编码(Coding)：JK/JXD221114001011

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：MF52 测温型 NTC 热敏电阻器 / MF52 Series Temp Measurement NTC Thermistor

产品规格 PART NUMBER：MF52B 103F395028L0075

产品编号 PRODUCTCODE：

版次 REV.NO：

日期 DATE：2022-11-14

确认

CONFIRM

客户 CLIENT			供货商/制造商 MANUFACTOR	
品保部 Quality Dep.			规格书制作 Design	吴迎丽
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
NANJING SHIHENG ELECTRONICS CO., LTD.
地址：南京市江宁区湖熟镇金阳路 18 号邮编 Postcode：211121
Address：No.18 Jinyang Road Hushu Town Jiangning District Nanjing China
TEL：025-52121868
Http: //www.shiheng.com.cn **E-MAIL:sales@shiheng.com.cn**

变 更 记 录 表

REVISED RECORD SHEET

版次 REV. NO	变更日期 REV.DATE	变更内容 CHANGE CONTENT	申请人 APPLICANT	批准人 APPROVED
A0	2015/10/11	版本制定。	鞠晓丽	李少媛
B0	2021/9/24	更新规格书版本格式，增加版次管控，细化规格图纸。	王月婷	李少媛

1、产品型号说明 Product model specification

MF52	B	103	F	3950	28	L	0075
①	②	③	④	⑤	⑥	⑦	⑧

① MF52：测温型 NTC 热敏电阻器系列 (Series Temp Measurement NTC Thermistor)

② B：指引线为漆包线 (Lead wire is enamelled wire)

③ 103： 25℃的零功率电阻值 10KΩ(Zero Power Resistance at 25℃is 10KΩ)

④ 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%）

⑤ 3950：B25/50 值 3950K（B25/50:3950K）

⑥ 28：线材规格：引线外径Φ0.281mm（Wire dimension: The outer diameter of lead wire is Φ0.281mm）

⑦ L：测量线材长度方式：L 指线长 Z 指总长（Method of measuring Wire length：L=Line length Z=Total length）

⑧ 0075：线材长度 0075=75mm。（Wire length 0075=75mm）

2、电气性能 Electrical Characteristics

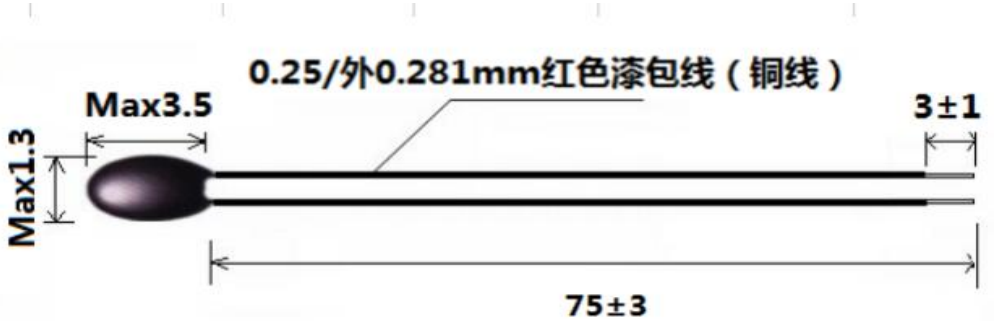
No.	项目 Item	符号 Symbol	测试条件 Test conditions	单位 Unit	性能要求 Requirements
2.1	25℃的零功率电阻值 Zero Power Resistance at 25℃	$R_{25℃}$	Ta=25±0.01℃ Test Power≤0.1mW	KΩ	10KΩ±1%
2.2	B 值 B-value	$B_{25/50}$	$B=[(T_a\times T_b)/(T_b-T_a)]\times\ln(R_a/R_b)$ Ta=25±0.01℃ T_b=50℃±0.01℃	K	3950±1%
2.3	耗散系数 Thermal dissipation Coefficient	δ	静止空气中 In still air	mW/℃	≥2
2.4	时间常数 Thermal time constant	τ	静止空气中 In still air	sec	≤7
2.6	绝缘电阻 Insulation resistance	/	100V/DC 1min	MΩ	≥100
2.7	工作温度范围 Operating temperature range	/	/	℃	-55℃～ 150℃
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：			
			确认 Confirm		日期 DATE	
产品型号 MODEL NO.	MF52B 103F395028L0075		审核 Approve:		日期 DATE	

尺寸 Dimensions：

（Unit：mm）



技术要求 Technical requirements：

1）零功率阻值：R25：10KΩ±1%(Zero Power Resistance: R25：10KΩ±1%)；
2）B25/50 数值：3950K±1%(B-value:B25/50: 3950K±1%)；
3）线材：外径Φ0.281 红色漆包线(OD Φ0.281red enamelled wire)；
4）封装：黑色环氧树脂包封（Black Epoxy）；
5）符合 RoHS 环保要求（Meet environmental protection requirements:RoHS）。

材料规格 Material specifications

No.	名称 Name	材料规格 Material specifications	数量 Quantity	备注 note
1	核心元件 Core element	芯片 10KΩ	1	
2	包封类 Coating material	环氧树脂	/	黑色 Black
3	导线 Conducting wire	0.25/外径Φ0.281 红色漆包线（铜线）	2	
4				
5				
6				

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
B0		版本发行		

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：5±1 N，时间：10±1 秒 Fixed resistor end, Pull strength：5±1 N， time：10±1 sec	无可见性损伤 No obvious damage R_{25} ΔR/R≤±2%
4.2	可焊性 Solderability	IEC60068-2-20	温度 245±5℃时间 2-3 秒 temperature : 245±5℃ for 2-3sec	着锡面积≥95% Coverage area ≥ 95%.
4.3	稳态湿热 Steady humidity and heat	IEC60068-2-78	温度：40℃±2℃，湿度：93±2%，时间：500 小时 Temp：40℃±2℃，humidity：93±2%， Time ： 500hrs	无可见性损伤 No obvious damage R_{25} ΔR/R≤±2%
4.4	温度快速变化 Rapid changes in temperature	IEC60068-2-14	-55℃30min→25℃5min→150℃ 30min→25℃5min，5cycles	无可见性损伤 No obvious damage R_{25} ΔR/R≤±2%
4.5	高温储存 High temperature storage	IEC60068-2-2	温度: 150℃±5℃ 时间:1000 小时 Temp : 150℃±5℃, Time :1000hrs	无可见性损伤 No obvious damage R_{25} ΔR/R≤±2%
4.6	低温储存 Low temperature storage	IEC60068-2-1	温度:-55℃时间:1000 小时 Temp : -55℃, Time :1000hrs	无可见性损伤 No obvious damage R_{25} ΔR/R≤±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□ 盒装方式 BoxedType□ 盘装方式 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	热封口袋(Heat sealing bag) W×H＝XXXmm×XXXmm	
2	内包装盒 Inner box	纸箱(Carton)， L×W×H=XXXmm×XXXmm×XXXmm	
3	外包装箱 Outer carton	纸箱(Carton)， L×W×H=XXXmm×XXXmm×XXXmm	

6、存储&运输要求 STORAGE & Transportation Requirements

6.1 存储环境要求 Storage environment requirements

6.1.1 储存温度：-10℃～40℃；储存湿度：≤75% RH

(Storage temperature: -10℃～40℃;storage humidity: ≤75% RH)；

6.1.2 避免存放在具有腐蚀性物质及气体的环境中、光照及辐射源的环境下

(Avoid storage in the environment of corrosive substances and gas, light and radiation source)；

6.1.3 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

(After the package is opened, it should be re-sealed and stored for one year. If the storage period exceeds, it can be retested according to the items specified in this sheet. If it meets the requirements, it can still be used)。

6.2 运输要求 Transportation requirements

6.2.1 存储或运输过程中，产品叠放高度不超过 4 箱产品

(During storage or transportation, the height of stacked products should not exceed tje height of 4 boxes)；

6.2.2 避免产品在运输过程中强烈碰撞和跌落

(Avoid strong collision and fall during transportation)；

6.2.3 产品运输方式不限，但需要避免雨水、雪、冰雹、海水的直接或间接淋袭

(The transportation method is not limited, but the direct or indirect attack of rain, snow, hail and sea water should be avoided)。

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

7.1 本产品的用途：温度测量与控制

(Usage of this product: Temperature measurement and control)；

7.2 本产品适用于常规家用、工业产品上，如果用于特殊设备/装置如：航空航天、深海探测、医疗、军用、新能源电源、铁道交通、消防、交通信号等设备上，请联系我司人员对相应的要求进行确认

(This product is used for conventional household and industrial products. If used in special equipment/device such as: aerospace, deep sea exploration, medical, military, new energy power supply, railway traffic,fire control, traffic signals and other equipment, please contact our staff to confirm the corresponding requirements)。

7.3 产品使用的最大工作温度，最大功率等，依照规格书要求作业，不可超出规格书范围

(The maximum working temperature, maximum power, etc. of the product shall be operated in accordance with the requirements of the specification, and shall not exceed the scope of the specification)。

7.4 设计使用时，避免过大的电流引起元件自身发热而产生测量误差

(When designing and using, avoid measuring error caused by excessive current)；

7.5 产品外观发现变形、破损时，不建议使用，可能会影响产品电气性能

(If the product is deformed or damaged, do not use it. Otherwise, the electrical performance may be affected)；

7.6 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 soldering by soldering iron, the distance between the welding place and the coating head should be at least 2mm, the welding temperature should be lower than 360℃, and the welding time should be less than 3sec)；

7.7 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

（If the heat shrinkable tube is used in the manufacturing process, do not use a hair dryer to shrink the tube. This is a recommended heat shrinkable process that puts the product coveredshrinkable tube into a constant temperature oven, and shrink them at 110℃/10 ~ 12min）；

7.8 一般不建议做注塑加工，因为注塑工艺的高温和高压会直接影响产品性能，本产品如果采用注塑工艺加工，需与我司确认具体的注塑工艺参数

（Generally, injection molding is not recommended, because the high temperature and high pressure of injection molding process will directly affect the product performance. If the product is processed by injection molding process, it is necessary to confirm the specific injection molding process parameters with our company）；

7.9 产品核心芯片为陶瓷半导体，在使用过程中避免挤压或对环氧端头物理撞击，以免造成产品损伤
（The core chip of the product is a ceramic semiconductor. Avoid extrusion or physical impact on the epoxy end in the process of use, so as not to cause product damage）；
7.10 产品引线需剪短加工时，裁剪处距环氧端头距离应不小于 10mm，且裁切时夹紧端头处
（When the product leads need to be cut short, the cutting distance from the epoxy end should be no less than 10mm, and the end should be clamped when cutting）。
7.11 如产品需要引线折弯时，折弯半径应不小于 1mm，折弯角度为 90°，折弯次数依引线直径大小存在差异，需与我司确认
（If the product needs lead bending, bending radius should not be less than 1mm, bending angle is 90°. Bending times vary according to the lead diameter and need to be confirmed with our company）；
7.12 本产品采用环氧树脂封装，具有一般的防水性，若使用环境湿度＞80%RH 或长期浸泡水中会导致封装端头渗水，造成绝缘和阻值性能偏低，如有相关的要求需与我司联系，产品增加防水层保护
（This product is encapsulated with epoxy resin, which is generally waterproof. If the ambient humidity is more than 80%RH or the product has long-term immersion in water, water seepage will occur at the end of the epoxy head, resulting in low insulation and resistance performance. If you have relevant requirements, please contact our company and add waterproof layer to the product）。

8、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	产品 CQC 认证 CQC certificate	
8.5	江苏省高新技术产品认证 High-tech product certificate in Jiangsu Province	

附表Ⅰ（Attachment I）

南京时恒阻温特性表

R25=10KΩ 精度:±1% B25/50=3950K 精度:±1%(F4-17)							
温度(℃)	电阻(KΩ)			电阻精度(%)		温度精度(℃)	
	最小值	中心值	最大值	△R	-△R	△T	-△T
-55	1318.470	1399.250	1484.820	6.115	-5.772	0.724	-0.683
-54	1106.840	1172.570	1242.090	5.928	-5.606	0.722	-0.683
-53	944.750	999.260	1056.800	5.759	-5.455	0.720	-0.682
-52	818.224	864.178	912.621	5.605	-5.317	0.717	-0.681
-51	717.728	757.035	798.415	5.466	-5.192	0.715	-0.679
-50	636.617	670.669	706.472	5.338	-5.077	0.712	-0.677
-49	570.173	600.002	631.329	5.221	-4.971	0.709	-0.675
-48	514.985	541.371	569.051	5.112	-4.873	0.706	-0.673
-47	468.554	492.090	516.758	5.012	-4.782	0.702	-0.670
-46	429.016	450.165	472.310	4.919	-4.698	0.698	-0.667
-45	394.967	414.092	434.099	4.831	-4.618	0.695	-0.664
-44	365.335	382.723	400.899	4.749	-4.543	0.691	-0.661
-43	339.293	355.176	371.766	4.670	-4.471	0.686	-0.657
-42	316.197	330.764	345.967	4.596	-4.403	0.682	-0.653
-41	295.543	308.947	322.927	4.525	-4.338	0.677	-0.649
-40	276.930	289.300	302.192	4.456	-4.275	0.673	-0.645
-39	260.038	271.480	283.398	4.389	-4.214	0.668	-0.641
-38	244.611	255.217	266.257	4.325	-4.155	0.663	-0.637
-37	230.443	240.290	250.533	4.262	-4.097	0.658	-0.632
-36	217.365	226.520	236.036	4.201	-4.041	0.653	-0.628
-35	205.241	213.761	222.612	4.140	-3.985	0.648	-0.623
-34	193.957	201.893	210.133	4.081	-3.930	0.642	-0.619
-33	183.421	190.818	198.494	4.022	-3.876	0.637	-0.614
-32	173.554	180.452	187.606	3.964	-3.822	0.631	-0.609
-31	164.292	170.728	177.398	3.906	-3.769	0.626	-0.604
-30	155.581	161.587	167.807	3.849	-3.716	0.620	-0.599
-29	147.374	152.979	158.781	3.792	-3.663	0.614	-0.593
-28	139.631	144.862	150.275	3.736	-3.611	0.609	-0.588
-27	132.318	137.201	142.250	3.679	-3.559	0.603	-0.583
-26	125.405	129.963	134.672	3.623	-3.506	0.597	-0.578
-25	118.866	123.120	127.512	3.567	-3.454	0.591	-0.572
-24	112.678	116.647	120.743	3.511	-3.402	0.585	-0.567
-23	106.819	110.522	114.341	3.456	-3.350	0.579	-0.561
-22	101.271	104.725	108.286	3.400	-3.298	0.573	-0.555
-21	96.016	99.237	102.556	3.344	-3.246	0.566	-0.550
-20	91.038	94.042	97.135	3.289	-3.194	0.560	-0.544

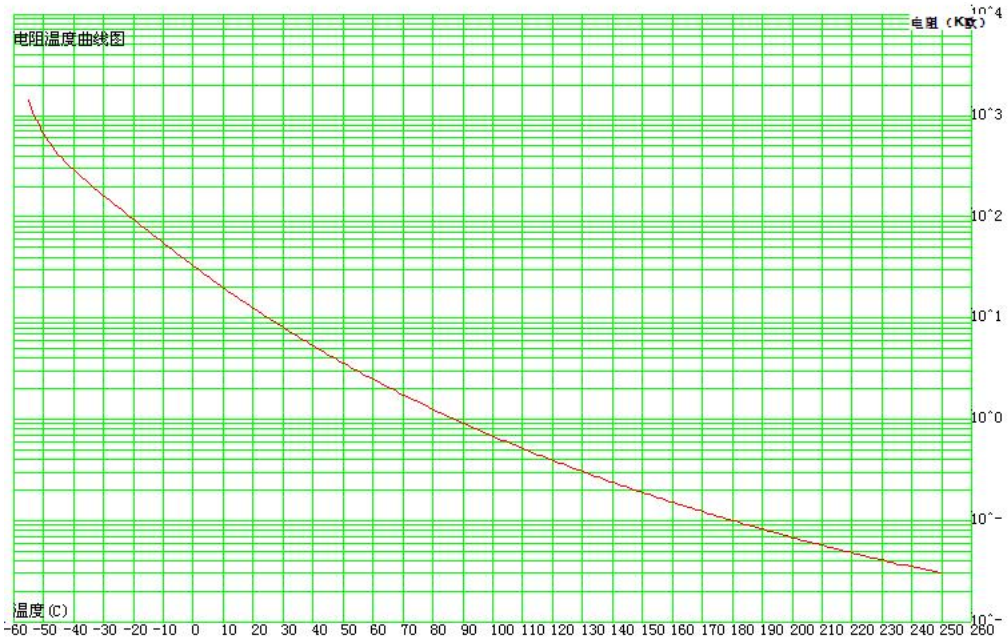
-19	86.323	89.123	92.005	3.233	-3.142	0.554	-0.538
-18	81.857	84.467	87.151	3.178	-3.090	0.548	-0.532
-17	77.626	80.059	82.559	3.122	-3.038	0.541	-0.527
-16	73.620	75.886	78.214	3.067	-2.986	0.535	-0.521
-15	69.826	71.937	74.104	3.012	-2.934	0.528	-0.515
-14	66.233	68.199	70.216	2.957	-2.882	0.522	-0.508
-13	62.832	64.662	66.540	2.902	-2.830	0.515	-0.502
-12	59.612	61.316	63.062	2.848	-2.779	0.509	-0.496
-11	56.564	58.150	59.774	2.793	-2.727	0.502	-0.490
-10	53.678	55.155	56.665	2.739	-2.676	0.495	-0.484
-9	50.948	52.321	53.726	2.685	-2.624	0.488	-0.477
-8	48.364	49.641	50.948	2.631	-2.573	0.481	-0.471
-7	45.918	47.107	48.321	2.577	-2.522	0.475	-0.464
-6	43.604	44.709	45.838	2.523	-2.471	0.468	-0.458
-5	41.415	42.442	43.491	2.470	-2.420	0.461	-0.451
-4	39.343	40.298	41.272	2.417	-2.370	0.454	-0.445
-3	37.382	38.270	39.175	2.364	-2.319	0.447	-0.438
-2	35.527	36.352	37.192	2.312	-2.269	0.439	-0.431
-1	33.771	34.537	35.318	2.259	-2.219	0.432	-0.424
0	31.673	32.371	33.081	2.193	-2.156	0.427	-0.420
1	30.536	31.198	31.870	2.155	-2.120	0.418	-0.411
2	29.048	29.662	30.286	2.104	-2.070	0.410	-0.404
3	27.638	28.208	28.788	2.052	-2.021	0.403	-0.397
4	26.304	26.833	27.370	2.001	-1.972	0.395	-0.390
5	25.040	25.531	26.030	1.951	-1.923	0.388	-0.382
6	23.844	24.299	24.761	1.900	-1.875	0.380	-0.375
7	22.710	23.133	23.561	1.850	-1.826	0.373	-0.368
8	21.636	22.028	22.425	1.800	-1.778	0.365	-0.361
9	20.618	20.982	21.349	1.751	-1.730	0.357	-0.353
10	19.559	19.893	20.230	1.697	-1.678	0.351	-0.347
11	18.740	19.052	19.366	1.653	-1.636	0.342	-0.338
12	17.873	18.162	18.453	1.604	-1.589	0.334	-0.331
13	17.051	17.318	17.587	1.556	-1.542	0.326	-0.323
14	16.271	16.518	16.767	1.508	-1.495	0.318	-0.315
15	15.531	15.760	15.990	1.460	-1.449	0.310	-0.307
16	14.829	15.040	15.253	1.413	-1.403	0.302	-0.300
17	14.163	14.357	14.554	1.365	-1.357	0.294	-0.292
18	13.530	13.710	13.890	1.319	-1.311	0.285	-0.284
19	12.929	13.095	13.261	1.272	-1.266	0.277	-0.276
20	12.358	12.511	12.664	1.226	-1.221	0.269	-0.268
21	11.815	11.956	12.097	1.180	-1.176	0.260	-0.259

22	11.299	11.429	11.559	1.135	-1.132	0.252	-0.251
23	10.809	10.928	11.047	1.089	-1.087	0.243	-0.243
24	10.343	10.452	10.561	1.044	-1.043	0.235	-0.235
25	9.900	10.000	10.100	1.000	-1.000	0.226	-0.226
26	9.469	9.569	9.669	1.044	-1.043	0.238	-0.237
27	9.060	9.160	9.259	1.088	-1.086	0.249	-0.249
28	8.671	8.770	8.869	1.132	-1.129	0.261	-0.260
29	8.301	8.399	8.498	1.176	-1.172	0.273	-0.272
30	7.948	8.046	8.144	1.219	-1.214	0.285	-0.284
31	7.613	7.710	7.807	1.262	-1.257	0.297	-0.295
32	7.293	7.389	7.486	1.305	-1.298	0.309	-0.307
33	6.989	7.084	7.180	1.348	-1.340	0.321	-0.319
34	6.699	6.793	6.888	1.391	-1.381	0.333	-0.331
35	6.423	6.516	6.609	1.433	-1.423	0.345	-0.343
36	6.160	6.251	6.344	1.475	-1.463	0.358	-0.355
37	5.909	5.999	6.090	1.517	-1.504	0.370	-0.367
38	5.669	5.758	5.848	1.558	-1.544	0.383	-0.379
39	5.441	5.529	5.617	1.600	-1.584	0.395	-0.392
40	5.223	5.309	5.397	1.641	-1.624	0.408	-0.404
41	5.015	5.100	5.186	1.682	-1.664	0.421	-0.416
42	4.817	4.900	4.985	1.722	-1.703	0.434	-0.429
43	4.627	4.709	4.792	1.763	-1.742	0.446	-0.441
44	4.446	4.526	4.608	1.803	-1.781	0.459	-0.454
45	4.273	4.352	4.432	1.843	-1.820	0.473	-0.466
46	4.107	4.185	4.264	1.883	-1.858	0.486	-0.479
47	3.949	4.026	4.103	1.923	-1.896	0.499	-0.492
48	3.798	3.873	3.949	1.962	-1.934	0.512	-0.505
49	3.654	3.727	3.802	2.001	-1.972	0.525	-0.518
50	3.515	3.588	3.661	2.040	-2.009	0.539	-0.531
51	3.383	3.454	3.526	2.079	-2.046	0.552	-0.544
52	3.257	3.326	3.396	2.117	-2.083	0.566	-0.557
53	3.135	3.203	3.272	2.156	-2.120	0.580	-0.570
54	3.019	3.086	3.154	2.194	-2.157	0.593	-0.583
55	2.908	2.973	3.040	2.232	-2.193	0.607	-0.597
56	2.802	2.866	2.931	2.270	-2.229	0.621	-0.610
57	2.700	2.762	2.826	2.307	-2.265	0.635	-0.624
58	2.602	2.663	2.726	2.344	-2.300	0.649	-0.637
59	2.508	2.568	2.630	2.382	-2.336	0.663	-0.651
60	2.418	2.477	2.537	2.419	-2.371	0.678	-0.664
61	2.332	2.390	2.449	2.455	-2.406	0.692	-0.678
62	2.250	2.306	2.364	2.492	-2.441	0.706	-0.692

63	2.171	2.226	2.282	2.528	-2.476	0.721	-0.706
64	2.094	2.148	2.204	2.565	-2.510	0.735	-0.720
65	2.021	2.074	2.128	2.601	-2.544	0.750	-0.734
66	1.951	2.003	2.056	2.636	-2.578	0.764	-0.748
67	1.884	1.935	1.986	2.672	-2.612	0.779	-0.762
68	1.820	1.869	1.920	2.707	-2.646	0.794	-0.776
69	1.758	1.806	1.855	2.743	-2.679	0.809	-0.790
70	1.698	1.745	1.794	2.778	-2.712	0.824	-0.805
71	1.641	1.687	1.734	2.813	-2.745	0.839	-0.819
72	1.586	1.631	1.677	2.847	-2.778	0.854	-0.833
73	1.533	1.577	1.622	2.882	-2.811	0.869	-0.848
74	1.482	1.525	1.570	2.916	-2.843	0.885	-0.862
75	1.433	1.475	1.519	2.951	-2.876	0.900	-0.877
76	1.386	1.427	1.470	2.985	-2.908	0.915	-0.892
77	1.341	1.381	1.423	3.019	-2.940	0.931	-0.907
78	1.297	1.337	1.378	3.052	-2.971	0.947	-0.922
79	1.255	1.294	1.334	3.086	-3.003	0.962	-0.936
80	1.215	1.253	1.292	3.119	-3.034	0.978	-0.951
81	1.176	1.213	1.251	3.152	-3.066	0.994	-0.967
82	1.138	1.175	1.212	3.185	-3.097	1.010	-0.982
83	1.102	1.138	1.175	3.218	-3.127	1.026	-0.997
84	1.068	1.103	1.138	3.251	-3.158	1.042	-1.012
85	1.030	1.065	1.100	3.287	-3.192	1.057	-1.027
86	1.002	1.035	1.070	3.316	-3.219	1.074	-1.043
87	0.971	1.004	1.037	3.348	-3.249	1.091	-1.058
88	0.941	0.973	1.006	3.380	-3.279	1.107	-1.074
89	0.912	0.944	0.976	3.412	-3.309	1.123	-1.089
90	0.884	0.915	0.947	3.443	-3.338	1.140	-1.105
91	0.858	0.888	0.918	3.475	-3.368	1.157	-1.121
92	0.832	0.861	0.891	3.506	-3.397	1.173	-1.137
93	0.807	0.835	0.865	3.538	-3.426	1.190	-1.153
94	0.783	0.811	0.840	3.569	-3.455	1.207	-1.168
95	0.759	0.787	0.815	3.599	-3.484	1.224	-1.184
96	0.737	0.764	0.792	3.630	-3.513	1.241	-1.201
97	0.715	0.742	0.769	3.661	-3.541	1.258	-1.217
98	0.694	0.720	0.747	3.691	-3.569	1.275	-1.233
99	0.674	0.699	0.725	3.722	-3.598	1.292	-1.249
100	0.652	0.677	0.702	3.756	-3.630	1.309	-1.265
101	0.636	0.660	0.685	3.782	-3.654	1.327	-1.282
102	0.618	0.641	0.666	3.812	-3.681	1.344	-1.298
103	0.600	0.623	0.647	3.841	-3.709	1.362	-1.315

104	0.583	0.606	0.629	3.871	-3.736	1.380	-1.332
105	0.567	0.589	0.612	3.900	-3.763	1.397	-1.348
106	0.551	0.572	0.595	3.930	-3.791	1.415	-1.365
107	0.535	0.557	0.579	3.959	-3.817	1.433	-1.382
108	0.520	0.541	0.563	3.988	-3.844	1.451	-1.399
109	0.506	0.526	0.548	4.016	-3.871	1.469	-1.416
110	0.492	0.512	0.533	4.045	-3.897	1.487	-1.433
111	0.479	0.498	0.518	4.074	-3.924	1.505	-1.450
112	0.466	0.485	0.505	4.102	-3.950	1.523	-1.467
113	0.453	0.472	0.491	4.130	-3.976	1.542	-1.484
114	0.441	0.459	0.478	4.159	-4.002	1.560	-1.501
115	0.429	0.447	0.466	4.187	-4.028	1.579	-1.519
116	0.417	0.435	0.454	4.214	-4.054	1.597	-1.536
117	0.406	0.424	0.442	4.242	-4.079	1.616	-1.554
118	0.396	0.413	0.430	4.270	-4.104	1.635	-1.571
119	0.385	0.402	0.419	4.297	-4.130	1.653	-1.589
120	0.375	0.391	0.408	4.325	-4.155	1.672	-1.607
121	0.365	0.381	0.398	4.352	-4.180	1.691	-1.624
122	0.356	0.372	0.388	4.379	-4.205	1.710	-1.642
123	0.347	0.362	0.378	4.406	-4.229	1.729	-1.660
124	0.338	0.353	0.369	4.433	-4.254	1.748	-1.678
125	0.329	0.344	0.359	4.459	-4.279	1.768	-1.696
126	0.321	0.335	0.350	4.486	-4.303	1.787	-1.714
127	0.313	0.327	0.342	4.512	-4.327	1.806	-1.732
128	0.305	0.319	0.333	4.539	-4.351	1.826	-1.750
129	0.297	0.311	0.325	4.565	-4.375	1.846	-1.769
130	0.290	0.303	0.317	4.591	-4.399	1.865	-1.787
131	0.283	0.296	0.309	4.617	-4.423	1.885	-1.806
132	0.276	0.289	0.302	4.643	-4.446	1.905	-1.824
133	0.269	0.282	0.295	4.669	-4.470	1.925	-1.843
134	0.262	0.275	0.288	4.694	-4.493	1.945	-1.861
135	0.256	0.268	0.281	4.720	-4.516	1.965	-1.880
136	0.250	0.262	0.274	4.745	-4.540	1.985	-1.899
137	0.244	0.255	0.268	4.770	-4.563	2.005	-1.918
138	0.238	0.249	0.261	4.795	-4.585	2.025	-1.936
139	0.232	0.243	0.255	4.820	-4.608	2.045	-1.955
140	0.227	0.238	0.249	4.845	-4.631	2.066	-1.974
141	0.221	0.232	0.244	4.870	-4.653	2.086	-1.994
142	0.216	0.227	0.238	4.895	-4.676	2.107	-2.013
143	0.211	0.222	0.232	4.919	-4.698	2.128	-2.032
144	0.206	0.216	0.227	4.944	-4.720	2.148	-2.051

145	0.201	0.211	0.222	4.968	-4.743	2.169	-2.071
146	0.197	0.207	0.217	4.992	-4.765	2.190	-2.090
147	0.192	0.202	0.212	5.017	-4.786	2.211	-2.110
148	0.188	0.197	0.207	5.041	-4.808	2.232	-2.129
149	0.183	0.193	0.203	5.065	-4.830	2.253	-2.149
150	0.179	0.189	0.198	5.088	-4.851	2.274	-2.168



附表Ⅱ（Attachment Ⅱ）