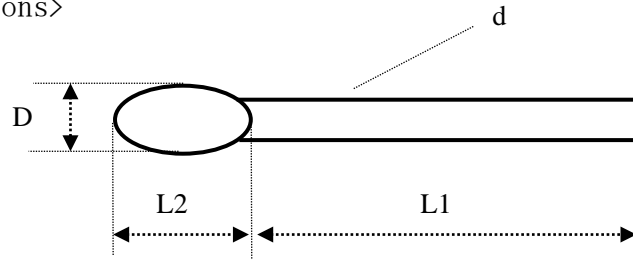


1. 尺寸

<Dimensions>



Dmax	L2max	d	L1
3.0mm	4mm	0.4±0.05mm	25±5mm

封装材料：环氧树脂

Encapsulation materials: epoxy resin

引线材质：镀锡铜丝

Lead Material: tinned copper wire

元件色泽：黑色

Components color: Black

2. 元件特性

<Components Characteristics>

SJMF5A-3-102F-3100F

	项目 Items	符号 Symbol	测试条件 Test Condition	最小值 MIN	正常值 TYP	最大值 MAX	单位 Unit
1	25°C的电阻值 <Res@25°C>	R <sub>25</sub>	T <sub>a</sub> =25°C±0.05°C P <sub>T</sub> ≤0.1mw	<b>0.99</b>	<b>1</b>	<b>1.01</b>	KΩ
3	B 值 <B Value>	B	/	<b>3069</b>	<b>3100</b>	<b>3131</b>	K
4	耗散系数 <Thermal Dissipation Coefficient>	σ	T <sub>a</sub> =25°C±0.5°C	2.5	/	/	mw/ °C
5	时间常数 <Time Constant>	τ	T <sub>a</sub> =25°C±0.5°C	/	/	5	sec

### 3. 使用范围

#### <Application Range>

	项目 Items	范围 Range	单位 Unit
1	温度范围 Temperature Range	-30°C~+150°C	°C
2	最大电流 Max. Current	1.0	mA
3	使用电流 Usage Current	200	μA

### 4. 材质特性

#### <Material Characteristics>

#### 1.1 引线拉伸试验

##### <Down-lead Drawing Test>

试验条件 Test Condition	测试结果 Test Result	
固定电阻端, 挂 0.5kg 拉伸 10 秒 Fixup Res. Terminal, pull 0.5kg with 10Sec	无开裂、破损 Without Crack or Break	OK

#### 1.2 引线弯曲试验

##### <Down-Lead Bending Test>

试验条件 Test Condition	测试结果 Test Result	
固定电阻端, 挂 0.5kg 使引线弯曲成 90° Fixup Res. Terminal, pull 0.5kg Force Down-Lead bending with 90°	无开裂、破损 Without Crack or Break	OK

### 5. 可靠性试验

#### <Reliability Test>

项目 Items	测试条件 Test Condition	变化范围 Variational Range
温度复现性试验 Temperature Repeating Test	-40°C × 20min → 25°C +110°C × 20min → 25°C 反复 5 次	±2%

漂移试验 Floating Test	1.0mA × 40 天(days)	±2%
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## 6. 使用注意事项

<Application Notes>

热敏电阻器长期连续工作所允许的温度范围为-30℃~+130℃。

Under long term and continuous working condition, the NTC themistor allow the Temperature Range is -30℃~+130℃.

## 7. 阻温特性表 (后附)

<Temperature Characteristics Table (See Appurtenance)>

### TEMPERATURE VS RESISTANCE TABLE

**Resistance**                    **1k Ohms at 25deg. C**

**Resistance Tolerance**        **+ / - 1 %**

**B Value**                        **3100K at 25/85 deg. C**

**B Value Tolerance**            **+ / - 1%**

Temp. (deg. C)	Rmax (k Ohms)	Rnor (k Ohms)	Rmin (k Ohms)
-40	16.2820	15.6831	15.1047
-39	15.4068	14.8482	14.3084
-38	14.5863	14.0651	13.5611
-37	13.8166	13.3301	12.8594
-36	13.0943	12.6399	12.2000
-35	12.4159	11.9913	11.5801
-34	11.7784	11.3816	10.9971
-33	11.1792	10.8081	10.4484
-32	10.6155	10.2684	9.9317
-31	10.0849	9.7602	9.4449
-30	9.5854	9.2814	8.9861
-29	9.1147	8.8300	8.5534
-28	8.6711	8.4044	8.1451
-27	8.2527	8.0028	7.7597
-26	7.8579	7.6237	7.3957
-25	7.4852	7.2656	7.0517
-24	7.1332	6.9272	6.7265
-23	6.8006	6.6073	6.4189
-22	6.4862	6.3048	6.1279

-21	6.1888	6.0185	5.8523
-20	5.9074	5.7475	5.5914
-19	5.6409	5.4908	5.3441
-18	5.3886	5.2476	5.1097
-17	5.1496	5.0170	4.8874
-16	4.9229	4.7983	4.6764
-15	4.7080	4.5909	4.4762
-14	4.5041	4.3940	4.2861
-13	4.3106	4.2070	4.1055
-12	4.1268	4.0294	3.9339
-11	3.9522	3.8606	3.7707
-10	3.7864	3.7001	3.6155
-9	3.6287	3.5475	3.4679
-8	3.4787	3.4023	3.3273
-7	3.3360	3.2641	3.1935
-6	3.2002	3.1325	3.0660
-5	3.0708	3.0071	2.9445
-4	2.9477	2.8877	2.8287
-3	2.8303	2.7738	2.7182
-2	2.7184	2.6653	2.6129
-1	2.6118	2.5617	2.5123
0	2.5100	2.4628	2.4163
1	2.4129	2.3685	2.3247
2	2.3202	2.2784	2.2371
3	2.2317	2.1924	2.1535
4	2.1472	2.1101	2.0735
5	2.0664	2.0315	1.9970
6	1.9892	1.9564	1.9239
7	1.9154	1.8845	1.8539
8	1.8448	1.8157	1.7869
9	1.7773	1.7499	1.7227
10	1.7127	1.6869	1.6613
11	1.6508	1.6265	1.6024
12	1.5915	1.5687	1.5460
13	1.5348	1.5133	1.4920
14	1.4804	1.4602	1.4401
15	1.4282	1.4093	1.3904
16	1.3783	1.3604	1.3427
17	1.3303	1.3136	1.2969
18	1.2843	1.2686	1.2529
19	1.2402	1.2255	1.2107
20	1.1979	1.1840	1.1702

21	1.1572	1.1442	1.1313
22	1.1182	1.1060	1.0938
23	1.0807	1.0693	1.0579
24	1.0446	1.0339	1.0233
25	1.0100	1.0000	0.9900
26	0.9774	0.9674	0.9574
27	0.9459	0.9360	0.9260
28	0.9157	0.9057	0.8958
29	0.8866	0.8767	0.8668
30	0.8586	0.8487	0.8388
31	0.8316	0.8217	0.8119
32	0.8056	0.7958	0.7860
33	0.7805	0.7708	0.7611
34	0.7563	0.7467	0.7371
35	0.7331	0.7235	0.7139
36	0.7106	0.7011	0.6916
37	0.6890	0.6795	0.6701
38	0.6681	0.6587	0.6494
39	0.6479	0.6386	0.6294
40	0.6285	0.6193	0.6101
41	0.6097	0.6006	0.5915
42	0.5915	0.5825	0.5736
43	0.5740	0.5651	0.5563
44	0.5571	0.5483	0.5396
45	0.5408	0.5321	0.5234
46	0.5250	0.5164	0.5079
47	0.5098	0.5012	0.4928
48	0.4950	0.4866	0.4783
49	0.4808	0.4724	0.4642
50	0.4670	0.4588	0.4506
51	0.4536	0.4455	0.4375
52	0.4407	0.4327	0.4248
53	0.4283	0.4204	0.4126
54	0.4162	0.4084	0.4007
55	0.4045	0.3968	0.3892
56	0.3932	0.3856	0.3781
57	0.3822	0.3747	0.3674
58	0.3716	0.3642	0.3570
59	0.3613	0.3541	0.3469
60	0.3514	0.3442	0.3371
61	0.3417	0.3347	0.3277
62	0.3324	0.3254	0.3186

63	0.3233	0.3165	0.3097
64	0.3146	0.3078	0.3011
65	0.3060	0.2994	0.2928
66	0.2978	0.2912	0.2848
67	0.2898	0.2833	0.2770
68	0.2820	0.2757	0.2694
69	0.2745	0.2682	0.2621
70	0.2672	0.2610	0.2550
71	0.2601	0.2540	0.2481
72	0.2532	0.2472	0.2414
73	0.2466	0.2407	0.2349
74	0.2401	0.2343	0.2286
75	0.2338	0.2281	0.2225
76	0.2277	0.2221	0.2166
77	0.2217	0.2162	0.2108
78	0.2160	0.2105	0.2052
79	0.2104	0.2050	0.1998
80	0.2050	0.1997	0.1945
81	0.1997	0.1945	0.1894
82	0.1945	0.1894	0.1844
83	0.1896	0.1845	0.1796
84	0.1847	0.1798	0.1749
85	0.1800	0.1751	0.1704
86	0.1754	0.1706	0.1660
87	0.1710	0.1663	0.1617
88	0.1666	0.1620	0.1575
89	0.1624	0.1579	0.1534
90	0.1583	0.1538	0.1495
91	0.1543	0.1499	0.1456
92	0.1505	0.1461	0.1419
93	0.1467	0.1424	0.1383
94	0.1430	0.1388	0.1348
95	0.1395	0.1353	0.1313
96	0.1360	0.1319	0.1280
97	0.1326	0.1286	0.1247
98	0.1293	0.1254	0.1216
99	0.1261	0.1223	0.1185
100	0.1230	0.1192	0.1155
101	0.1199	0.1162	0.1126
102	0.1170	0.1133	0.1098
103	0.1141	0.1105	0.1070
104	0.1113	0.1078	0.1043

105	0.1086	0.1051	0.1017
106	0.1059	0.1025	0.0992
107	0.1033	0.1000	0.0967
108	0.1008	0.0975	0.0943
109	0.0983	0.0951	0.0920
110	0.0959	0.0927	0.0897
111	0.0936	0.0905	0.0874
112	0.0913	0.0882	0.0853
113	0.0891	0.0861	0.0832
114	0.0869	0.0840	0.0811
115	0.0848	0.0819	0.0791
116	0.0828	0.0799	0.0771
117	0.0808	0.0780	0.0752
118	0.0788	0.0761	0.0734
119	0.0769	0.0742	0.0716
120	0.0751	0.0724	0.0698
121	0.0733	0.0706	0.0681
122	0.0715	0.0689	0.0664
123	0.0698	0.0672	0.0648
124	0.0681	0.0656	0.0632
125	0.0664	0.0640	0.0616