0.441	-0.441
3	23.736	24.192	24.648	1.883	-1.883	0.434	-0.434
4	22.761	23.188	23.614	1.841	-1.841	0.427	-0.427
5	21.83	22.23	22.63	1.798	-1.798	0.42	-0.42
6	20.942	21.316	21.691	1.756	-1.756	0.412	-0.412
7	20.094	20.445	20.795	1.715	-1.715	0.405	-0.405
8	19.285	19.613	19.941	1.673	-1.673	0.398	-0.398
9	18.512	18.819	19.126	1.632	-1.632	0.39	-0.39
10	17.729	18.016	18.302	1.588	-1.588	0.384	-0.384
11	17.068	17.337	17.606	1.55	-1.55	0.375	-0.375
12	16.394	16.646	16.897	1.509	-1.509	0.368	-0.368
13	15.75	15.985	16.22	1.469	-1.469	0.36	-0.36
14	15.135	15.354	15.574	1.428	-1.428	0.352	-0.352
15	14.546	14.751	14.956	1.388	-1.388	0.345	-0.345
16	13.983	14.175	14.366	1.348	-1.348	0.337	-0.337
17	13.445	13.624	13.802	1.309	-1.309	0.329	-0.329
18	12.931	13.097	13.263	1.269	-1.269	0.321	-0.321
19	12.438	12.593	12.748	1.23	-1.23	0.313	-0.313
20	11.967	12.112	12.256	1.191	-1.191	0.305	-0.305
21	11.517	11.651	11.785	1.152	-1.152	0.297	-0.297
22	11.085	11.21	11.335	1.114	-1.114	0.289	-0.289
23	10.673	10.789	10.905	1.075	-1.075	0.281	-0.281

24	10.278	10.386	10.493	1.037	-1.037	0.273	-0.273
25	9.9	10	10.1	1	-1	0.264	-0.264
26	9.53	9.63	9.73	1.037	-1.037	0.276	-0.276
27	9.177	9.276	9.376	1.075	-1.075	0.288	-0.288
28	8.838	8.938	9.037	1.112	-1.112	0.3	-0.3
29	8.514	8.613	8.712	1.149	-1.149	0.312	-0.312
30	8.204	8.303	8.401	1.185	-1.185	0.324	-0.324
31	7.907	8.005	8.103	1.222	-1.222	0.336	-0.336
32	7.623	7.72	7.817	1.258	-1.258	0.348	-0.348
33	7.35	7.447	7.543	1.294	-1.294	0.36	-0.36
34	7.089	7.185	7.28	1.33	-1.33	0.373	-0.373
35	6.839	6.934	7.028	1.366	-1.366	0.385	-0.385
36	6.599	6.693	6.786	1.401	-1.401	0.398	-0.398
37	6.368	6.461	6.554	1.436	-1.436	0.41	-0.41
38	6.148	6.239	6.331	1.471	-1.471	0.423	-0.423
39	5.936	6.027	6.117	1.506	-1.506	0.436	-0.436
40	5.732	5.822	5.912	1.54	-1.54	0.448	-0.448
41	5.537	5.626	5.714	1.575	-1.575	0.461	-0.461
42	5.35	5.437	5.525	1.609	-1.609	0.474	-0.474
43	5.169	5.256	5.342	1.643	-1.643	0.487	-0.487
44	4.996	5.082	5.167	1.676	-1.676	0.5	-0.5
45	4.83	4.914	4.998	1.71	-1.71	0.513	-0.513
46	4.67	4.753	4.836	1.743	-1.743	0.527	-0.527
47	4.516	4.598	4.68	1.776	-1.776	0.54	-0.54
48	4.369	4.449	4.53	1.809	-1.809	0.553	-0.553
49	4.226	4.306	4.385	1.842	-1.842	0.567	-0.567
50	4.089	4.168	4.246	1.875	-1.875	0.58	-0.58
51	3.958	4.035	4.111	1.907	-1.907	0.594	-0.594
52	3.831	3.906	3.982	1.939	-1.939	0.607	-0.607
53	3.708	3.783	3.858	1.971	-1.971	0.621	-0.621
54	3.591	3.664	3.738	2.003	-2.003	0.635	-0.635
55	3.477	3.549	3.622	2.035	-2.035	0.649	-0.649
56	3.368	3.439	3.51	2.067	-2.067	0.662	-0.662
57	3.262	3.332	3.402	2.098	-2.098	0.676	-0.676
58	3.161	3.23	3.298	2.13	-2.13	0.69	-0.69
59	3.063	3.13	3.198	2.161	-2.161	0.704	-0.704
60	2.968	3.035	3.101	2.192	-2.192	0.719	-0.719
61	2.877	2.942	3.008	2.223	-2.223	0.733	-0.733
62	2.789	2.853	2.918	2.254	-2.254	0.747	-0.747
63	2.704	2.767	2.831	2.284	-2.284	0.762	-0.762
64	2.622	2.684	2.746	2.315	-2.315	0.776	-0.776
65	2.543	2.604	2.665	2.345	-2.345	0.79	-0.79

66	2.467	2.527	2.587	2.375	-2.375	0.805	-0.805
67	2.393	2.452	2.511	2.405	-2.405	0.82	-0.82
68	2.322	2.379	2.437	2.435	-2.435	0.834	-0.834
69	2.253	2.31	2.367	2.465	-2.465	0.849	-0.849
70	2.186	2.242	2.298	2.495	-2.495	0.864	-0.864
71	2.122	2.177	2.232	2.524	-2.524	0.879	-0.879
72	2.06	2.114	2.168	2.554	-2.554	0.894	-0.894
73	2	2.053	2.106	2.583	-2.583	0.909	-0.909
74	1.942	1.994	2.046	2.612	-2.612	0.924	-0.924
75	1.886	1.937	1.988	2.641	-2.641	0.939	-0.939
76	1.832	1.882	1.932	2.67	-2.67	0.954	-0.954
77	1.779	1.829	1.878	2.699	-2.699	0.97	-0.97
78	1.729	1.777	1.826	2.727	-2.727	0.985	-0.985
79	1.68	1.727	1.775	2.756	-2.756	1.001	-1.001
80	1.632	1.679	1.726	2.784	-2.784	1.016	-1.016
81	1.586	1.632	1.678	2.812	-2.812	1.032	-1.032
82	1.542	1.587	1.632	2.84	-2.84	1.048	-1.048
83	1.499	1.544	1.588	2.868	-2.868	1.063	-1.063
84	1.458	1.501	1.545	2.896	-2.896	1.079	-1.079
85	1.418	1.461	1.503	2.923	-2.923	1.095	-1.095
86	1.379	1.421	1.463	2.951	-2.951	1.111	-1.111
87	1.341	1.383	1.424	2.978	-2.978	1.127	-1.127
88	1.305	1.346	1.386	3.005	-3.005	1.143	-1.143
89	1.27	1.31	1.349	3.032	-3.032	1.16	-1.16
90	1.236	1.275	1.314	3.059	-3.059	1.176	-1.176
91	1.203	1.241	1.28	3.086	-3.086	1.192	-1.192
92	1.171	1.209	1.246	3.112	-3.112	1.209	-1.209
93	1.14	1.177	1.214	3.139	-3.139	1.225	-1.225
94	1.11	1.147	1.183	3.165	-3.165	1.242	-1.242
95	1.082	1.117	1.153	3.191	-3.191	1.258	-1.258
96	1.053	1.089	1.124	3.217	-3.217	1.275	-1.275
97	1.026	1.061	1.095	3.243	-3.243	1.292	-1.292
98	1	1.034	1.068	3.269	-3.269	1.309	-1.309
99	0.975	1.008	1.041	3.294	-3.294	1.326	-1.326
100	0.95	0.983	1.015	3.32	-3.32	1.343	-1.343
101	0.926	0.958	0.99	3.345	-3.345	1.36	-1.36
102	0.903	0.934	0.966	3.37	-3.37	1.377	-1.377
103	0.88	0.911	0.942	3.395	-3.395	1.395	-1.395
104	0.858	0.889	0.919	3.42	-3.42	1.412	-1.412
105	0.837	0.867	0.897	3.445	-3.445	1.429	-1.429
106	0.817	0.846	0.876	3.469	-3.469	1.447	-1.447
107	0.797	0.826	0.855	3.493	-3.493	1.465	-1.465

108	0.778	0.806	0.834	3.518	-3.518	1.482	-1.482
109	0.759	0.787	0.815	3.542	-3.542	1.5	-1.5
110	0.741	0.768	0.796	3.566	-3.566	1.518	-1.518
111	0.723	0.75	0.777	3.59	-3.59	1.536	-1.536
112	0.706	0.732	0.759	3.613	-3.613	1.554	-1.554
113	0.689	0.715	0.741	3.637	-3.637	1.572	-1.572
114	0.673	0.699	0.724	3.661	-3.661	1.59	-1.59
115	0.657	0.683	0.708	3.684	-3.684	1.608	-1.608
116	0.642	0.667	0.692	3.707	-3.707	1.626	-1.626
117	0.627	0.652	0.676	3.73	-3.73	1.645	-1.645
118	0.613	0.637	0.661	3.753	-3.753	1.663	-1.663
119	0.599	0.622	0.646	3.776	-3.776	1.682	-1.682
120	0.585	0.608	0.631	3.799	-3.799	1.7	-1.7
121	0.572	0.595	0.617	3.822	-3.822	1.719	-1.719
122	0.559	0.581	0.604	3.844	-3.844	1.737	-1.737
123	0.546	0.568	0.59	3.867	-3.867	1.756	-1.756
124	0.534	0.556	0.577	3.889	-3.889	1.775	-1.775
125	0.522	0.544	0.565	3.912	-3.912	1.794	-1.794
126	0.511	0.532	0.552	3.934	-3.934	1.813	-1.813
127	0.499	0.52	0.54	3.956	-3.956	1.832	-1.832
128	0.488	0.509	0.529	3.978	-3.978	1.851	-1.851
129	0.478	0.497	0.517	4	-4	1.87	-1.87
130	0.467	0.487	0.506	4.022	-4.022	1.89	-1.89
131	0.457	0.476	0.495	4.044	-4.044	1.909	-1.909
132	0.447	0.466	0.485	4.066	-4.066	1.928	-1.928
133	0.437	0.456	0.475	4.088	-4.088	1.948	-1.948
134	0.428	0.446	0.464	4.109	-4.109	1.967	-1.967
135	0.418	0.437	0.455	4.131	-4.131	1.987	-1.987
136	0.409	0.427	0.445	4.152	-4.152	2.007	-2.007
137	0.401	0.418	0.436	4.174	-4.174	2.026	-2.026
138	0.392	0.409	0.426	4.195	-4.195	2.046	-2.046
139	0.384	0.401	0.418	4.217	-4.217	2.066	-2.066
140	0.375	0.392	0.409	4.238	-4.238	2.086	-2.086
141	0.367	0.384	0.4	4.259	-4.259	2.106	-2.106
142	0.36	0.376	0.392	4.281	-4.281	2.126	-2.126
143	0.352	0.368	0.384	4.302	-4.302	2.146	-2.146
144	0.345	0.36	0.376	4.323	-4.323	2.166	-2.166
145	0.337	0.353	0.368	4.344	-4.344	2.186	-2.186
146	0.33	0.345	0.36	4.365	-4.365	2.207	-2.207
147	0.323	0.338	0.353	4.386	-4.386	2.227	-2.227
148	0.316	0.331	0.346	4.407	-4.407	2.248	-2.248
149	0.31	0.324	0.339	4.428	-4.428	2.268	-2.268



150	0.303	0.318	0.332	4.449	-4.449	2.289	-2.289
151	0.297	0.311	0.325	4.47	-4.47	2.309	-2.309
152	0.291	0.305	0.318	4.491	-4.491	2.33	-2.33
153	0.285	0.298	0.312	4.512	-4.512	2.351	-2.351
154	0.279	0.292	0.305	4.532	-4.532	2.372	-2.372
155	0.273	0.286	0.299	4.553	-4.553	2.393	-2.393
156	0.267	0.28	0.293	4.574	-4.574	2.414	-2.414
157	0.262	0.275	0.287	4.594	-4.594	2.435	-2.435
158	0.256	0.269	0.281	4.615	-4.615	2.456	-2.456
159	0.251	0.263	0.276	4.636	-4.636	2.477	-2.477
160	0.246	0.258	0.27	4.656	-4.656	2.498	-2.498
161	0.241	0.253	0.265	4.676	-4.676	2.519	-2.519
162	0.236	0.248	0.259	4.697	-4.697	2.541	-2.541
163	0.231	0.243	0.254	4.717	-4.717	2.562	-2.562
164	0.227	0.238	0.249	4.737	-4.737	2.584	-2.584
165	0.222	0.233	0.244	4.758	-4.758	2.605	-2.605
166	0.218	0.228	0.239	4.778	-4.778	2.627	-2.627
167	0.213	0.224	0.235	4.798	-4.798	2.649	-2.649
168	0.209	0.219	0.23	4.818	-4.818	2.671	-2.671
169	0.205	0.215	0.226	4.838	-4.838	2.693	-2.693
170	0.201	0.211	0.221	4.858	-4.858	2.714	-2.714
171	0.197	0.207	0.217	4.878	-4.878	2.736	-2.736
172	0.193	0.203	0.213	4.897	-4.897	2.759	-2.759
173	0.189	0.199	0.209	4.917	-4.917	2.781	-2.781
174	0.185	0.195	0.205	4.936	-4.936	2.803	-2.803
175	0.182	0.191	0.201	4.956	-4.956	2.825	-2.825
176	0.178	0.188	0.197	4.975	-4.975	2.848	-2.848
177	0.175	0.184	0.193	4.994	-4.994	2.87	-2.87
178	0.171	0.18	0.19	5.013	-5.013	2.893	-2.893
179	0.168	0.177	0.186	5.032	-5.032	2.915	-2.915
180	0.165	0.174	0.183	5.051	-5.051	2.938	-2.938
181	0.162	0.17	0.179	5.07	-5.07	2.961	-2.961
182	0.159	0.167	0.176	5.089	-5.089	2.984	-2.984
183	0.156	0.164	0.173	5.107	-5.107	3.007	-3.007
184	0.153	0.161	0.17	5.126	-5.126	3.03	-3.03
185	0.15	0.158	0.167	5.144	-5.144	3.053	-3.053
186	0.147	0.155	0.164	5.162	-5.162	3.076	-3.076
187	0.145	0.153	0.161	5.18	-5.18	3.099	-3.099
188	0.142	0.15	0.158	5.198	-5.198	3.123	-3.123
189	0.14	0.147	0.155	5.216	-5.216	3.146	-3.146
190	0.137	0.145	0.152	5.233	-5.233	3.17	-3.17
191	0.135	0.142	0.15	5.251	-5.251	3.193	-3.193

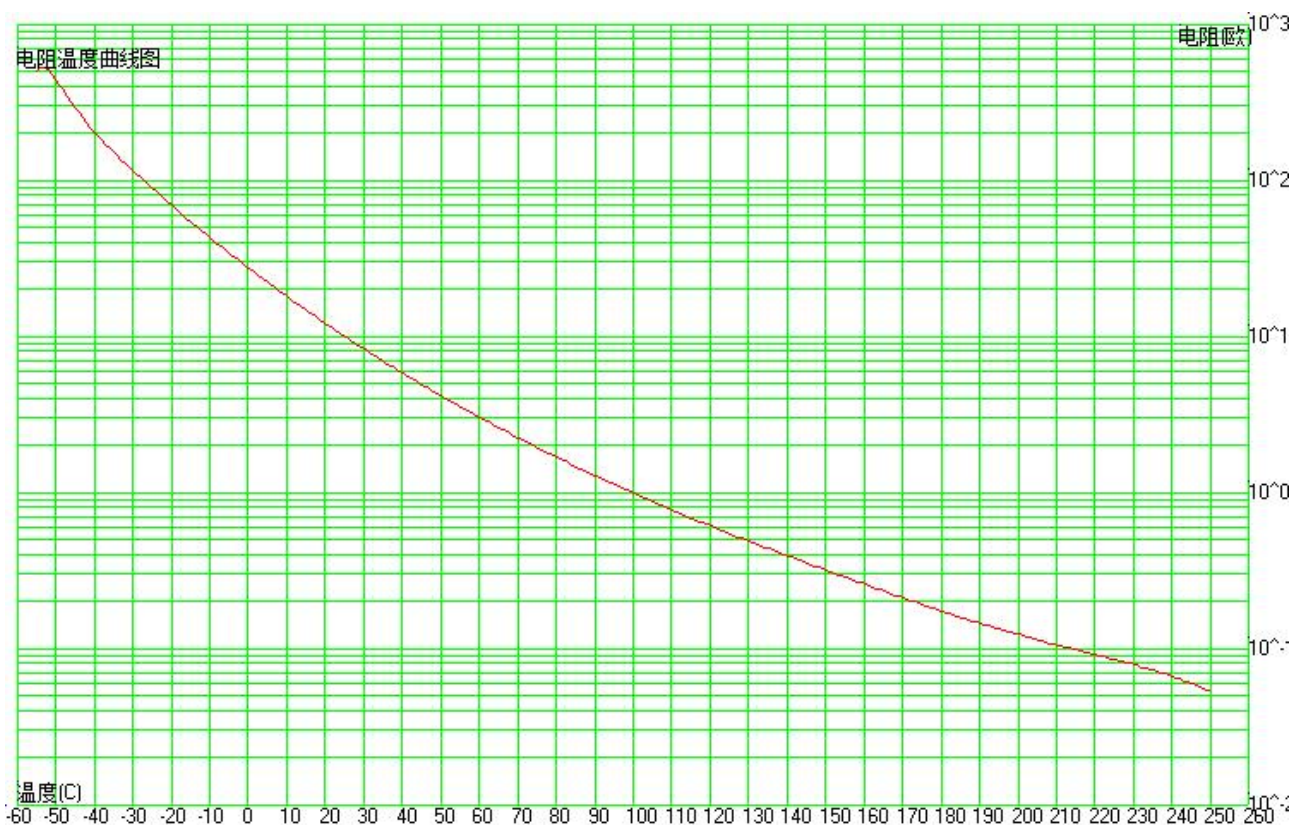




192	0.132	0.14	0.147	5.268	-5.268	3.217	-3.217
193	0.13	0.137	0.145	5.285	-5.285	3.241	-3.241
194	0.128	0.135	0.142	5.302	-5.302	3.265	-3.265
195	0.126	0.133	0.14	5.319	-5.319	3.289	-3.289
196	0.124	0.131	0.138	5.335	-5.335	3.313	-3.313
197	0.122	0.129	0.136	5.352	-5.352	3.337	-3.337
198	0.12	0.127	0.133	5.368	-5.368	3.361	-3.361
199	0.118	0.124	0.131	5.384	-5.384	3.385	-3.385
200	0.116	0.123	0.129	5.4	-5.4	3.41	-3.41
201	0.114	0.121	0.127	5.416	-5.416	3.434	-3.434
202	0.112	0.119	0.125	5.432	-5.432	3.459	-3.459
203	0.11	0.117	0.123	5.447	-5.447	3.483	-3.483
204	0.109	0.115	0.121	5.462	-5.462	3.508	-3.508
205	0.107	0.113	0.12	5.478	-5.478	3.533	-3.533
206	0.105	0.112	0.118	5.493	-5.493	3.558	-3.558
207	0.104	0.11	0.116	5.508	-5.508	3.583	-3.583
208	0.102	0.108	0.114	5.523	-5.523	3.608	-3.608
209	0.101	0.107	0.113	5.537	-5.537	3.633	-3.633
210	0.099	0.105	0.111	5.552	-5.552	3.658	-3.658
211	0.098	0.104	0.109	5.566	-5.566	3.683	-3.683
212	0.096	0.102	0.108	5.581	-5.581	3.709	-3.709
213	0.095	0.101	0.106	5.595	-5.595	3.734	-3.734
214	0.094	0.099	0.105	5.609	-5.609	3.76	-3.76
215	0.092	0.098	0.103	5.623	-5.623	3.785	-3.785
216	0.091	0.097	0.102	5.637	-5.637	3.811	-3.811
217	0.09	0.095	0.101	5.651	-5.651	3.837	-3.837
218	0.089	0.094	0.099	5.666	-5.666	3.863	-3.863
219	0.087	0.093	0.098	5.68	-5.68	3.888	-3.888
220	0.086	0.091	0.096	5.694	-5.694	3.914	-3.914
221	0.085	0.09	0.095	5.708	-5.708	3.94	-3.94
222	0.084	0.089	0.094	5.722	-5.722	3.966	-3.966
223	0.082	0.087	0.093	5.736	-5.736	3.993	-3.993
224	0.081	0.086	0.091	5.75	-5.75	4.019	-4.019
225	0.08	0.085	0.09	5.764	-5.764	4.045	-4.045
226	0.079	0.084	0.089	5.779	-5.779	4.071	-4.071
227	0.078	0.083	0.087	5.793	-5.793	4.097	-4.097
228	0.077	0.081	0.086	5.808	-5.808	4.124	-4.124
229	0.075	0.08	0.085	5.823	-5.823	4.15	-4.15
230	0.074	0.079	0.084	5.838	-5.838	4.177	-4.177
231	0.073	0.078	0.082	5.854	-5.854	4.203	-4.203
232	0.072	0.076	0.081	5.869	-5.869	4.23	-4.23
233	0.071	0.075	0.08	5.885	-5.885	4.256	-4.256



234	0.07	0.074	0.078	5.902	-5.902	4.283	-4.283
235	0.068	0.073	0.077	5.918	-5.918	4.309	-4.309
236	0.067	0.072	0.076	5.936	-5.936	4.336	-4.336
237	0.066	0.07	0.075	5.953	-5.953	4.362	-4.362
238	0.065	0.069	0.073	5.971	-5.971	4.389	-4.389
239	0.064	0.068	0.072	5.99	-5.99	4.415	-4.415
240	0.062	0.066	0.07	6.009	-6.009	4.442	-4.442
241	0.061	0.065	0.069	6.029	-6.029	4.468	-4.468
242	0.06	0.064	0.068	6.049	-6.049	4.494	-4.494
243	0.059	0.062	0.066	6.071	-6.071	4.521	-4.521
244	0.057	0.061	0.065	6.093	-6.093	4.547	-4.547
245	0.056	0.06	0.063	6.115	-6.115	4.573	-4.573
246	0.055	0.058	0.062	6.139	-6.139	4.6	-4.6
247	0.053	0.057	0.06	6.164	-6.164	4.626	-4.626
248	0.052	0.055	0.059	6.189	-6.189	4.652	-4.652
249	0.051	0.054	0.057	6.216	-6.216	4.678	-4.678
250	0.049	0.053	0.056	6.243	-6.243	4.704	-4.704



附表 II (Attachment II)

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

