



南京时恒电子科技有限公司

规格承认书

APPROVAL SHEET

客户名称:

CUSTOMER _____

产品名称:

PART NAME MF58 玻壳测温型 NTC 热敏电阻器

产品规格:

PART NUMBER MF58-103 J 3470 (UL: E240991)

日期:

DATE 2017年 07月 20日

确 认

CONFIRM

客户

品保部: _____

制造部: _____

工程部: _____

供货商/制造商

规格书制作: 鞠晓丽

技术部审核: _____

品质部审核: _____

生产部审核: _____

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南京时恒电子科技有限公司

MF58 玻壳测温型 NTC 热敏电阻器

型号: MF58-103J3470

本规格书提供了南京时恒电子科技有限公司生产的 MF58 系列 NTC 热敏电阻的结构尺寸、产品性能、试验条件、使用要求的描述, 敬请贵司确认。
对本规格书产生疑问时, 请速与我们联系 (025-52121868), 若无疑问请确认回传, 若无回传, 我司将视为默认。
贵公司改变使用用途, 作用方法时, 请与我们联系。

客户名称:		
客户 确认	确认:	时间:
	审核:	时间:

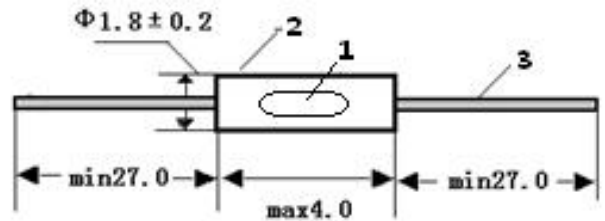
1. 电气性能

	项目	符号	测试条件	单位	性能要求
1.1	25℃的零功率电阻值	R ₂₅	T _a =25±0.05℃ 测试功率≤0.1mw	KΩ	10KΩ±5%
1.2	B 值	B _{25/50}	$B = [(T_a \times T_b) / (T_b - T_a)] \times \ln(R_a / R_b)$ T _b =50℃±0.05℃	K	3470±1%
1.3	耗散系数	δ	静止空气中	mW/℃	≥2
1.4	时间常数	τ	静止空气中	sec	≤20
1.5	耐电压	/	1500V/AC 1min	/	无击穿或飞弧
1.6	绝缘电阻	/	500V/DC 1min	MΩ	≥500
1.7	工作温度范围	/	/	℃	-55~250
1.8	最大额定功率	P _{max}	/	mW	50
1.9	阻温特性	/	/	/	见附表 1
1.10	阻值误差	/	/	/	见附表 2

2. 可靠性

项目	测试条件及方法	技术要求
2.1 引出端强度	固定电阻端, 拉力: 10±1 N, 时间: 10±1 秒	无可见性损伤 R ₂₅ ΔR/R≤±2%
2.2 可焊性	温度 245±5℃ 时间 2-3 秒	着锡面积≥95%
2.3 耐焊接热	锡锅温度: 265±5℃, 浸入深度距电阻体 6mm, 时间 5±1 秒	R ₂₅ ΔR/R≤±2%
2.4 稳态湿热	温度: 40℃±2℃, 湿度: 93±2%, 时间: 500 小时	R ₂₅ ΔR/R≤±2%
2.5 温度快速变化	-55℃30min→25℃5min→250℃30min→25℃5min, 反复 5 次	R ₂₅ ΔR/R≤±2%
2.6 高温储存	温度: 250℃±5℃, 时间: 1000 小时	R ₂₅ ΔR/R≤±2%
2.7 低温储存	温度: -55℃±5℃, 时间: 1000 小时	R ₂₅ ΔR/R≤±2%

4. 外形尺寸: (单位: mm)



序号	名称	材料规格	数量	备注
1	元件	NTC 热敏电阻	1	
2	外壳	玻璃	1	
3	导线	Φ0.5±0.05 镀锡钢线	2	

5. 产品型号说明

MF58 103 J 3470

① ② ③ ④

- ① MF58: 玻壳测温型 NTC 热敏电阻
- ② 103: 25℃的零功率电阻值 10KΩ
- ③ J: 阻值精度代码 F-±1% G-±2% H-±3% J-±5%
- ④ 3470: B_{25/50} 值 3470K

6. 认证

- 6.1 质量管理体系认证 ISO9001:2008 (01115Q20270R5M)
ISO/TS16949: 2009 (0192416)
- 6.2 环境管理体系认证 ISO14001:2004 (01113E20060R2M)
- 6.3 环保检测报告 ROHS
- 6.4 CQC 产品 CQC 认证 (CQC09001033986)
- 6.5 江苏省高新技术产品认证 (150115G0377N)
- 6.6 cULus 安规认证 UL 1434 认证(File # E240991)

3. 使用注意事项

- 3.1 本产品的用途: 温度测量与控制;
- 3.2 避免流过热敏电阻芯片的电流引起元件自身发热而产生测量误差;
- 3.3 烙铁焊接时, 焊接处距玻壳端距离至少 2mm, 焊接温度应低于 360℃, 焊接时间<3ses;
- 3.4 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;
- 3.5 储存温度: -10℃ ~ 40℃; 储存湿度: ≤75% RH;
- 3.6 避免存放在具有腐蚀性气体及光照的环境下;
- 3.7 包装打开后需重新密封保存;
- 3.8 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;

电话: 025-52121868

传真: 025-52122373

附表 1
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南京时恒阻温特性表

R25=10K Ω 精度:±5% B25/50=3470K B25/85=3611K 精度:±1%(P232-26)

温度(°C)	电阻(kΩ)			电阻精度(%)		温度精度(°C)	
	最小值	中心值	最大值	△R	-△R	△T	-△T
-55	538.475	590.410	645.735	9.370	-8.796	1.344	-1.262
-54	494.941	542.215	592.519	9.277	-8.718	1.349	-1.267
-53	458.034	501.390	547.478	9.192	-8.647	1.352	-1.272
-52	426.208	466.213	508.697	9.112	-8.580	1.354	-1.275
-51	398.314	435.402	474.754	9.038	-8.518	1.356	-1.278
-50	373.489	408.001	444.587	8.967	-8.458	1.357	-1.280
-49	351.092	383.294	417.404	8.899	-8.401	1.357	-1.281
-48	330.642	360.750	392.615	8.833	-8.345	1.358	-1.283
-47	311.781	339.970	369.781	8.768	-8.291	1.358	-1.284
-46	294.245	320.661	348.574	8.705	-8.237	1.357	-1.284
-45	277.839	302.606	328.758	8.642	-8.184	1.357	-1.285
-44	262.418	285.646	310.153	8.579	-8.131	1.357	-1.286
-43	247.878	269.664	292.631	8.516	-8.078	1.356	-1.287
-42	234.141	254.573	276.096	8.454	-8.025	1.356	-1.287
-41	221.148	240.308	260.474	8.391	-7.972	1.356	-1.288
-40	208.856	226.820	245.712	8.329	-7.919	1.356	-1.289
-39	197.228	214.067	231.763	8.266	-7.866	1.356	-1.290
-38	186.234	202.018	218.591	8.203	-7.812	1.356	-1.291
-37	175.848	190.640	206.161	8.141	-7.759	1.356	-1.292
-36	166.044	179.908	194.442	8.078	-7.706	1.356	-1.293
-35	156.799	169.793	183.403	8.016	-7.652	1.356	-1.295
-34	148.088	160.268	173.015	7.953	-7.599	1.356	-1.296
-33	139.888	151.306	163.247	7.891	-7.546	1.357	-1.297
-32	132.175	142.881	154.069	7.829	-7.493	1.357	-1.298
-31	124.923	134.965	145.450	7.768	-7.440	1.357	-1.300
-30	118.109	127.531	137.360	7.707	-7.387	1.357	-1.301
-29	111.708	120.552	129.770	7.646	-7.335	1.358	-1.303
-28	105.698	114.002	122.651	7.586	-7.284	1.358	-1.304
-27	100.054	107.854	115.973	7.527	-7.232	1.358	-1.305
-26	94.754	102.085	109.709	7.467	-7.181	1.358	-1.306
-25	89.776	96.670	103.832	7.409	-7.131	1.359	-1.308
-24	85.100	91.585	98.318	7.351	-7.080	1.359	-1.309
-23	80.706	86.810	93.141	7.293	-7.031	1.359	-1.310
-22	76.575	82.323	88.280	7.236	-6.981	1.359	-1.311
-21	72.690	78.105	83.713	7.180	-6.932	1.359	-1.312
-20	69.034	74.138	79.420	7.124	-6.884	1.358	-1.312
-19	65.592	70.405	75.382	7.069	-6.836	1.358	-1.313
-18	62.349	66.889	71.581	7.014	-6.788	1.358	-1.314
-17	59.291	63.577	68.002	6.960	-6.741	1.357	-1.315
-16	56.408	60.455	64.630	6.906	-6.694	1.357	-1.315

-15	53.686	57.509	61.450	6.852	-6.647	1.356	-1.316
-14	51.115	54.728	58.449	6.800	-6.601	1.356	-1.316
-13	48.686	52.101	55.617	6.747	-6.555	1.355	-1.316
-12	46.388	49.618	52.941	6.695	-6.509	1.354	-1.317
-11	44.215	47.271	50.411	6.643	-6.464	1.353	-1.317
-10	42.158	45.050	48.019	6.592	-6.419	1.352	-1.317
-9	40.209	42.947	45.756	6.541	-6.374	1.352	-1.317
-8	38.363	40.955	43.613	6.490	-6.330	1.351	-1.317
-7	36.612	39.068	41.584	6.440	-6.285	1.350	-1.317
-6	34.952	37.279	39.661	6.390	-6.241	1.349	-1.317
-5	33.377	35.582	37.839	6.341	-6.198	1.347	-1.317
-4	31.882	33.973	36.110	6.292	-6.154	1.346	-1.317
-3	30.462	32.445	34.471	6.243	-6.111	1.345	-1.317
-2	29.114	30.995	32.915	6.194	-6.068	1.344	-1.317
-1	27.833	29.618	31.438	6.146	-6.025	1.343	-1.317
0	26.616	28.310	30.036	6.098	-5.983	1.342	-1.316
1	25.458	27.066	28.704	6.050	-5.941	1.341	-1.316
2	24.358	25.885	27.439	6.003	-5.899	1.339	-1.316
3	23.312	24.762	26.237	5.956	-5.857	1.338	-1.316
4	22.316	23.694	25.094	5.909	-5.816	1.337	-1.316
5	21.369	22.678	24.008	5.863	-5.774	1.336	-1.315
6	20.467	21.712	22.975	5.817	-5.733	1.334	-1.315
7	19.609	20.793	21.993	5.771	-5.692	1.333	-1.315
8	18.792	19.918	21.059	5.726	-5.652	1.332	-1.314
9	18.014	19.085	20.169	5.680	-5.612	1.330	-1.314
10	17.291	18.312	19.344	5.637	-5.572	1.327	-1.312
11	16.567	17.537	18.518	5.591	-5.532	1.328	-1.313
12	15.894	16.818	17.751	5.547	-5.492	1.326	-1.313
13	15.253	16.132	17.020	5.503	-5.453	1.325	-1.313
14	14.641	15.479	16.324	5.459	-5.414	1.323	-1.312
15	14.058	14.856	15.661	5.416	-5.375	1.322	-1.312
16	13.502	14.263	15.029	5.373	-5.336	1.320	-1.311
17	12.971	13.696	14.427	5.330	-5.298	1.319	-1.311
18	12.464	13.156	13.852	5.288	-5.260	1.317	-1.310
19	11.981	12.641	13.304	5.246	-5.222	1.316	-1.309
20	11.519	12.149	12.781	5.204	-5.184	1.314	-1.309
21	11.078	11.679	12.282	5.163	-5.147	1.312	-1.308
22	10.656	11.230	11.805	5.121	-5.110	1.310	-1.307
23	10.253	10.801	11.350	5.081	-5.073	1.308	-1.306
24	9.868	10.391	10.915	5.040	-5.036	1.306	-1.305
25	9.500	10.000	10.500	5.000	-5.000	1.305	-1.305
26	9.140	9.625	10.110	5.040	-5.036	1.323	-1.322
27	8.796	9.266	9.737	5.079	-5.072	1.343	-1.341
28	8.467	8.923	9.380	5.119	-5.108	1.362	-1.359
29	8.152	8.595	9.038	5.159	-5.143	1.381	-1.377

30	7.851	8.280	8.710	5.198	-5.179	1.400	-1.395
31	7.563	7.979	8.396	5.237	-5.214	1.419	-1.413
32	7.286	7.690	8.095	5.276	-5.249	1.439	-1.431
33	7.021	7.413	7.807	5.314	-5.283	1.458	-1.450
34	6.767	7.147	7.530	5.353	-5.318	1.478	-1.468
35	6.524	6.893	7.264	5.391	-5.352	1.497	-1.486
36	6.290	6.648	7.009	5.429	-5.386	1.517	-1.505
37	6.066	6.413	6.764	5.467	-5.420	1.536	-1.523
38	5.850	6.188	6.529	5.505	-5.454	1.556	-1.542
39	5.644	5.972	6.303	5.542	-5.488	1.575	-1.560
40	5.445	5.764	6.085	5.580	-5.521	1.595	-1.579
41	5.254	5.564	5.876	5.617	-5.555	1.615	-1.597
42	5.071	5.371	5.675	5.654	-5.588	1.635	-1.616
43	4.895	5.187	5.482	5.691	-5.621	1.654	-1.634
44	4.726	5.009	5.296	5.728	-5.654	1.674	-1.653
45	4.563	4.838	5.117	5.765	-5.687	1.694	-1.671
46	4.406	4.673	4.944	5.801	-5.719	1.714	-1.690
47	4.255	4.515	4.778	5.838	-5.752	1.734	-1.708
48	4.110	4.362	4.618	5.874	-5.784	1.754	-1.727
49	3.970	4.215	4.464	5.910	-5.817	1.774	-1.746
50	3.835	4.074	4.316	5.947	-5.849	1.794	-1.765
51	3.706	3.937	4.173	5.983	-5.881	1.814	-1.783
52	3.581	3.806	4.035	6.019	-5.913	1.834	-1.802
53	3.460	3.679	3.902	6.055	-5.945	1.855	-1.821
54	3.344	3.557	3.774	6.090	-5.976	1.875	-1.840
55	3.233	3.439	3.650	6.126	-6.008	1.895	-1.859
56	3.125	3.326	3.531	6.162	-6.039	1.915	-1.877
57	3.021	3.216	3.416	6.197	-6.071	1.936	-1.896
58	2.921	3.111	3.305	6.233	-6.102	1.956	-1.915
59	2.825	3.009	3.198	6.268	-6.133	1.977	-1.934
60	2.732	2.911	3.095	6.303	-6.164	1.997	-1.954
61	2.642	2.816	2.995	6.338	-6.196	2.018	-1.973
62	2.555	2.725	2.899	6.373	-6.226	2.039	-1.992
63	2.472	2.637	2.806	6.408	-6.257	2.060	-2.011
64	2.391	2.552	2.716	6.443	-6.288	2.081	-2.030
65	2.314	2.470	2.630	6.478	-6.319	2.101	-2.050
66	2.239	2.391	2.546	6.513	-6.349	2.123	-2.069
67	2.167	2.314	2.466	6.547	-6.379	2.144	-2.089
68	2.097	2.241	2.388	6.582	-6.410	2.165	-2.108
69	2.030	2.169	2.313	6.616	-6.440	2.186	-2.128
70	1.965	2.101	2.240	6.650	-6.470	2.207	-2.148
71	1.902	2.034	2.170	6.685	-6.500	2.229	-2.167
72	1.842	1.970	2.103	6.719	-6.530	2.251	-2.187
73	1.783	1.909	2.038	6.753	-6.560	2.272	-2.207
74	1.727	1.849	1.975	6.787	-6.589	2.294	-2.227

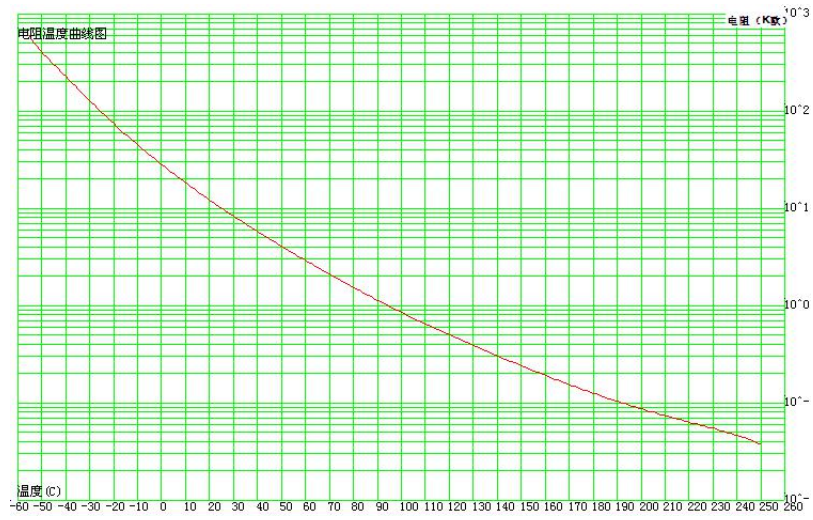
75	1.673	1.791	1.914	6.820	-6.619	2.316	-2.247
76	1.620	1.736	1.855	6.854	-6.648	2.338	-2.268
77	1.570	1.682	1.798	6.888	-6.678	2.360	-2.288
78	1.521	1.630	1.743	6.921	-6.707	2.382	-2.308
79	1.474	1.580	1.690	6.954	-6.736	2.404	-2.329
80	1.428	1.532	1.639	6.987	-6.765	2.427	-2.349
81	1.385	1.486	1.590	7.021	-6.794	2.449	-2.370
82	1.342	1.440	1.542	7.053	-6.822	2.472	-2.391
83	1.301	1.397	1.496	7.086	-6.851	2.495	-2.412
84	1.262	1.355	1.452	7.119	-6.879	2.517	-2.433
85	1.224	1.315	1.409	7.151	-6.907	2.540	-2.454
86	1.187	1.275	1.367	7.184	-6.936	2.563	-2.475
87	1.151	1.238	1.327	7.216	-6.964	2.587	-2.496
88	1.117	1.201	1.288	7.248	-6.991	2.610	-2.517
89	1.084	1.166	1.251	7.280	-7.019	2.633	-2.539
90	1.052	1.132	1.214	7.312	-7.047	2.657	-2.561
91	1.021	1.099	1.179	7.344	-7.074	2.681	-2.582
92	0.991	1.067	1.146	7.375	-7.101	2.704	-2.604
93	0.962	1.036	1.113	7.407	-7.129	2.728	-2.626
94	0.934	1.006	1.081	7.438	-7.156	2.752	-2.648
95	0.907	0.978	1.051	7.469	-7.183	2.777	-2.670
96	0.881	0.950	1.021	7.500	-7.209	2.801	-2.692
97	0.856	0.923	0.992	7.531	-7.236	2.825	-2.715
98	0.832	0.897	0.965	7.562	-7.262	2.850	-2.737
99	0.808	0.872	0.938	7.592	-7.289	2.875	-2.760
100	0.785	0.848	0.912	7.623	-7.315	2.899	-2.782
101	0.763	0.824	0.887	7.653	-7.341	2.924	-2.805
102	0.742	0.801	0.863	7.683	-7.367	2.949	-2.828
103	0.722	0.779	0.839	7.713	-7.393	2.975	-2.851
104	0.702	0.758	0.817	7.743	-7.418	3.000	-2.874
105	0.682	0.737	0.795	7.772	-7.444	3.025	-2.897
106	0.664	0.717	0.773	7.802	-7.469	3.051	-2.921
107	0.646	0.698	0.753	7.831	-7.494	3.076	-2.944
108	0.628	0.679	0.733	7.861	-7.519	3.102	-2.968
109	0.611	0.661	0.714	7.890	-7.544	3.128	-2.991
110	0.595	0.644	0.695	7.919	-7.569	3.154	-3.015
111	0.579	0.627	0.677	7.947	-7.594	3.180	-3.039
112	0.564	0.610	0.659	7.976	-7.618	3.206	-3.063
113	0.549	0.594	0.642	8.005	-7.643	3.233	-3.087
114	0.534	0.579	0.625	8.033	-7.667	3.259	-3.111
115	0.521	0.564	0.609	8.062	-7.691	3.286	-3.135
116	0.507	0.549	0.594	8.090	-7.716	3.312	-3.159
117	0.494	0.535	0.579	8.118	-7.740	3.339	-3.183
118	0.481	0.522	0.564	8.146	-7.763	3.366	-3.208
119	0.469	0.508	0.550	8.174	-7.787	3.393	-3.232

120	0.457	0.495	0.536	8.201	-7.811	3.420	-3.257
121	0.445	0.483	0.523	8.229	-7.834	3.447	-3.282
122	0.434	0.471	0.510	8.257	-7.858	3.474	-3.307
123	0.423	0.459	0.497	8.284	-7.881	3.502	-3.331
124	0.412	0.448	0.485	8.311	-7.904	3.529	-3.356
125	0.402	0.437	0.473	8.338	-7.927	3.557	-3.381
126	0.392	0.426	0.461	8.366	-7.950	3.584	-3.407
127	0.382	0.415	0.450	8.392	-7.973	3.612	-3.432
128	0.373	0.405	0.439	8.419	-7.996	3.640	-3.457
129	0.363	0.395	0.429	8.446	-8.019	3.668	-3.482
130	0.354	0.386	0.418	8.473	-8.041	3.696	-3.508
131	0.346	0.376	0.408	8.499	-8.064	3.724	-3.533
132	0.337	0.367	0.398	8.526	-8.086	3.752	-3.559
133	0.329	0.358	0.389	8.552	-8.109	3.781	-3.585
134	0.321	0.350	0.380	8.579	-8.131	3.809	-3.610
135	0.313	0.341	0.371	8.605	-8.153	3.838	-3.636
136	0.306	0.333	0.362	8.631	-8.176	3.866	-3.662
137	0.298	0.325	0.353	8.657	-8.198	3.895	-3.688
138	0.291	0.317	0.345	8.683	-8.220	3.924	-3.714
139	0.284	0.310	0.337	8.709	-8.241	3.953	-3.740
140	0.278	0.303	0.329	8.735	-8.263	3.981	-3.766
141	0.271	0.296	0.322	8.761	-8.285	4.011	-3.793
142	0.265	0.289	0.314	8.787	-8.307	4.040	-3.819
143	0.258	0.282	0.307	8.812	-8.328	4.069	-3.845
144	0.252	0.275	0.300	8.838	-8.350	4.098	-3.872
145	0.246	0.269	0.293	8.863	-8.371	4.128	-3.898
146	0.241	0.263	0.286	8.889	-8.393	4.157	-3.925
147	0.235	0.257	0.280	8.914	-8.414	4.187	-3.952
148	0.230	0.251	0.273	8.939	-8.435	4.216	-3.978
149	0.224	0.245	0.267	8.965	-8.456	4.246	-4.005
150	0.219	0.240	0.261	8.990	-8.477	4.276	-4.032
151	0.214	0.234	0.255	9.015	-8.498	4.306	-4.059
152	0.209	0.229	0.249	9.040	-8.519	4.336	-4.086
153	0.204	0.224	0.244	9.064	-8.540	4.366	-4.113
154	0.200	0.219	0.238	9.089	-8.561	4.396	-4.140
155	0.195	0.214	0.233	9.114	-8.582	4.426	-4.168
156	0.191	0.209	0.228	9.139	-8.602	4.457	-4.195
157	0.187	0.204	0.223	9.163	-8.623	4.487	-4.223
158	0.182	0.200	0.218	9.188	-8.643	4.518	-4.250
159	0.178	0.195	0.213	9.212	-8.664	4.548	-4.278
160	0.174	0.191	0.209	9.236	-8.684	4.579	-4.305
161	0.170	0.187	0.204	9.260	-8.704	4.610	-4.333
162	0.167	0.183	0.200	9.284	-8.724	4.641	-4.361
163	0.163	0.179	0.195	9.308	-8.744	4.672	-4.389
164	0.159	0.175	0.191	9.332	-8.764	4.703	-4.417

165	0.156	0.171	0.187	9.356	-8.784	4.735	-4.445
166	0.153	0.167	0.183	9.380	-8.804	4.766	-4.473
167	0.149	0.164	0.179	9.403	-8.824	4.798	-4.502
168	0.146	0.160	0.175	9.427	-8.843	4.829	-4.530
169	0.143	0.157	0.172	9.450	-8.863	4.861	-4.559
170	0.140	0.154	0.168	9.473	-8.882	4.893	-4.587
171	0.137	0.150	0.165	9.496	-8.901	4.925	-4.616
172	0.134	0.147	0.161	9.519	-8.920	4.957	-4.645
173	0.131	0.144	0.158	9.542	-8.939	4.989	-4.674
174	0.129	0.141	0.155	9.565	-8.958	5.022	-4.703
175	0.126	0.138	0.152	9.588	-8.977	5.054	-4.732
176	0.123	0.136	0.149	9.610	-8.995	5.087	-4.761
177	0.121	0.133	0.146	9.632	-9.014	5.120	-4.791
178	0.118	0.130	0.143	9.654	-9.032	5.152	-4.820
179	0.116	0.128	0.140	9.676	-9.051	5.185	-4.850
180	0.114	0.125	0.137	9.698	-9.069	5.219	-4.880
181	0.111	0.123	0.135	9.720	-9.087	5.252	-4.910
182	0.109	0.120	0.132	9.742	-9.105	5.285	-4.940
183	0.107	0.118	0.129	9.763	-9.122	5.319	-4.970
184	0.105	0.116	0.127	9.784	-9.140	5.353	-5.000
185	0.103	0.113	0.125	9.805	-9.157	5.387	-5.031
186	0.101	0.111	0.122	9.826	-9.175	5.421	-5.061
187	0.099	0.109	0.120	9.847	-9.192	5.455	-5.092
188	0.097	0.107	0.118	9.868	-9.209	5.489	-5.123
189	0.095	0.105	0.116	9.888	-9.226	5.523	-5.153
190	0.094	0.103	0.113	9.908	-9.242	5.558	-5.185
191	0.092	0.101	0.111	9.928	-9.259	5.593	-5.216
192	0.090	0.099	0.109	9.948	-9.275	5.628	-5.247
193	0.089	0.098	0.107	9.968	-9.292	5.663	-5.279
194	0.087	0.096	0.106	9.988	-9.308	5.698	-5.310
195	0.085	0.094	0.104	10.000	-9.324	5.733	-5.342
196	0.084	0.093	0.102	10.020	-9.340	5.769	-5.374
197	0.082	0.091	0.100	10.040	-9.355	5.805	-5.406
198	0.081	0.089	0.099	10.060	-9.371	5.840	-5.438
199	0.080	0.088	0.097	10.080	-9.386	5.876	-5.470
200	0.078	0.087	0.095	10.100	-9.401	5.913	-5.503
201	0.077	0.085	0.094	10.120	-9.417	5.949	-5.536
202	0.076	0.084	0.092	10.130	-9.432	5.985	-5.568
203	0.074	0.082	0.091	10.150	-9.446	6.022	-5.601
204	0.073	0.081	0.089	10.170	-9.461	6.059	-5.634
205	0.072	0.080	0.088	10.190	-9.476	6.096	-5.667
206	0.071	0.078	0.086	10.200	-9.490	6.133	-5.701
207	0.070	0.077	0.085	10.220	-9.504	6.170	-5.734
208	0.069	0.076	0.084	10.240	-9.518	6.207	-5.768
209	0.068	0.075	0.083	10.260	-9.532	6.244	-5.801

210	0.067	0.074	0.081	10.270	-9.546	6.282	-5.835
211	0.066	0.073	0.080	10.290	-9.560	6.320	-5.869
212	0.065	0.071	0.079	10.310	-9.574	6.358	-5.903
213	0.064	0.070	0.078	10.320	-9.588	6.396	-5.937
214	0.063	0.069	0.076	10.340	-9.601	6.434	-5.971
215	0.062	0.068	0.075	10.360	-9.615	6.472	-6.006
216	0.061	0.067	0.074	10.370	-9.628	6.510	-6.040
217	0.060	0.066	0.073	10.390	-9.642	6.548	-6.074
218	0.059	0.065	0.072	10.410	-9.655	6.587	-6.109
219	0.058	0.064	0.071	10.420	-9.668	6.625	-6.144
220	0.057	0.063	0.070	10.440	-9.681	6.664	-6.178
221	0.056	0.062	0.069	10.450	-9.695	6.703	-6.213
222	0.055	0.061	0.068	10.470	-9.708	6.742	-6.248
223	0.055	0.061	0.067	10.490	-9.721	6.780	-6.283
224	0.054	0.060	0.066	10.500	-9.735	6.819	-6.318
225	0.053	0.059	0.065	10.520	-9.748	6.858	-6.353
226	0.052	0.058	0.064	10.540	-9.761	6.897	-6.387
227	0.051	0.057	0.063	10.550	-9.775	6.936	-6.422
228	0.051	0.056	0.062	10.570	-9.788	6.975	-6.457
229	0.050	0.055	0.061	10.590	-9.802	7.014	-6.492
230	0.049	0.055	0.060	10.600	-9.816	7.053	-6.527
231	0.048	0.054	0.059	10.620	-9.830	7.092	-6.561
232	0.048	0.053	0.059	10.640	-9.844	7.131	-6.596
233	0.047	0.052	0.058	10.650	-9.858	7.169	-6.631
234	0.046	0.051	0.057	10.670	-9.872	7.208	-6.665
235	0.045	0.050	0.056	10.690	-9.887	7.247	-6.700
236	0.045	0.049	0.055	10.710	-9.902	7.285	-6.734
237	0.044	0.049	0.054	10.730	-9.917	7.324	-6.768
238	0.043	0.048	0.053	10.750	-9.933	7.362	-6.802
239	0.042	0.047	0.052	10.770	-9.948	7.400	-6.835
240	0.041	0.046	0.051	10.790	-9.965	7.438	-6.869
241	0.041	0.045	0.050	10.810	-9.981	7.476	-6.902
242	0.040	0.044	0.049	10.830	-9.998	7.513	-6.935
243	0.039	0.044	0.048	10.850	-10.010	7.550	-6.968
244	0.038	0.043	0.047	10.870	-10.030	7.587	-7.000
245	0.038	0.042	0.046	10.890	-10.050	7.624	-7.033
246	0.037	0.041	0.046	10.920	-10.070	7.661	-7.064
247	0.036	0.040	0.045	10.940	-10.090	7.697	-7.096
248	0.035	0.039	0.044	10.960	-10.100	7.733	-7.127
249	0.034	0.038	0.043	10.990	-10.130	7.768	-7.158
250	0.034	0.037	0.042	11.020	-10.150	7.803	-7.188

附表:2



南京时恒电阻误差曲线图

