



江苏宇飞特电子科技有限公司

承认书

SPECIFICATION FOR APPROVAL

客户名称:

CUSTOMER _____

产品名称:

PART NAME NTC补偿型热敏电阻系列规格书

产品规格:

PART NUMBER _____

日期:

2023/07/17

DATE _____

供应商确认签章栏		
品质部	工程部	批准
徐琰	赵朴林	于光哲

客户确认签章栏		
品质部	工程部	批准

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3. 电气性能及要求 (electrical properties and requirements)

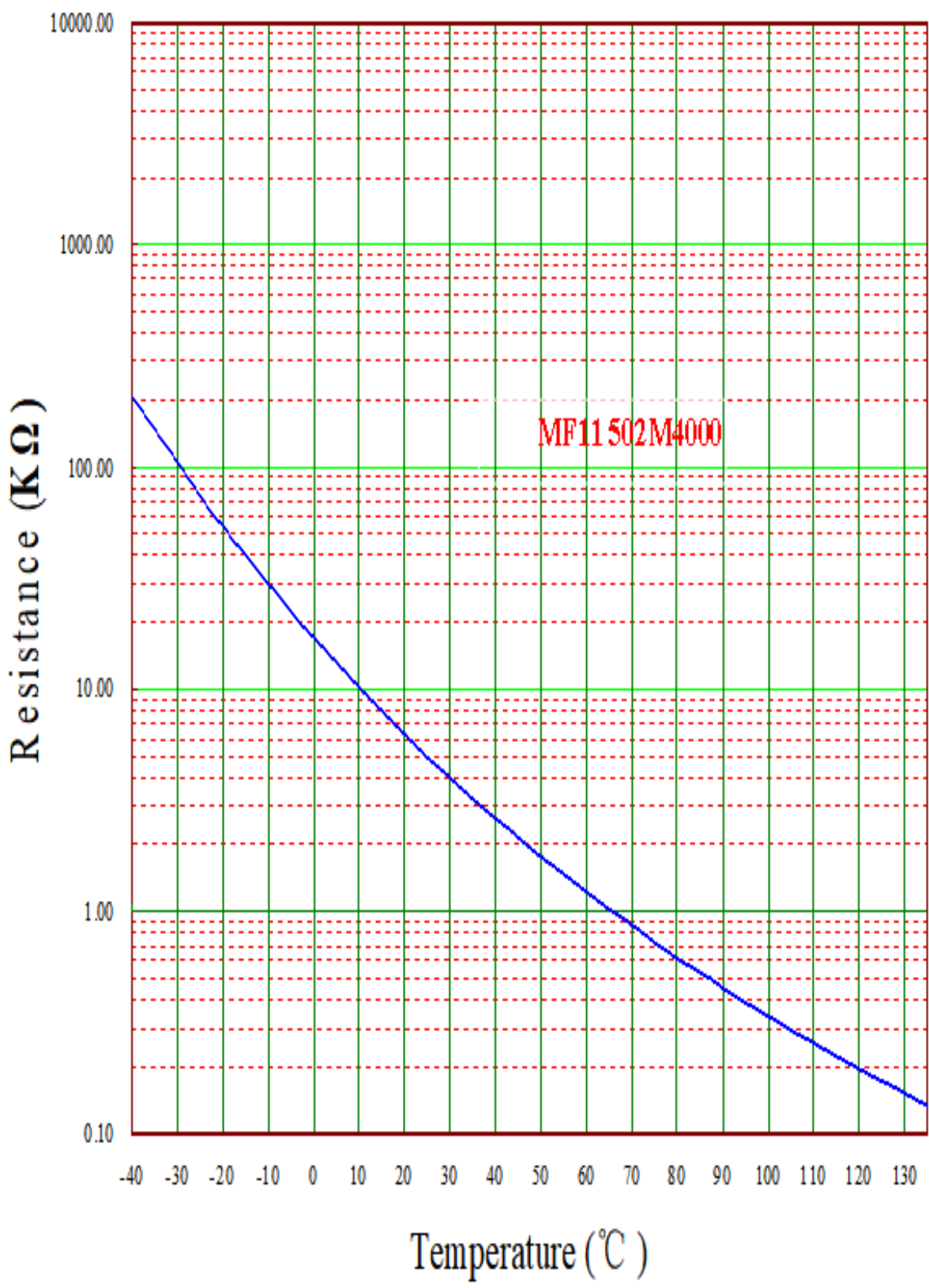
项目	测试方法	性能要求
零功率电阻值 Zero Power Resistance	在 25℃ 下, 当由于电阻体内部发热引起的电阻值变化相对于总测量误差可以忽略不计时所测得的电阻值。 At 25℃, the measured resistance value can be neglected compared to the general tolerance when the change of the resistance is made through its self-heat of the resistor.	见电特性参数 See Electrical Parameters
B 值 B-value	B 值可以用 25℃ 和 50℃ 时的零功率电阻值计算出来。其计算公式是： $B = \frac{T_1 \cdot T_2}{T_2 - T_1} \cdot \ln \left(\frac{R_1}{R_2} \right)$ The B value can be calculated using the zero power resistance value at 25℃ and 50℃. The equation is as above.	见电特性参数 See Electrical Parameters
热耗散系数 Thermal Dissipation Constant	在规定的温度下, 热敏电阻中耗散的功率变化与热敏电阻相应温度变化之比。其单位： mw/℃ The ratio of the change of the dissipation power to the corresponding change of the temperature at specified temperature. The unit is: mw/℃	见电特性参数 See Electrical Parameters
热时间常数 Thermal Time Constant	在零功率条件下, 当温度发生变化时, 热敏电阻的温度变化为其初始的和最终的温度差的 63.2% 所需的时间。 Under zero power condition, thermal time constant is the time required by a thermistor that its body temperature reach 63.2% of the difference between its initial and final temperature.	见电特性参数 See Electrical Parameters
工作温度 Operating Temperature	热敏电阻器长期连续工作所允许的温度范围。 Allowable temperature range while the thermistor work continuously for long time	-40~+125℃
稳态湿热	温度 40±2℃, 相对湿度 93±3%, 存放 1000±2 小时后, 在正常状态下 1 小时。 The sample should be subjected to 40±2℃, relative humidity 93±3% for 1000±2 hours, then stored at room temperature and	无可见损伤、标志清晰、无击穿或飞弧, 绝缘电阻大于 100M Ω。电阻值的最大变化率在 ±15% 以内。

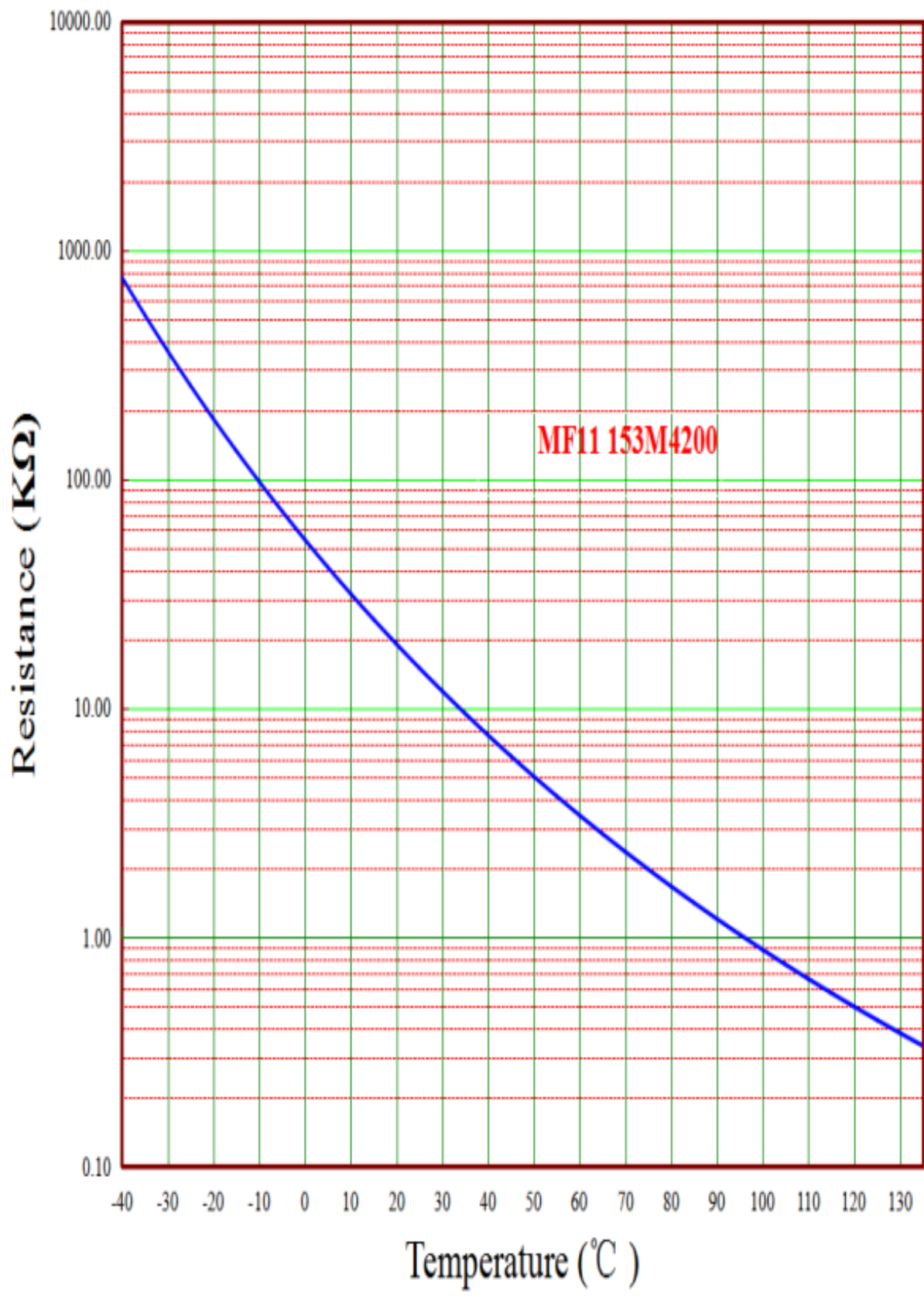
Damp Heat	h u m i d i t y f o r 1 h o u r .	No visible damage, the mark is clear, no breakdown or arcing. Insulating resistance is $>100M \Omega$. The change ratio of the resistance is within $\pm 15\%$.
耐电压 Withstand Voltage	施加 700ACV 电压, 时间 60S, 电压加在电阻器引线及绝缘层之间 Applied AC voltage of 700v between the lead of the resistor and the insulating coating for 60S	无击穿或飞弧 No breakdown or arcing
耐焊接热 Resistance to Soldering Heat	将热敏电阻器引线在 $260 \pm 10^{\circ}\text{C}$ 的焊锡液里, 液面距电阻体 6mm 时间 10S。在室温下恢复到原来的状态。 Immerse the lead of the resistor into tin liquor of $260 \pm 10^{\circ}\text{C}$ for 10S, the distance from the liquor surface to the resistor is 6mm. Then resume to the original state.	无可见损伤、电阻值的最大变化率在 $\pm 15\%$ 以内 No visible damage. The max change ratio of the resistance is within $\pm 15\%$
可焊性 Solderability	引线浸在 $260 \pm 10^{\circ}\text{C}$ 的锡液里, 时间 3 秒。 浸锡温度: $260 \pm 5^{\circ}\text{C}$ 手锡温度: $260 \pm 5^{\circ}\text{C}$ (5s) Immerse the lead into tin liquor of $260 \pm 10^{\circ}\text{C}$ for 3 sec. The temperature of immerse welding: $260 \pm 5^{\circ}\text{C}$, The temperature of hand welding: $260 \pm 5^{\circ}\text{C}$ (5s)	焊锡涂布面积在 90% 以上 The covered surface area should be above 90%
引出端变曲强度 Bending Strength of Terminals	固定电阻体, 在一根引出端悬挂 0.5kg 重力变曲 90 度; 然后再回复, 再把方向弯曲 90 度 Fix the resistor, hanging a force of 0.5kg to one terminal to bend it by 90 degree, then resume to the original state, bend it by 90 degree again.	无可见损伤 NO visible damage
振 动 Vibration	频率: 10-50HZ; 振幅: 1.55mm 方向和时间: X、Y 及 Z 轴各 2 个小时 Frequency: 10-50HZ, Wave Amplitude: 1.55mm. Direction and Time: 2 hours respectively f o r X , Y a n d Z a x i s .	无机械损伤 No mechanical damage
绝缘电阻 Insulation resistance	施加 500DCV 电压, 时间 60s, 电压加在电阻器引线及绝缘层之间 Applied DC voltage of 500v between the lead of the resistor and the insulating	绝缘电阻 $\geq 100M \Omega$ 无击穿或飞弧 Insulation resistance $\geq 100M \Omega$

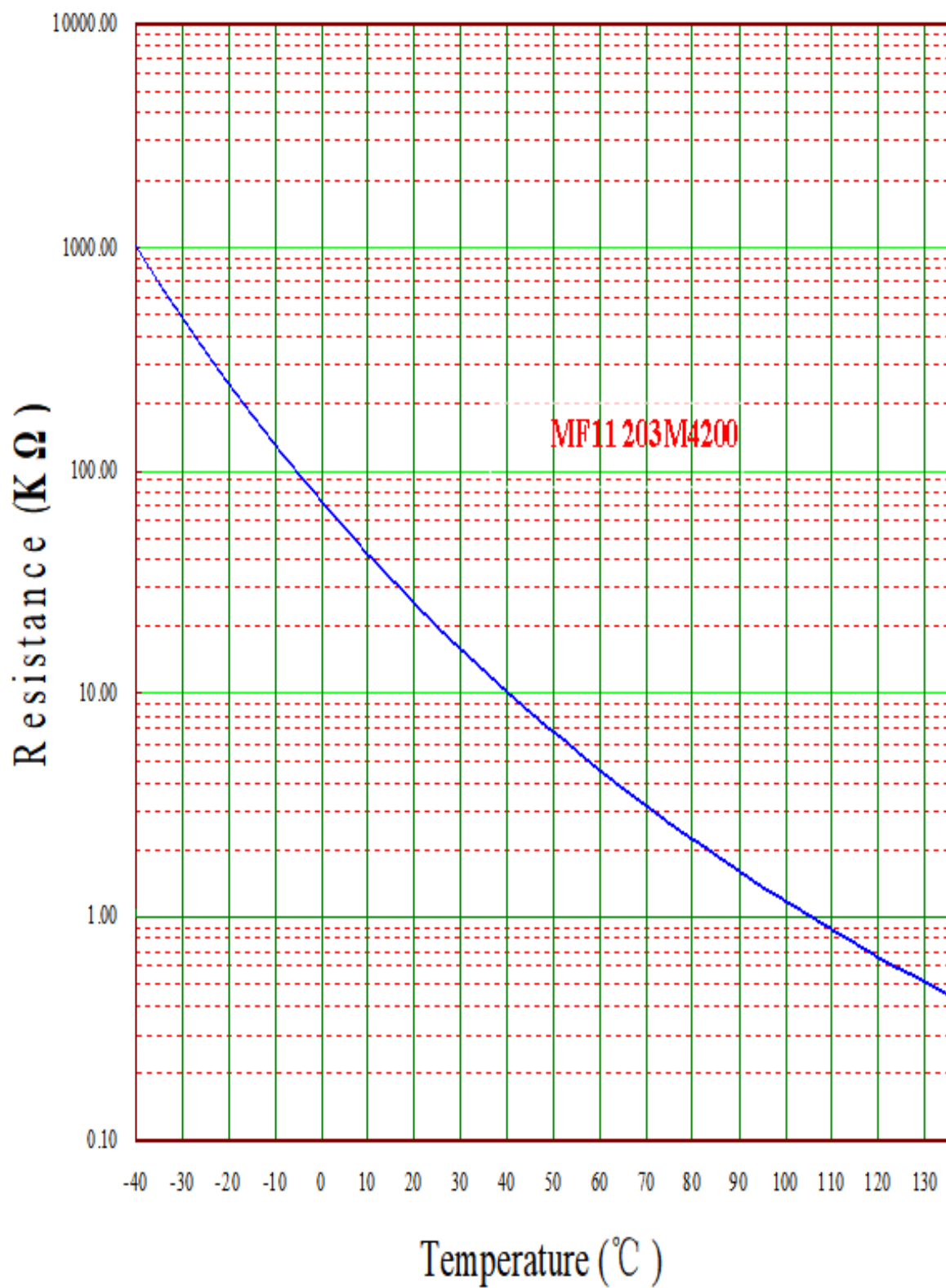
	coating for 60s	No breakdown or arcing
温度快速变化 Temperature Rapid Change	-40°C/30 → 25°C/5 → +160°C/30 → 25°C/5	电阻变化率±20% The change ratio of the resistance is± 20%
储存条件 Storage conditions	-10°C ~ 40°C RH≤75%	

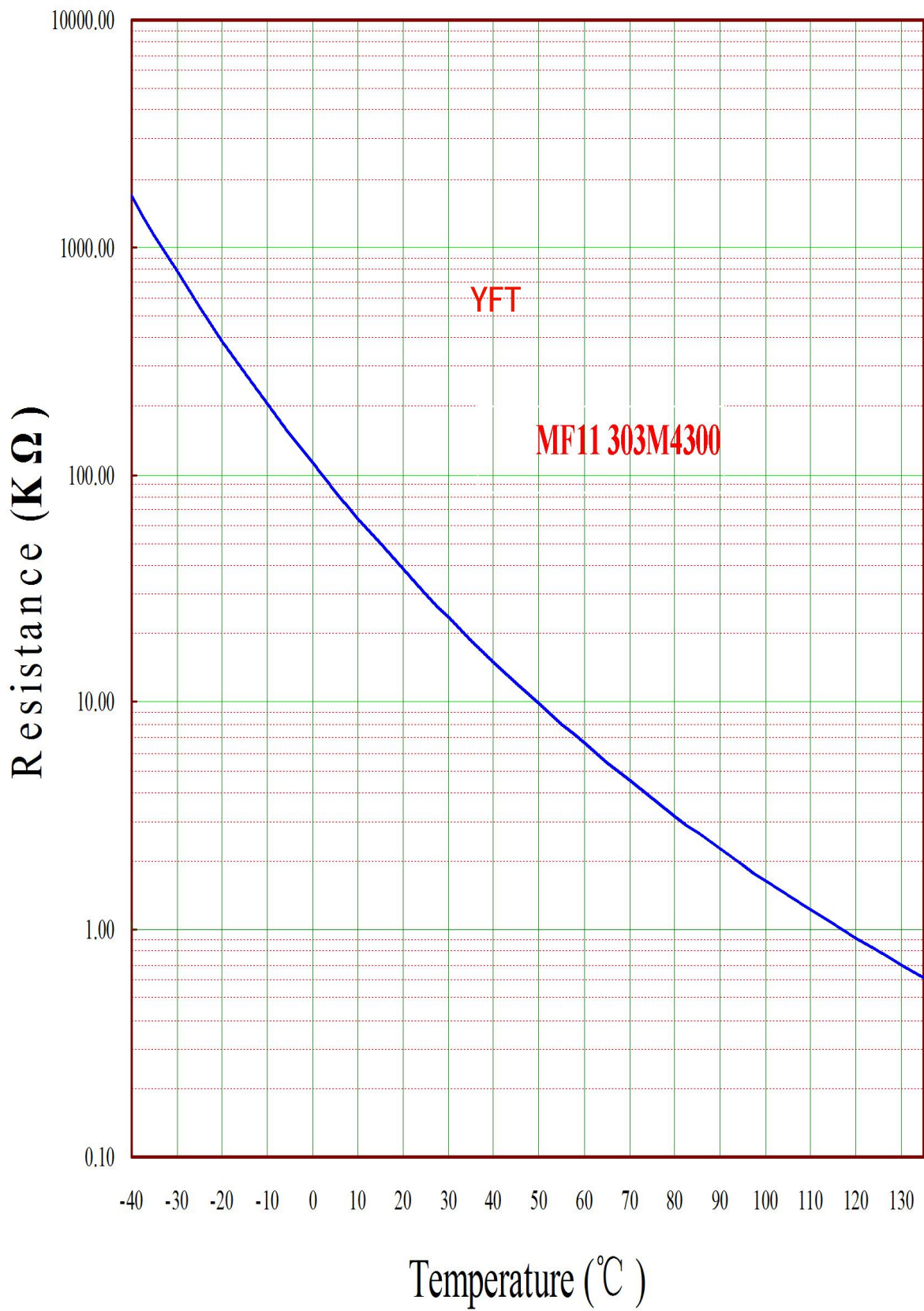
产品UL标准号：E523747

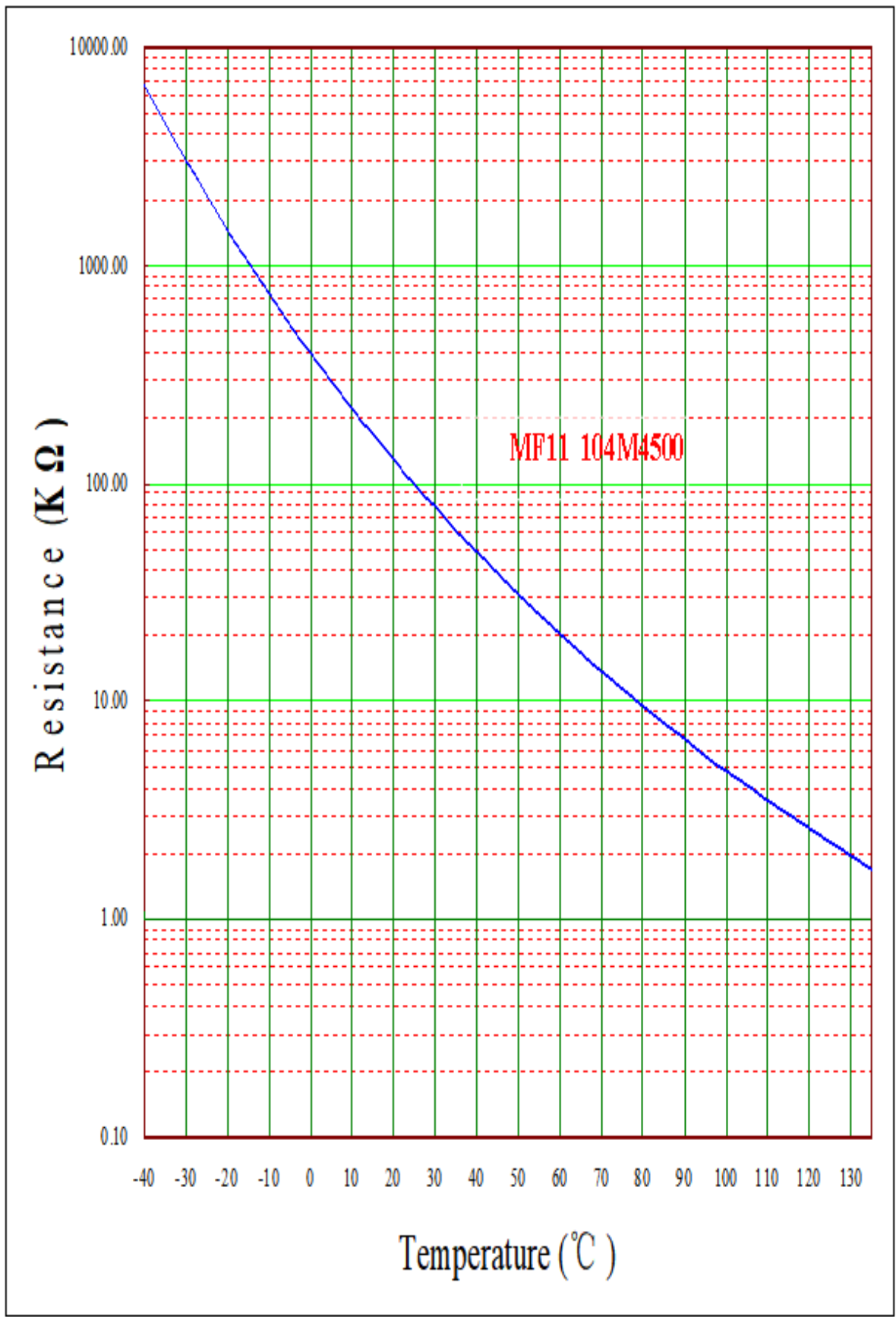
各规格阻温表，详见单独规格书。











型号: YFTMF11502M4000

R: 5000 ohms ± 20%

B: 4000 °K ± 5%

温度 (°C)	阻值 (Ω)			温度系数 (%/°C)	阻值精度偏差 (%)		测温精度偏差 (°C)	
	下限值	中心值	上限值		最小	最大	最小	最大
-40.0	140147.3122	211244.5748	305673.3582	-7.37	-33.66	44.70	-6.06	4.57
-39.0	130706.7262	196292.9420	282997.5425	-7.31	-33.41	44.17	-6.04	4.57
-38.0	121974.8276	182514.1555	262176.7205	-7.25	-33.17	43.65	-6.02	4.58
-37.0	113893.3244	169807.8119	243045.8976	-7.19	-32.93	43.13	-6.00	4.58
-36.0	106409.1159	158082.7842	225455.8720	-7.12	-32.69	42.62	-5.98	4.59
-35.0	99473.7957	147256.3047	209271.6211	-7.06	-32.45	42.11	-5.96	4.59
-34.0	93043.2075	137253.1440	194370.8627	-7.01	-32.21	41.61	-5.94	4.60
-33.0	87077.0436	128004.8763	180642.7707	-6.95	-31.97	41.12	-5.92	4.60
-32.0	81538.4854	119449.2202	167986.8284	-6.89	-31.74	40.63	-5.90	4.61
-31.0	76393.8788	111529.4478	156311.8040	-6.83	-31.50	40.15	-5.88	4.61
-30.0	71612.4422	104193.8540	145534.8335	-6.78	-31.27	39.68	-5.86	4.62
-29.0	67166.0028	97395.2803	135580.6005	-6.72	-31.04	39.21	-5.83	4.62
-28.0	63028.7596	91090.6858	126380.6010	-6.66	-30.81	38.74	-5.81	4.62
-27.0	59177.0682	85240.7621	117872.4841	-6.61	-30.58	38.28	-5.79	4.63
-26.0	55589.2472	79809.5861	109999.4611	-6.56	-30.35	37.83	-5.77	4.63
-25.0	52245.4032	74764.3072	102709.7743	-6.50	-30.12	37.38	-5.75	4.63
-24.0	49127.2717	70074.8655	95956.2202	-6.45	-29.89	36.93	-5.72	4.63
-23.0	46218.0742	65713.7373	89695.7202	-6.40	-29.67	36.49	-5.70	4.64
-22.0	43502.3877	61655.7054	83888.9348	-6.35	-29.44	36.06	-5.68	4.64
-21.0	40966.0268	57877.6518	78499.9163	-6.30	-29.22	35.63	-5.66	4.64
-20.0	38595.9372	54358.3700	73495.7951	-6.25	-29.00	35.21	-5.63	4.64
-19.0	36380.0982	51078.3949	68846.4973	-6.20	-28.78	34.79	-5.61	4.64
-18.0	34307.4347	48019.8498	64524.4904	-6.15	-28.56	34.37	-5.59	4.64
-17.0	32367.7370	45166.3066	60504.5524	-6.10	-28.34	33.96	-5.57	4.64
-16.0	30551.5881	42502.6598	56763.5646	-6.05	-28.12	33.55	-5.54	4.64
-15.0	28850.2973	40015.0122	53280.3228	-6.01	-27.90	33.15	-5.52	4.64
-14.0	27255.8398	37690.5709	50035.3679	-5.96	-27.69	32.75	-5.49	4.64
-13.0	25760.8014	35517.5527	47010.8314	-5.92	-27.47	32.36	-5.47	4.64
-12.0	24358.3290	33485.0988	44190.2959	-5.87	-27.26	31.97	-5.45	4.64

-11.0	23042.0844	31583.1964	41558.6690	-5.83	-27.04	31.58	-5.42	4.64
-10.0	21806.2026	29802.6078	39102.0681	-5.78	-26.83	31.20	-5.40	4.64
-9.0	20645.2535	28134.8063	36807.7163	-5.74	-26.62	30.83	-5.37	4.64
-8.0	19554.2078	26571.9167	34663.8481	-5.69	-26.41	30.45	-5.35	4.64
-7.0	18528.4040	25106.6619	32659.6231	-5.65	-26.20	30.08	-5.32	4.64
-6.0	17563.5204	23732.3140	30785.0481	-5.61	-25.99	29.72	-5.30	4.63
-5.0	16655.5475	22442.6499	29030.9058	-5.57	-25.79	29.36	-5.27	4.63
-4.0	15800.7643	21231.9098	27388.6900	-5.53	-25.58	29.00	-5.25	4.63
-3.0	14995.7154	20094.7610	25850.5467	-5.48	-25.37	28.64	-5.22	4.63
-2.0	14237.1907	19026.2627	24409.2204	-5.44	-25.17	28.29	-5.20	4.62
-1.0	13522.2066	18021.8359	23058.0050	-5.40	-24.97	27.94	-5.17	4.62
0.0	12847.9888	17077.2343	21790.6989	-5.36	-24.77	27.60	-5.15	4.62
1.0	12211.9560	16188.5183	20601.5644	-5.32	-24.56	27.26	-5.12	4.61
2.0	11611.7061	15352.0310	19485.2901	-5.29	-24.36	26.92	-5.09	4.61
3.0	11045.0019	14564.3767	18436.9571	-5.25	-24.16	26.59	-5.07	4.60
4.0	10509.7597	13822.4005	17452.0076	-5.21	-23.97	26.26	-5.04	4.60
5.0	10004.0372	13123.1698	16526.2162	-5.17	-23.77	25.93	-5.01	4.60
6.0	9526.0234	12463.9574	15655.6643	-5.14	-23.57	25.61	-4.99	4.59
7.0	9074.0292	11842.2262	14836.7154	-5.10	-23.38	25.29	-4.96	4.58
8.0	8646.4780	11255.6146	14065.9938	-5.06	-23.18	24.97	-4.93	4.58
9.0	8241.8982	10701.9237	13340.3643	-5.03	-22.99	24.65	-4.90	4.57
10.0	7858.9150	10179.1048	12656.9134	-4.99	-22.79	24.34	-4.88	4.57
11.0	7496.2441	9685.2485	12012.9330	-4.96	-22.60	24.03	-4.85	4.56
12.0	7152.6847	9218.5748	11405.9041	-4.92	-22.41	23.73	-4.82	4.55
13.0	6827.1140	8777.4228	10833.4833	-4.89	-22.22	23.42	-4.79	4.55
14.0	6518.4816	8360.2431	10293.4888	-4.85	-22.03	23.12	-4.77	4.54
15.0	6225.8044	7965.5887	9783.8890	-4.82	-21.84	22.83	-4.74	4.53
16.0	5948.1617	7592.1084	9302.7911	-4.79	-21.65	22.53	-4.71	4.52
17.0	5684.6916	7238.5398	8848.4308	-4.75	-21.47	22.24	-4.68	4.52
18.0	5434.5859	6903.7027	8419.1632	-4.72	-21.28	21.95	-4.65	4.51
19.0	5197.0876	6586.4934	8013.4535	-4.69	-21.09	21.66	-4.62	4.50
20.0	4971.4864	6285.8798	7629.8697	-4.66	-20.91	21.38	-4.59	4.49
21.0	4757.1161	6000.8956	7267.0746	-4.62	-20.73	21.10	-4.56	4.48
22.0	4553.3517	5730.6363	6923.8195	-4.59	-20.54	20.82	-4.53	4.47
23.0	4359.6060	5474.2548	6598.9373	-4.56	-20.36	20.54	-4.50	4.46
24.0	4175.3281	5230.9573	6291.3375	-4.53	-20.18	20.27	-4.47	4.45
25.0	4000.0000	5000.0000	6000.0000	-4.50	-20.00	20.00	-4.44	4.44
26.0	3815.9805	4780.6852	5749.7027	-4.47	-20.18	20.27	-4.53	4.51
27.0	3641.5711	4572.3586	5511.4138	-4.44	-20.36	20.54	-4.62	4.58

28.0	3476.2145	4374.4064	5284.4880	-4.41	-20.53	20.80	-4.72	4.65
29.0	3319.3888	4186.2520	5068.3179	-4.38	-20.71	21.07	-4.81	4.73
30.0	3170.6050	4007.3545	4862.3321	-4.35	-20.88	21.34	-4.90	4.80
31.0	3029.4047	3837.2054	4665.9926	-4.32	-21.05	21.60	-4.99	4.87
32.0	2895.3581	3675.3271	4478.7925	-4.30	-21.22	21.86	-5.09	4.94
33.0	2768.0622	3521.2705	4300.2545	-4.27	-21.39	22.12	-5.18	5.01
34.0	2647.1387	3374.6133	4129.9288	-4.24	-21.56	22.38	-5.28	5.08
35.0	2532.2327	3234.9584	3967.3911	-4.21	-21.72	22.64	-5.37	5.16
36.0	2423.0109	3101.9320	3812.2415	-4.19	-21.89	22.90	-5.47	5.23
37.0	2319.1601	2975.1822	3664.1027	-4.16	-22.05	23.16	-5.57	5.30
38.0	2220.3862	2854.3778	3522.6186	-4.13	-22.21	23.41	-5.67	5.38
39.0	2126.4126	2739.2067	3387.4532	-4.11	-22.37	23.67	-5.76	5.45
40.0	2036.9793	2629.3748	3258.2892	-4.08	-22.53	23.92	-5.86	5.52
41.0	1951.8418	2524.6051	3134.8267	-4.05	-22.69	24.17	-5.96	5.60
42.0	1870.7700	2424.6362	3016.7825	-4.03	-22.84	24.42	-6.06	5.67
43.0	1793.5474	2329.2217	2903.8891	-4.00	-23.00	24.67	-6.16	5.75
44.0	1719.9699	2238.1289	2795.8933	-3.98	-23.15	24.92	-6.27	5.82
45.0	1649.8456	2151.1386	2692.5558	-3.95	-23.30	25.17	-6.37	5.90
46.0	1582.9935	2068.0434	2593.6503	-3.93	-23.45	25.42	-6.47	5.97
47.0	1519.2431	1988.6478	2498.9625	-3.90	-23.60	25.66	-6.58	6.05
48.0	1458.4336	1912.7670	2408.2896	-3.88	-23.75	25.91	-6.68	6.12
49.0	1400.4134	1840.2262	2321.4397	-3.85	-23.90	26.15	-6.78	6.20
50.0	1345.0396	1770.8605	2238.2309	-3.83	-24.05	26.39	-6.89	6.28
51.0	1292.1771	1704.5138	2158.4910	-3.81	-24.19	26.63	-7.00	6.35
52.0	1241.6986	1641.0384	2082.0567	-3.78	-24.33	26.87	-7.10	6.43
53.0	1193.4837	1580.2948	2008.7734	-3.76	-24.48	27.11	-7.21	6.51
54.0	1147.4190	1522.1508	1938.4943	-3.74	-24.62	27.35	-7.32	6.59
55.0	1103.3970	1466.4812	1871.0803	-3.71	-24.76	27.59	-7.43	6.67
56.0	1061.3164	1413.1677	1806.3993	-3.69	-24.90	27.83	-7.54	6.74
57.0	1021.0812	1362.0981	1744.3262	-3.67	-25.04	28.06	-7.65	6.82
58.0	982.6008	1313.1660	1684.7420	-3.65	-25.17	28.30	-7.76	6.90
59.0	945.7893	1266.2708	1627.5338	-3.63	-25.31	28.53	-7.87	6.98
60.0	910.5658	1221.3170	1572.5944	-3.60	-25.44	28.76	-7.98	7.06
61.0	876.8532	1178.2141	1519.8221	-3.58	-25.58	28.99	-8.09	7.14
62.0	844.5791	1136.8762	1469.1199	-3.56	-25.71	29.22	-8.21	7.22
63.0	813.6744	1097.2218	1420.3960	-3.54	-25.84	29.45	-8.32	7.30
64.0	784.0739	1059.1737	1373.5629	-3.52	-25.97	29.68	-8.44	7.38
65.0	755.7160	1022.6584	1328.5375	-3.50	-26.10	29.91	-8.55	7.46
66.0	728.5420	987.6064	1285.2406	-3.48	-26.23	30.14	-8.67	7.54

67.0	702.4963	953.9514	1243.5971	-3.46	-26.36	30.36	-8.78	7.63
68.0	677.5265	921.6307	1203.5353	-3.44	-26.49	30.59	-8.90	7.71
69.0	653.5824	890.5844	1164.9870	-3.42	-26.61	30.81	-9.02	7.79
70.0	630.6167	860.7559	1127.8874	-3.40	-26.74	31.03	-9.14	7.87
71.0	608.5846	832.0912	1092.1747	-3.38	-26.86	31.26	-9.26	7.95
72.0	587.4432	804.5389	1057.7900	-3.36	-26.98	31.48	-9.38	8.04
73.0	567.1521	778.0503	1024.6771	-3.34	-27.11	31.70	-9.50	8.12
74.0	547.6728	752.5790	992.7828	-3.32	-27.23	31.92	-9.62	8.20
75.0	528.9687	728.0807	962.0559	-3.30	-27.35	32.14	-9.74	8.29
76.0	511.0051	704.5135	932.4479	-3.28	-27.47	32.35	-9.86	8.37
77.0	493.7490	681.8372	903.9125	-3.26	-27.59	32.57	-9.98	8.46
78.0	477.1689	660.0137	876.4055	-3.24	-27.70	32.79	-10.11	8.54
79.0	461.2350	639.0068	849.8846	-3.23	-27.82	33.00	-10.23	8.63
80.0	445.9190	618.7819	824.3098	-3.21	-27.94	33.21	-10.36	8.71
81.0	431.1937	599.3059	799.6425	-3.19	-28.05	33.43	-10.48	8.80
82.0	417.0336	580.5474	775.8460	-3.17	-28.17	33.64	-10.61	8.88
83.0	403.4141	562.4765	752.8854	-3.15	-28.28	33.85	-10.74	8.97
84.0	390.3119	545.0645	730.7272	-3.14	-28.39	34.06	-10.86	9.05
85.0	377.7049	528.2843	709.3394	-3.12	-28.50	34.27	-10.99	9.14
86.0	365.5719	512.1099	688.6915	-3.10	-28.61	34.48	-11.12	9.23
87.0	353.8928	496.5163	668.7543	-3.08	-28.72	34.69	-11.25	9.32
88.0	342.6484	481.4800	649.4999	-3.07	-28.83	34.90	-11.38	9.40
89.0	331.8204	466.9784	630.9016	-3.05	-28.94	35.10	-11.51	9.49
90.0	321.3914	452.9897	612.9339	-3.03	-29.05	35.31	-11.64	9.58
91.0	311.3448	439.4935	595.5724	-3.02	-29.16	35.51	-11.77	9.67
92.0	301.6646	426.4700	578.7937	-3.00	-29.26	35.72	-11.91	9.76
93.0	292.3359	413.9004	562.5755	-2.98	-29.37	35.92	-12.04	9.84
94.0	283.3441	401.7667	546.8963	-2.97	-29.48	36.12	-12.17	9.93
95.0	274.6754	390.0517	531.7357	-2.95	-29.58	36.32	-12.31	10.02
96.0	266.3168	378.7390	517.0741	-2.94	-29.68	36.53	-12.44	10.11
97.0	258.2556	367.8129	502.8927	-2.92	-29.79	36.73	-12.58	10.20
98.0	250.4799	357.2583	489.1735	-2.90	-29.89	36.92	-12.72	10.29
99.0	242.9782	347.0608	475.8993	-2.89	-29.99	37.12	-12.85	10.38
100.0	235.7396	337.2067	463.0535	-2.87	-30.09	37.32	-12.99	10.47
101.0	228.7536	327.6829	450.6204	-2.86	-30.19	37.52	-13.13	10.57
102.0	222.0102	318.4766	438.5846	-2.84	-30.29	37.71	-13.27	10.66
103.0	215.4998	309.5758	426.9318	-2.83	-30.39	37.91	-13.41	10.75
104.0	209.2134	300.9691	415.6478	-2.81	-30.49	38.10	-13.55	10.84
105.0	203.1421	292.6452	404.7194	-2.80	-30.58	38.30	-13.69	10.93

106.0	197.2776	284.5936	394.1337	-2.78	-30.68	38.49	-13.83	11.03
107.0	191.6120	276.8041	383.8784	-2.77	-30.78	38.68	-13.98	11.12
108.0	186.1375	269.2670	373.9416	-2.75	-30.87	38.87	-14.12	11.21
109.0	180.8468	261.9730	364.3119	-2.74	-30.97	39.06	-14.26	11.31
110.0	175.7329	254.9130	354.9786	-2.72	-31.06	39.25	-14.41	11.40
111.0	170.7891	248.0786	345.9311	-2.71	-31.16	39.44	-14.55	11.49
112.0	166.0090	241.4614	337.1593	-2.70	-31.25	39.63	-14.70	11.59
113.0	161.3864	235.0537	328.6536	-2.68	-31.34	39.82	-14.84	11.68
114.0	156.9154	228.8477	320.4048	-2.67	-31.43	40.01	-14.99	11.78
115.0	152.5903	222.8363	312.4039	-2.66	-31.52	40.19	-15.14	11.87
116.0	148.4057	217.0125	304.6424	-2.64	-31.61	40.38	-15.29	11.97
117.0	144.3564	211.3696	297.1119	-2.63	-31.70	40.57	-15.44	12.06
118.0	140.4375	205.9011	289.8047	-2.61	-31.79	40.75	-15.59	12.16
119.0	136.6441	200.6008	282.7131	-2.60	-31.88	40.93	-15.74	12.26
120.0	132.9717	195.4630	275.8297	-2.59	-31.97	41.12	-15.89	12.35
121.0	129.4158	190.4817	269.1475	-2.57	-32.06	41.30	-16.04	12.45
122.0	125.9724	185.6517	262.6598	-2.56	-32.15	41.48	-16.19	12.55
123.0	122.6372	180.9675	256.3600	-2.55	-32.23	41.66	-16.34	12.65
124.0	119.4064	176.4242	250.2419	-2.54	-32.32	41.84	-16.50	12.74
125.0	116.2763	172.0170	244.2994	-2.52	-32.40	42.02	-16.65	12.84
126.0	113.2434	167.7410	238.5268	-2.51	-32.49	42.20	-16.81	12.94
127.0	110.3041	163.5920	232.9183	-2.50	-32.57	42.38	-16.96	13.04
128.0	107.4551	159.5654	227.4687	-2.49	-32.66	42.56	-17.12	13.14
129.0	104.6934	155.6573	222.1727	-2.47	-32.74	42.73	-17.28	13.24
130.0	102.0158	151.8635	217.0253	-2.46	-32.82	42.91	-17.43	13.34
131.0	99.4194	148.1802	212.0218	-2.45	-32.91	43.08	-17.59	13.44
132.0	96.9014	144.6038	207.1574	-2.44	-32.99	43.26	-17.75	13.54
133.0	94.4592	141.1307	202.4278	-2.43	-33.07	43.43	-17.91	13.64
134.0	92.0900	137.7574	197.8286	-2.41	-33.15	43.61	-18.07	13.74
135.0	89.7913	134.4807	193.3556	-2.40	-33.23	43.78	-18.23	13.84
136.0	87.5609	131.2973	189.0048	-2.39	-33.31	43.95	-18.39	13.94
137.0	85.3963	128.2043	184.7725	-2.38	-33.39	44.12	-18.55	14.04
138.0	83.2954	125.1986	180.6547	-2.37	-33.47	44.29	-18.72	14.14
139.0	81.2560	122.2775	176.6481	-2.36	-33.55	44.46	-18.88	14.24
140.0	79.2760	119.4381	172.7490	-2.34	-33.63	44.63	-19.04	14.35
141.0	77.3535	116.6779	168.9542	-2.33	-33.70	44.80	-19.21	14.45
142.0	75.4865	113.9944	165.2605	-2.32	-33.78	44.97	-19.37	14.55
143.0	73.6732	111.3849	161.6646	-2.31	-33.86	45.14	-19.54	14.66
144.0	71.9118	108.8473	158.1636	-2.30	-33.93	45.31	-19.71	14.76

145.0	70.2006	106.3792	154.7546	-2.29	-34.01	45.47	-19.87	14.86
146.0	68.5381	103.9784	151.4349	-2.28	-34.08	45.64	-20.04	14.97
147.0	66.9225	101.6429	148.2016	-2.27	-34.16	45.81	-20.21	15.07
148.0	65.3524	99.3705	145.0522	-2.26	-34.23	45.97	-20.38	15.18
149.0	63.8264	97.1593	141.9842	-2.25	-34.31	46.14	-20.55	15.28
150.0	62.3429	95.0074	138.9951	-2.23	-34.38	46.30	-20.72	15.39
151.0	60.9006	92.9130	136.0825	-2.22	-34.45	46.46	-20.89	15.49
152.0	59.4983	90.8742	133.2442	-2.21	-34.53	46.62	-21.06	15.60
153.0	58.1345	88.8895	130.4781	-2.20	-34.60	46.79	-21.24	15.70
154.0	56.8082	86.9570	127.7819	-2.19	-34.67	46.95	-21.41	15.81
155.0	55.5182	85.0753	125.1535	-2.18	-34.74	47.11	-21.58	15.92
156.0	54.2632	83.2428	122.5912	-2.17	-34.81	47.27	-21.76	16.02
157.0	53.0422	81.4580	120.0928	-2.16	-34.88	47.43	-21.93	16.13
158.0	51.8542	79.7195	117.6565	-2.15	-34.95	47.59	-22.11	16.24
159.0	50.6981	78.0258	115.2806	-2.14	-35.02	47.75	-22.29	16.35
160.0	49.5729	76.3757	112.9633	-2.13	-35.09	47.90	-22.46	16.46
161.0	48.4777	74.7679	110.7029	-2.12	-35.16	48.06	-22.64	16.56
162.0	47.4116	73.2010	108.4978	-2.11	-35.23	48.22	-22.82	16.67
163.0	46.3736	71.6739	106.3464	-2.10	-35.30	48.38	-23.00	16.78
164.0	45.3629	70.1855	104.2473	-2.09	-35.37	48.53	-23.18	16.89
165.0	44.3788	68.7345	102.1988	-2.08	-35.43	48.69	-23.36	17.00
166.0	43.4203	67.3199	100.1997	-2.07	-35.50	48.84	-23.54	17.11
167.0	42.4867	65.9407	98.2484	-2.07	-35.57	49.00	-23.72	17.22
168.0	41.5773	64.5958	96.3438	-2.06	-35.63	49.15	-23.90	17.33
169.0	40.6913	63.2842	94.4844	-2.05	-35.70	49.30	-24.09	17.44
170.0	39.8280	62.0049	92.6690	-2.04	-35.77	49.45	-24.27	17.55
171.0	38.9869	60.7571	90.8965	-2.03	-35.83	49.61	-24.46	17.67
172.0	38.1671	59.5398	89.1655	-2.02	-35.90	49.76	-24.64	17.78
173.0	37.3682	58.3523	87.4751	-2.01	-35.96	49.91	-24.83	17.89
174.0	36.5894	57.1935	85.8241	-2.00	-36.03	50.06	-25.01	18.00
175.0	35.8302	56.0628	84.2113	-1.99	-36.09	50.21	-25.20	18.11
176.0	35.0901	54.9593	82.6359	-1.98	-36.15	50.36	-25.39	18.23
177.0	34.3684	53.8822	81.0967	-1.97	-36.22	50.51	-25.58	18.34
178.0	33.6647	52.8309	79.5928	-1.97	-36.28	50.66	-25.77	18.45
179.0	32.9783	51.8047	78.1232	-1.96	-36.34	50.80	-25.96	18.57
180.0	32.3089	50.8027	76.6871	-1.95	-36.40	50.95	-26.15	18.68
181.0	31.6560	49.8244	75.2835	-1.94	-36.46	51.10	-26.34	18.79

182.0	31.0190	48.8691	73.9116	-1.93	-36.53	51.24	-26.53	18.91
183.0	30.3976	47.9362	72.5706	-1.92	-36.59	51.39	-26.72	19.02
184.0	29.7912	47.0251	71.2595	-1.91	-36.65	51.54	-26.91	19.14
185.0	29.1995	46.1351	69.9778	-1.91	-36.71	51.68	-27.11	19.25
186.0	28.6220	45.2658	68.7245	-1.90	-36.77	51.82	-27.30	19.37
187.0	28.0584	44.4165	67.4989	-1.89	-36.83	51.97	-27.50	19.49
188.0	27.5082	43.5867	66.3004	-1.88	-36.89	52.11	-27.69	19.60
189.0	26.9712	42.7759	65.1281	-1.87	-36.95	52.25	-27.89	19.72
190.0	26.4469	41.9835	63.9816	-1.87	-37.01	52.40	-28.09	19.84
191.0	25.9350	41.2092	62.8600	-1.86	-37.07	52.54	-28.28	19.95
192.0	25.4351	40.4524	61.7628	-1.85	-37.12	52.68	-28.48	20.07
193.0	24.9469	39.7126	60.6893	-1.84	-37.18	52.82	-28.68	20.19
194.0	24.4701	38.9895	59.6389	-1.83	-37.24	52.96	-28.88	20.31
195.0	24.0044	38.2825	58.6111	-1.83	-37.30	53.10	-29.08	20.42
196.0	23.5495	37.5912	57.6052	-1.82	-37.35	53.24	-29.28	20.54
197.0	23.1051	36.9153	56.6208	-1.81	-37.41	53.38	-29.48	20.66
198.0	22.6709	36.2543	55.6572	-1.80	-37.47	53.52	-29.68	20.78
199.0	22.2467	35.6079	54.7141	-1.80	-37.52	53.66	-29.89	20.90
200.0	21.8321	34.9757	53.7908	-1.79	-37.58	53.79	-30.09	21.02

型号: YFTMF11153M4200

R: 15000 ohms \pm 20%
 B: 4200 $^{\circ}$ K \pm 5%

温度 ($^{\circ}$ C)	阻值 (Ω)			温度系数 (%/ $^{\circ}$ C)	阻值精度偏差 (%)		测温精度偏差 ($^{\circ}$ C)	
	下限值	中心值	上限值		最小	最大	最小	最大
-40.0	501052.7706	762243.2687	1113204.5195	-7.73	-34.27	46.04	-5.96	4.43
-39.0	465721.1879	705772.4159	1026773.3730	-7.66	-34.01	45.48	-5.93	4.44
-38.0	433150.7330	653913.8415	947705.1483	-7.60	-33.76	44.93	-5.91	4.44
-37.0	403105.9345	606258.0493	875320.4537	-7.53	-33.51	44.38	-5.89	4.45
-36.0	375372.9919	562434.6593	809007.1549	-7.47	-33.26	43.84	-5.87	4.45
-35.0	349757.6415	522108.4194	748213.2840	-7.41	-33.01	43.31	-5.85	4.46
-34.0	326083.2459	484975.6482	692440.7400	-7.35	-32.76	42.78	-5.82	4.46
-33.0	304189.0818	450761.0601	641239.6882	-7.29	-32.52	42.26	-5.80	4.46
-32.0	283928.8044	419214.9295	594203.5756	-7.23	-32.27	41.74	-5.78	4.47
-31.0	265169.0701	390110.5548	550964.6925	-7.17	-32.03	41.23	-5.75	4.47
-30.0	247788.2990	363241.9905	511190.2151	-7.11	-31.78	40.73	-5.73	4.47
-29.0	231675.5629	338422.0153	474578.6765	-7.05	-31.54	40.23	-5.71	4.48
-28.0	216729.5851	315480.3128	440856.8153	-6.99	-31.30	39.74	-5.68	4.48
-27.0	202857.8400	294261.8386	409776.7602	-6.93	-31.06	39.26	-5.66	4.48
-26.0	189975.7427	274625.3559	381113.5129	-6.88	-30.82	38.78	-5.64	4.48
-25.0	178005.9177	256442.1200	354662.6947	-6.82	-30.59	38.30	-5.61	4.48
-24.0	166877.5401	239594.6957	330238.5299	-6.77	-30.35	37.83	-5.59	4.48
-23.0	156525.7400	223975.8945	307672.0369	-6.71	-30.11	37.37	-5.57	4.49
-22.0	146891.0658	209487.8168	286809.4075	-6.66	-29.88	36.91	-5.54	4.49
-21.0	137918.9981	196040.9904	267510.5507	-6.61	-29.65	36.46	-5.52	4.49
-20.0	129559.5100	183553.5936	249647.7862	-6.56	-29.42	36.01	-5.49	4.49
-19.0	121766.6703	171950.7541	233104.6689	-6.50	-29.19	35.56	-5.47	4.49
-18.0	114498.2826	161163.9167	217774.9321	-6.45	-28.96	35.13	-5.44	4.49
-17.0	107715.5594	151130.2721	203561.5366	-6.40	-28.73	34.69	-5.42	4.49
-16.0	101382.8260	141792.2409	190375.8137	-6.35	-28.50	34.26	-5.39	4.49
-15.0	95467.2521	133097.0062	178136.6924	-6.30	-28.27	33.84	-5.37	4.48

-14.0	89938.6080	124996.0916	166770.0037	-6.26	-28.05	33.42	-5.34	4.48
-13.0	84769.0429	117444.9784	156207.8511	-6.21	-27.82	33.01	-5.32	4.48
-12.0	79932.8835	110402.7589	146388.0433	-6.16	-27.60	32.59	-5.29	4.48
-11.0	75406.4513	103831.8224	137253.5808	-6.11	-27.38	32.19	-5.27	4.48
-10.0	71167.8952	97697.5695	128752.1918	-6.07	-27.15	31.79	-5.24	4.48
-9.0	67197.0403	91968.1537	120835.9121	-6.02	-26.93	31.39	-5.21	4.47
-8.0	63475.2489	86614.2460	113460.7052	-5.98	-26.72	31.00	-5.19	4.47
-7.0	59985.2950	81608.8211	106586.1175	-5.93	-26.50	30.61	-5.16	4.47
-6.0	56711.2487	76926.9634	100174.9656	-5.89	-26.28	30.22	-5.13	4.46
-5.0	53638.3712	72545.6894	94193.0534	-5.84	-26.06	29.84	-5.11	4.46
-4.0	50753.0190	68443.7873	88608.9148	-5.80	-25.85	29.46	-5.08	4.46
-3.0	48042.5563	64601.6700	83393.5795	-5.76	-25.63	29.09	-5.05	4.45
-2.0	45495.2743	61001.2412	78520.3611	-5.71	-25.42	28.72	-5.03	4.45
-1.0	43100.3184	57625.7733	73964.6639	-5.67	-25.21	28.35	-5.00	4.44
0.0	40847.6207	54459.7966	69703.8071	-5.63	-24.99	27.99	-4.97	4.44
1.0	38727.8385	51488.9968	65716.8646	-5.59	-24.78	27.63	-4.94	4.43
2.0	36732.2983	48700.1226	61984.5197	-5.55	-24.57	27.28	-4.92	4.43
3.0	34852.9435	46080.9008	58488.9320	-5.51	-24.37	26.93	-4.89	4.42
4.0	33082.2876	43619.9583	55213.6161	-5.47	-24.16	26.58	-4.86	4.42
5.0	31413.3704	41306.7511	52143.3312	-5.43	-23.95	26.23	-4.83	4.41
6.0	29839.7180	39131.4994	49263.9802	-5.39	-23.75	25.89	-4.80	4.41
7.0	28355.3062	37085.1279	46562.5174	-5.35	-23.54	25.56	-4.78	4.40
8.0	26954.5268	35159.2108	44026.8645	-5.31	-23.34	25.22	-4.75	4.39
9.0	25632.1565	33345.9221	41645.8328	-5.28	-23.13	24.89	-4.72	4.38
10.0	24383.3283	31637.9896	39409.0537	-5.24	-22.93	24.56	-4.69	4.38
11.0	23203.5054	30028.6523	37306.9132	-5.20	-22.73	24.24	-4.66	4.37
12.0	22088.4569	28511.6219	35330.4934	-5.17	-22.53	23.92	-4.63	4.36
13.0	21034.2355	27081.0472	33471.5181	-5.13	-22.33	23.60	-4.60	4.35
14.0	20037.1568	25731.4812	31722.3030	-5.09	-22.13	23.28	-4.57	4.34
15.0	19093.7807	24457.8510	30075.7103	-5.06	-21.93	22.97	-4.54	4.34
16.0	18200.8935	23255.4301	28525.1068	-5.02	-21.73	22.66	-4.51	4.33
17.0	17355.4920	22119.8131	27064.3256	-4.99	-21.54	22.35	-4.48	4.32
18.0	16554.7687	21046.8917	25687.6306	-4.95	-21.34	22.05	-4.45	4.31
19.0	15796.0976	20032.8333	24389.6843	-4.92	-21.15	21.75	-4.42	4.30
20.0	15077.0218	19074.0612	23165.5178	-4.89	-20.96	21.45	-4.39	4.29
21.0	14395.2417	18167.2358	22010.5036	-4.85	-20.76	21.15	-4.36	4.28
22.0	13748.6039	17309.2379	20920.3299	-4.82	-20.57	20.86	-4.33	4.27
23.0	13135.0914	16497.1529	19890.9779	-4.79	-20.38	20.57	-4.30	4.26
24.0	12552.8141	15728.2563	18918.6999	-4.76	-20.19	20.28	-4.26	4.24

25.0	12000.0000	15000.0000	18000.0000	-4.72	-20.00	20.00	-4.23	4.23
26.0	11421.0770	14310.0006	17212.4812	-4.69	-20.19	20.28	-4.32	4.30
27.0	10873.6667	13656.0273	16464.3263	-4.66	-20.37	20.56	-4.41	4.37
28.0	10355.8726	13035.9915	15753.3411	-4.63	-20.56	20.84	-4.50	4.44
29.0	9865.9222	12447.9374	15077.4652	-4.60	-20.74	21.12	-4.59	4.51
30.0	9402.1592	11890.0320	14434.7638	-4.57	-20.92	21.40	-4.68	4.58
31.0	8963.0343	11360.5577	13823.4192	-4.54	-21.10	21.68	-4.77	4.65
32.0	8547.0986	10857.9038	13241.7230	-4.51	-21.28	21.95	-4.87	4.72
33.0	8152.9960	10380.5596	12688.0691	-4.48	-21.46	22.23	-4.96	4.79
34.0	7779.4569	9927.1073	12160.9469	-4.45	-21.63	22.50	-5.05	4.86
35.0	7425.2925	9496.2166	11658.9353	-4.42	-21.81	22.77	-5.15	4.93
36.0	7089.3890	9086.6379	11180.6968	-4.39	-21.98	23.05	-5.24	5.00
37.0	6770.7026	8697.1977	10724.9725	-4.37	-22.15	23.32	-5.34	5.07
38.0	6468.2544	8326.7932	10290.5764	-4.34	-22.32	23.58	-5.44	5.14
39.0	6181.1268	7974.3879	9876.3915	-4.31	-22.49	23.85	-5.53	5.22
40.0	5908.4584	7639.0071	9481.3652	-4.28	-22.65	24.12	-5.63	5.29
41.0	5649.4411	7319.7340	9104.5051	-4.26	-22.82	24.38	-5.73	5.36
42.0	5403.3161	7015.7060	8744.8753	-4.23	-22.98	24.65	-5.83	5.43
43.0	5169.3706	6726.1112	8401.5932	-4.20	-23.14	24.91	-5.93	5.51
44.0	4946.9352	6450.1852	8073.8260	-4.18	-23.31	25.17	-6.03	5.58
45.0	4735.3804	6187.2079	7760.7873	-4.15	-23.46	25.43	-6.13	5.66
46.0	4534.1146	5936.5010	7461.7351	-4.12	-23.62	25.69	-6.23	5.73
47.0	4342.5815	5697.4251	7175.9682	-4.10	-23.78	25.95	-6.33	5.80
48.0	4160.2576	5469.3776	6902.8243	-4.07	-23.94	26.21	-6.44	5.88
49.0	3986.6503	5251.7899	6641.6776	-4.05	-24.09	26.47	-6.54	5.95
50.0	3821.2957	5044.1259	6391.9362	-4.02	-24.24	26.72	-6.64	6.03
51.0	3663.7571	4845.8796	6153.0409	-4.00	-24.39	26.97	-6.75	6.10
52.0	3513.6233	4656.5734	5924.4623	-3.97	-24.54	27.23	-6.85	6.18
53.0	3370.5065	4475.7562	5705.6997	-3.95	-24.69	27.48	-6.96	6.25
54.0	3234.0413	4303.0021	5496.2792	-3.92	-24.84	27.73	-7.07	6.33
55.0	3103.8832	4137.9086	5295.7523	-3.90	-24.99	27.98	-7.17	6.41
56.0	2979.7072	3980.0955	5103.6939	-3.88	-25.13	28.23	-7.28	6.48
57.0	2861.2067	3829.2030	4919.7019	-3.85	-25.28	28.48	-7.39	6.56
58.0	2748.0925	3684.8914	4743.3947	-3.83	-25.42	28.73	-7.50	6.64
59.0	2640.0913	3546.8388	4574.4111	-3.81	-25.56	28.97	-7.61	6.72
60.0	2536.9452	3414.7411	4412.4084	-3.78	-25.71	29.22	-7.72	6.79
61.0	2438.4106	3288.3102	4257.0617	-3.76	-25.85	29.46	-7.83	6.87
62.0	2344.2572	3167.2734	4108.0629	-3.74	-25.99	29.70	-7.94	6.95
63.0	2254.2674	3051.3727	3965.1197	-3.72	-26.12	29.95	-8.06	7.03

64.0	2168.2356	2940.3633	3827.9544	-3.69	-26.26	30.19	-8.17	7.11
65.0	2085.9671	2834.0136	3696.3037	-3.67	-26.40	30.43	-8.28	7.19
66.0	2007.2779	2732.1040	3569.9175	-3.65	-26.53	30.67	-8.40	7.27
67.0	1931.9940	2634.4262	3448.5581	-3.63	-26.66	30.90	-8.51	7.35
68.0	1859.9504	2540.7829	3331.9999	-3.61	-26.80	31.14	-8.63	7.43
69.0	1790.9911	2450.9867	3220.0284	-3.59	-26.93	31.38	-8.75	7.51
70.0	1724.9683	2364.8599	3112.4398	-3.57	-27.06	31.61	-8.86	7.59
71.0	1661.7421	2282.2341	3009.0401	-3.55	-27.19	31.85	-8.98	7.67
72.0	1601.1797	2202.9490	2909.6452	-3.53	-27.32	32.08	-9.10	7.75
73.0	1543.1556	2126.8528	2814.0795	-3.51	-27.44	32.31	-9.22	7.83
74.0	1487.5505	2053.8010	2722.1764	-3.49	-27.57	32.54	-9.34	7.91
75.0	1434.2513	1983.6567	2633.7769	-3.47	-27.70	32.77	-9.46	7.99
76.0	1383.1509	1916.2894	2548.7301	-3.45	-27.82	33.00	-9.58	8.08
77.0	1334.1476	1851.5753	2466.8920	-3.43	-27.95	33.23	-9.70	8.16
78.0	1287.1448	1789.3968	2388.1254	-3.41	-28.07	33.46	-9.82	8.24
79.0	1242.0509	1729.6418	2312.3000	-3.39	-28.19	33.69	-9.95	8.32
80.0	1198.7790	1672.2039	2239.2912	-3.37	-28.31	33.91	-10.07	8.41
81.0	1157.2463	1616.9817	2168.9806	-3.35	-28.43	34.14	-10.19	8.49
82.0	1117.3743	1563.8789	2101.2550	-3.33	-28.55	34.36	-10.32	8.57
83.0	1079.0886	1512.8036	2036.0068	-3.31	-28.67	34.59	-10.45	8.66
84.0	1042.3181	1463.6685	1973.1332	-3.29	-28.79	34.81	-10.57	8.74
85.0	1006.9956	1416.3905	1912.5362	-3.27	-28.90	35.03	-10.70	8.83
86.0	973.0569	1370.8902	1854.1221	-3.26	-29.02	35.25	-10.83	8.91
87.0	940.4410	1327.0921	1797.8018	-3.24	-29.14	35.47	-10.95	9.00
88.0	909.0899	1284.9243	1743.4901	-3.22	-29.25	35.69	-11.08	9.08
89.0	878.9486	1244.3183	1691.1055	-3.20	-29.36	35.91	-11.21	9.17
90.0	849.9644	1205.2086	1640.5705	-3.18	-29.48	36.12	-11.34	9.26
91.0	822.0874	1167.5328	1591.8108	-3.17	-29.59	36.34	-11.47	9.34
92.0	795.2699	1131.2316	1544.7555	-3.15	-29.70	36.56	-11.61	9.43
93.0	769.4666	1096.2482	1499.3370	-3.13	-29.81	36.77	-11.74	9.52
94.0	744.6342	1062.5284	1455.4903	-3.12	-29.92	36.98	-11.87	9.60
95.0	720.7317	1030.0206	1413.1538	-3.10	-30.03	37.20	-12.00	9.69
96.0	697.7198	998.6755	1372.2681	-3.08	-30.14	37.41	-12.14	9.78
97.0	675.5610	968.4459	1332.7767	-3.07	-30.24	37.62	-12.27	9.87
98.0	654.2197	939.2869	1294.6255	-3.05	-30.35	37.83	-12.41	9.95
99.0	633.6618	911.1555	1257.7626	-3.03	-30.46	38.04	-12.54	10.04
100.0	613.8550	884.0107	1222.1386	-3.02	-30.56	38.25	-12.68	10.13

101.0	594.7683	857.8132	1187.7059	-3.00	-30.66	38.46	-12.82	10.22
102.0	576.3720	832.5256	1154.4192	-2.98	-30.77	38.66	-12.96	10.31
103.0	558.6381	808.1120	1122.2349	-2.97	-30.87	38.87	-13.09	10.40
104.0	541.5395	784.5381	1091.1115	-2.95	-30.97	39.08	-13.23	10.49
105.0	525.0506	761.7711	1061.0090	-2.94	-31.08	39.28	-13.37	10.58
106.0	509.1467	739.7797	1031.8893	-2.92	-31.18	39.49	-13.52	10.67
107.0	493.8045	718.5339	1003.7156	-2.91	-31.28	39.69	-13.66	10.76
108.0	479.0015	698.0049	976.4531	-2.89	-31.38	39.89	-13.80	10.85
109.0	464.7162	678.1653	950.0678	-2.88	-31.47	40.09	-13.94	10.94
110.0	450.9282	658.9888	924.5278	-2.86	-31.57	40.29	-14.08	11.04
111.0	437.6179	640.4502	899.8019	-2.85	-31.67	40.50	-14.23	11.13
112.0	424.7665	622.5253	875.8606	-2.83	-31.77	40.69	-14.37	11.22
113.0	412.3562	605.1911	852.6753	-2.82	-31.86	40.89	-14.52	11.31
114.0	400.3698	588.4253	830.2188	-2.80	-31.96	41.09	-14.66	11.41
115.0	388.7909	572.2068	808.4649	-2.79	-32.05	41.29	-14.81	11.50
116.0	377.6038	556.5153	787.3884	-2.77	-32.15	41.49	-14.96	11.59
117.0	366.7935	541.3312	766.9653	-2.76	-32.24	41.68	-15.11	11.69
118.0	356.3456	526.6358	747.1722	-2.75	-32.34	41.88	-15.25	11.78
119.0	346.2462	512.4113	727.9869	-2.73	-32.43	42.07	-15.40	11.87
120.0	336.4824	498.6404	709.3882	-2.72	-32.52	42.26	-15.55	11.97
121.0	327.0413	485.3067	691.3553	-2.70	-32.61	42.46	-15.70	12.06
122.0	317.9108	472.3943	673.8687	-2.69	-32.70	42.65	-15.86	12.16
123.0	309.0795	459.8881	656.9093	-2.68	-32.79	42.84	-16.01	12.25
124.0	300.5361	447.7734	640.4588	-2.66	-32.88	43.03	-16.16	12.35
125.0	292.2700	436.0364	624.4999	-2.65	-32.97	43.22	-16.31	12.44
126.0	284.2710	424.6635	609.0156	-2.64	-33.06	43.41	-16.47	12.54
127.0	276.5292	413.6418	593.9898	-2.62	-33.15	43.60	-16.62	12.64
128.0	269.0353	402.9590	579.4068	-2.61	-33.24	43.79	-16.78	12.73
129.0	261.7803	392.6032	565.2517	-2.60	-33.32	43.98	-16.93	12.83
130.0	254.7554	382.5629	551.5101	-2.58	-33.41	44.16	-17.09	12.93
131.0	247.9524	372.8271	538.1681	-2.57	-33.49	44.35	-17.25	13.03
132.0	241.3633	363.3854	525.2123	-2.56	-33.58	44.53	-17.40	13.12
133.0	234.9805	354.2274	512.6299	-2.55	-33.66	44.72	-17.56	13.22
134.0	228.7965	345.3436	500.4085	-2.53	-33.75	44.90	-17.72	13.32
135.0	222.8044	336.7245	488.5362	-2.52	-33.83	45.08	-17.88	13.42
136.0	216.9974	328.3610	477.0016	-2.51	-33.91	45.27	-18.04	13.52
137.0	211.3690	320.2445	465.7935	-2.50	-34.00	45.45	-18.20	13.62

138.0	205.9128	312.3667	454.9014	-2.48	-34.08	45.63	-18.36	13.72
139.0	200.6230	304.7195	444.3150	-2.47	-34.16	45.81	-18.53	13.82
140.0	195.4936	297.2951	434.0244	-2.46	-34.24	45.99	-18.69	13.92
141.0	190.5192	290.0862	424.0202	-2.45	-34.32	46.17	-18.85	14.02
142.0	185.6945	283.0855	414.2930	-2.44	-34.40	46.35	-19.02	14.12
143.0	181.0142	276.2863	404.8341	-2.43	-34.48	46.53	-19.18	14.22
144.0	176.4735	269.6817	395.6350	-2.41	-34.56	46.70	-19.35	14.32
145.0	172.0676	263.2655	386.6874	-2.40	-34.64	46.88	-19.52	14.42
146.0	167.7919	257.0315	377.9834	-2.39	-34.72	47.06	-19.68	14.52
147.0	163.6421	250.9737	369.5154	-2.38	-34.80	47.23	-19.85	14.62
148.0	159.6138	245.0864	361.2759	-2.37	-34.87	47.41	-20.02	14.73
149.0	155.7032	239.3641	353.2579	-2.36	-34.95	47.58	-20.19	14.83
150.0	151.9061	233.8015	345.4545	-2.35	-35.03	47.76	-20.36	14.93
151.0	148.2189	228.3936	337.8590	-2.33	-35.10	47.93	-20.53	15.04
152.0	144.6379	223.1352	330.4650	-2.32	-35.18	48.10	-20.70	15.14
153.0	141.1596	218.0218	323.2665	-2.31	-35.25	48.27	-20.87	15.24
154.0	137.7806	213.0486	316.2573	-2.30	-35.33	48.44	-21.04	15.35
155.0	134.4977	208.2113	309.4318	-2.29	-35.40	48.61	-21.22	15.45
156.0	131.3079	203.5057	302.7844	-2.28	-35.48	48.78	-21.39	15.56
157.0	128.2079	198.9275	296.3097	-2.27	-35.55	48.95	-21.56	15.66
158.0	125.1951	194.4728	290.0025	-2.26	-35.62	49.12	-21.74	15.77
159.0	122.2664	190.1378	283.8578	-2.25	-35.70	49.29	-21.92	15.87
160.0	119.4194	185.9188	277.8708	-2.24	-35.77	49.46	-22.09	15.98
161.0	116.6513	181.8121	272.0367	-2.23	-35.84	49.63	-22.27	16.08
162.0	113.9596	177.8145	266.3511	-2.22	-35.91	49.79	-22.45	16.19
163.0	111.3419	173.9224	260.8096	-2.21	-35.98	49.96	-22.63	16.30
164.0	108.7960	170.1328	255.4080	-2.20	-36.05	50.12	-22.80	16.40
165.0	106.3195	166.4425	250.1421	-2.19	-36.12	50.29	-22.98	16.51
166.0	103.9102	162.8484	245.0080	-2.18	-36.19	50.45	-23.16	16.62
167.0	101.5661	159.3478	240.0019	-2.17	-36.26	50.62	-23.35	16.72
168.0	99.2852	155.9378	235.1200	-2.16	-36.33	50.78	-23.53	16.83
169.0	97.0654	152.6157	230.3589	-2.15	-36.40	50.94	-23.71	16.94
170.0	94.9050	149.3789	225.7150	-2.14	-36.47	51.10	-23.89	17.05
171.0	92.8020	146.2248	221.1851	-2.13	-36.53	51.26	-24.08	17.16
172.0	90.7548	143.1510	216.7657	-2.12	-36.60	51.42	-24.26	17.27
173.0	88.7616	140.1552	212.4539	-2.11	-36.67	51.58	-24.45	17.38

174.0	86.8208	137.2351	208.2465	-2.10	-36.74	51.74	-24.63	17.49
175.0	84.9309	134.3885	204.1407	-2.09	-36.80	51.90	-24.82	17.60
176.0	83.0902	131.6131	200.1336	-2.08	-36.87	52.06	-25.00	17.71
177.0	81.2973	128.9070	196.2224	-2.07	-36.93	52.22	-25.19	17.82
178.0	79.5507	126.2682	192.4045	-2.06	-37.00	52.38	-25.38	17.93
179.0	77.8492	123.6948	188.6772	-2.05	-37.06	52.53	-25.57	18.04
180.0	76.1914	121.1847	185.0382	-2.05	-37.13	52.69	-25.76	18.15
181.0	74.5759	118.7364	181.4848	-2.04	-37.19	52.85	-25.95	18.26
182.0	73.0015	116.3479	178.0149	-2.03	-37.26	53.00	-26.14	18.37
183.0	71.4671	114.0176	174.6261	-2.02	-37.32	53.16	-26.33	18.49
184.0	69.9714	111.7439	171.3162	-2.01	-37.38	53.31	-26.52	18.60
185.0	68.5133	109.5251	168.0830	-2.00	-37.45	53.47	-26.72	18.71
186.0	67.0918	107.3598	164.9246	-1.99	-37.51	53.62	-26.91	18.82
187.0	65.7057	105.2464	161.8389	-1.98	-37.57	53.77	-27.10	18.94
188.0	64.3541	103.1835	158.8239	-1.98	-37.63	53.92	-27.30	19.05
189.0	63.0360	101.1698	155.8777	-1.97	-37.69	54.08	-27.50	19.17
190.0	61.7504	99.2037	152.9985	-1.96	-37.75	54.23	-27.69	19.28
191.0	60.4964	97.2841	150.1846	-1.95	-37.81	54.38	-27.89	19.39
192.0	59.2730	95.4096	147.4342	-1.94	-37.88	54.53	-28.09	19.51
193.0	58.0795	93.5791	144.7457	-1.93	-37.94	54.68	-28.28	19.62
194.0	56.9150	91.7913	142.1174	-1.92	-38.00	54.83	-28.48	19.74
195.0	55.7787	90.0450	139.5477	-1.92	-38.05	54.98	-28.68	19.86
196.0	54.6697	88.3393	137.0351	-1.91	-38.11	55.12	-28.88	19.97
197.0	53.5874	86.6728	134.5782	-1.90	-38.17	55.27	-29.08	20.09
198.0	52.5309	85.0447	132.1755	-1.89	-38.23	55.42	-29.29	20.20
199.0	51.4997	83.4539	129.8255	-1.88	-38.29	55.57	-29.49	20.32
200.0	50.4929	81.8994	127.5270	-1.88	-38.35	55.71	-29.69	20.44

型号: YFTMF11203M4200

R: 20000 ohms \pm 20%
 B: 4200 $^{\circ}$ K \pm 5%

温度 ($^{\circ}$ C)	阻值 (Ω)			温度系数 (%/ $^{\circ}$ C)	阻值精度偏差 (%)		测温精度偏差 ($^{\circ}$ C)	
	下限值	中心值	上限值		最小	最大	最小	最大
-40.0	668070.3608	1016324.3583	1484272.6926	-7.73	-34.27	46.04	-5.96	4.43
-39.0	620961.5839	941029.8879	1369031.1640	-7.66	-34.01	45.48	-5.93	4.44
-38.0	577534.3107	871885.1220	1263606.8644	-7.60	-33.76	44.93	-5.91	4.44
-37.0	537474.5793	808344.0658	1167093.9383	-7.53	-33.51	44.38	-5.89	4.45
-36.0	500497.3225	749912.8791	1078676.2066	-7.47	-33.26	43.84	-5.87	4.45
-35.0	466343.5220	696144.5592	997617.7120	-7.41	-33.01	43.31	-5.85	4.46
-34.0	434777.6613	646634.1975	923254.3200	-7.35	-32.76	42.78	-5.82	4.46
-33.0	405585.4424	601014.7468	854986.2509	-7.29	-32.52	42.26	-5.80	4.46
-32.0	378571.7392	558953.2393	792271.4342	-7.23	-32.27	41.74	-5.78	4.47
-31.0	353558.7601	520147.4064	734619.5900	-7.17	-32.03	41.23	-5.75	4.47
-30.0	330384.3987	484322.6539	681586.9535	-7.11	-31.78	40.73	-5.73	4.47
-29.0	308900.7506	451229.3538	632771.5687	-7.05	-31.54	40.23	-5.71	4.48
-28.0	288972.7801	420640.4171	587809.0870	-6.99	-31.30	39.74	-5.68	4.48
-27.0	270477.1200	392349.1181	546369.0136	-6.93	-31.06	39.26	-5.66	4.48
-26.0	253300.9903	366167.1412	508151.3505	-6.88	-30.82	38.78	-5.64	4.48
-25.0	237341.2237	341922.8266	472883.5930	-6.82	-30.59	38.30	-5.61	4.48
-24.0	222503.3867	319459.5943	440318.0398	-6.77	-30.35	37.83	-5.59	4.48
-23.0	208700.9866	298634.5260	410229.3825	-6.71	-30.11	37.37	-5.57	4.49
-22.0	195854.7544	279317.0890	382412.5433	-6.66	-29.88	36.91	-5.54	4.49
-21.0	183891.9974	261387.9872	356680.7343	-6.61	-29.65	36.46	-5.52	4.49
-20.0	172746.0134	244738.1248	332863.7149	-6.56	-29.42	36.01	-5.49	4.49
-19.0	162355.5604	229267.6721	310806.2251	-6.50	-29.19	35.56	-5.47	4.49
-18.0	152664.3768	214885.2222	290366.5761	-6.45	-28.96	35.13	-5.44	4.49
-17.0	143620.7458	201507.0295	271415.3822	-6.40	-28.73	34.69	-5.42	4.49
-16.0	135177.1013	189056.3212	253834.4182	-6.35	-28.50	34.26	-5.39	4.49
-15.0	127289.6695	177462.6749	237515.5899	-6.30	-28.27	33.84	-5.37	4.48

-14.0	119918.1440	166661.4554	222360.0049	-6.26	-28.05	33.42	-5.34	4.48
-13.0	113025.3905	156593.3045	208277.1348	-6.21	-27.82	33.01	-5.32	4.48
-12.0	106577.1780	147203.6786	195184.0578	-6.16	-27.60	32.59	-5.29	4.48
-11.0	100541.9350	138442.4299	183004.7744	-6.11	-27.38	32.19	-5.27	4.48
-10.0	94890.5269	130263.4261	171669.5890	-6.07	-27.15	31.79	-5.24	4.48
-9.0	89596.0537	122624.2050	161114.5495	-6.02	-26.93	31.39	-5.21	4.47
-8.0	84633.6652	115485.6613	151280.9403	-5.98	-26.72	31.00	-5.19	4.47
-7.0	79980.3934	108811.7615	142114.8233	-5.93	-26.50	30.61	-5.16	4.47
-6.0	75614.9982	102569.2845	133566.6207	-5.89	-26.28	30.22	-5.13	4.46
-5.0	71517.8282	96727.5858	125590.7379	-5.84	-26.06	29.84	-5.11	4.46
-4.0	67670.6920	91258.3831	118145.2197	-5.80	-25.85	29.46	-5.08	4.46
-3.0	64056.7417	86135.5600	111191.4393	-5.76	-25.63	29.09	-5.05	4.45
-2.0	60660.3657	81334.9882	104693.8148	-5.71	-25.42	28.72	-5.03	4.45
-1.0	57467.0912	76834.3645	98619.5519	-5.67	-25.21	28.35	-5.00	4.44
0.0	54463.4942	72613.0621	92938.4094	-5.63	-24.99	27.99	-4.97	4.44
1.0	51637.1180	68651.9957	87622.4861	-5.59	-24.78	27.63	-4.94	4.43
2.0	48976.3977	64933.4968	82646.0263	-5.55	-24.57	27.28	-4.92	4.43
3.0	46470.5913	61441.2011	77985.2427	-5.51	-24.37	26.93	-4.89	4.42
4.0	44109.7168	58159.9443	73618.1548	-5.47	-24.16	26.58	-4.86	4.42
5.0	41884.4939	55075.6681	69524.4415	-5.43	-23.95	26.23	-4.83	4.41
6.0	39786.2907	52175.3325	65685.3069	-5.39	-23.75	25.89	-4.80	4.41
7.0	37807.0749	49446.8371	62083.3566	-5.35	-23.54	25.56	-4.78	4.40
8.0	35939.3690	46878.9477	58702.4860	-5.31	-23.34	25.22	-4.75	4.39
9.0	34176.2086	44461.2295	55527.7771	-5.28	-23.13	24.89	-4.72	4.38
10.0	32511.1044	42183.9862	52545.4049	-5.24	-22.93	24.56	-4.69	4.38
11.0	30938.0072	40038.2031	49742.5510	-5.20	-22.73	24.24	-4.66	4.37
12.0	29451.2759	38015.4959	47107.3246	-5.17	-22.53	23.92	-4.63	4.36
13.0	28045.6473	36108.0630	44628.6908	-5.13	-22.33	23.60	-4.60	4.35
14.0	26716.2091	34308.6416	42296.4040	-5.09	-22.13	23.28	-4.57	4.34
15.0	25458.3742	32610.4680	40100.9470	-5.06	-21.93	22.97	-4.54	4.34
16.0	24267.8580	31007.2402	38033.4757	-5.02	-21.73	22.66	-4.51	4.33
17.0	23140.6560	29493.0841	36085.7674	-4.99	-21.54	22.35	-4.48	4.32
18.0	22073.0249	28062.5222	34250.1741	-4.95	-21.34	22.05	-4.45	4.31
19.0	21061.4634	26710.4444	32519.5790	-4.92	-21.15	21.75	-4.42	4.30
20.0	20102.6957	25432.0815	30887.3571	-4.89	-20.96	21.45	-4.39	4.29
21.0	19193.6555	24222.9810	29347.3381	-4.85	-20.76	21.15	-4.36	4.28
22.0	18331.4719	23078.9839	27893.7732	-4.82	-20.57	20.86	-4.33	4.27
23.0	17513.4553	21996.2039	26521.3038	-4.79	-20.38	20.57	-4.30	4.26
24.0	16737.0855	20971.0083	25224.9332	-4.76	-20.19	20.28	-4.26	4.24

25.0	16000.0000	20000.0000	24000.0000	-4.72	-20.00	20.00	-4.23	4.23
26.0	15228.1026	19080.0008	22949.9749	-4.69	-20.19	20.28	-4.32	4.30
27.0	14498.2223	18208.0363	21952.4351	-4.66	-20.37	20.56	-4.41	4.37
28.0	13807.8301	17381.3221	21004.4548	-4.63	-20.56	20.84	-4.50	4.44
29.0	13154.5630	16597.2498	20103.2869	-4.60	-20.74	21.12	-4.59	4.51
30.0	12536.2123	15853.3760	19246.3518	-4.57	-20.92	21.40	-4.68	4.58
31.0	11950.7124	15147.4103	18431.2257	-4.54	-21.10	21.68	-4.77	4.65
32.0	11396.1315	14477.2051	17655.6307	-4.51	-21.28	21.95	-4.87	4.72
33.0	10870.6613	13840.7461	16917.4255	-4.48	-21.46	22.23	-4.96	4.79
34.0	10372.6092	13236.1431	16214.5958	-4.45	-21.63	22.50	-5.05	4.86
35.0	9900.3900	12661.6222	15545.2470	-4.42	-21.81	22.77	-5.15	4.93
36.0	9452.5187	12115.5173	14907.5958	-4.39	-21.98	23.05	-5.24	5.00
37.0	9027.6034	11596.2636	14299.9633	-4.37	-22.15	23.32	-5.34	5.07
38.0	8624.3392	11102.3910	13720.7685	-4.34	-22.32	23.58	-5.44	5.14
39.0	8241.5023	10632.5172	13168.5221	-4.31	-22.49	23.85	-5.53	5.22
40.0	7877.9445	10185.3428	12641.8203	-4.28	-22.65	24.12	-5.63	5.29
41.0	7532.5882	9759.6453	12139.3401	-4.26	-22.82	24.38	-5.73	5.36
42.0	7204.4214	9354.2747	11659.8337	-4.23	-22.98	24.65	-5.83	5.43
43.0	6892.4942	8968.1483	11202.1243	-4.20	-23.14	24.91	-5.93	5.51
44.0	6595.9135	8600.2469	10765.1013	-4.18	-23.31	25.17	-6.03	5.58
45.0	6313.8405	8249.6105	10347.7165	-4.15	-23.46	25.43	-6.13	5.66
46.0	6045.4862	7915.3347	9948.9801	-4.12	-23.62	25.69	-6.23	5.73
47.0	5790.1087	7596.5668	9567.9576	-4.10	-23.78	25.95	-6.33	5.80
48.0	5547.0102	7292.5034	9203.7657	-4.07	-23.94	26.21	-6.44	5.88
49.0	5315.5337	7002.3866	8855.5701	-4.05	-24.09	26.47	-6.54	5.95
50.0	5095.0609	6725.5013	8522.5817	-4.02	-24.24	26.72	-6.64	6.03
51.0	4885.0095	6461.1729	8204.0545	-4.00	-24.39	26.97	-6.75	6.10
52.0	4684.8311	6208.7645	7899.2830	-3.97	-24.54	27.23	-6.85	6.18
53.0	4494.0086	5967.6749	7607.5996	-3.95	-24.69	27.48	-6.96	6.25
54.0	4312.0550	5737.3361	7328.3723	-3.92	-24.84	27.73	-7.07	6.33
55.0	4138.5109	5517.2115	7061.0030	-3.90	-24.99	27.98	-7.17	6.41
56.0	3972.9429	5306.7939	6804.9253	-3.88	-25.13	28.23	-7.28	6.48
57.0	3814.9423	5105.6041	6559.6025	-3.85	-25.28	28.48	-7.39	6.56
58.0	3664.1233	4913.1885	6324.5263	-3.83	-25.42	28.73	-7.50	6.64
59.0	3520.1217	4729.1184	6099.2147	-3.81	-25.56	28.97	-7.61	6.72
60.0	3382.5936	4552.9881	5883.2111	-3.78	-25.71	29.22	-7.72	6.79
61.0	3251.2141	4384.4136	5676.0823	-3.76	-25.85	29.46	-7.83	6.87
62.0	3125.6763	4223.0312	5477.4172	-3.74	-25.99	29.70	-7.94	6.95
63.0	3005.6899	4068.4969	5286.8262	-3.72	-26.12	29.95	-8.06	7.03

64.0	2890.9808	3920.4844	5103.9392	-3.69	-26.26	30.19	-8.17	7.11
65.0	2781.2895	3778.6848	4928.4049	-3.67	-26.40	30.43	-8.28	7.19
66.0	2676.3706	3642.8053	4759.8899	-3.65	-26.53	30.67	-8.40	7.27
67.0	2575.9920	3512.5683	4598.0775	-3.63	-26.66	30.90	-8.51	7.35
68.0	2479.9338	3387.7105	4442.6666	-3.61	-26.80	31.14	-8.63	7.43
69.0	2387.9881	3267.9822	4293.3713	-3.59	-26.93	31.38	-8.75	7.51
70.0	2299.9577	3153.1466	4149.9197	-3.57	-27.06	31.61	-8.86	7.59
71.0	2215.6561	3042.9787	4012.0535	-3.55	-27.19	31.85	-8.98	7.67
72.0	2134.9063	2937.2653	3879.5269	-3.53	-27.32	32.08	-9.10	7.75
73.0	2057.5408	2835.8037	3752.1060	-3.51	-27.44	32.31	-9.22	7.83
74.0	1983.4006	2738.4014	3629.5685	-3.49	-27.57	32.54	-9.34	7.91
75.0	1912.3351	2644.8756	3511.7026	-3.47	-27.70	32.77	-9.46	7.99
76.0	1844.2012	2555.0525	3398.3068	-3.45	-27.82	33.00	-9.58	8.08
77.0	1778.8635	2468.7671	3289.1893	-3.43	-27.95	33.23	-9.70	8.16
78.0	1716.1931	2385.8624	3184.1673	-3.41	-28.07	33.46	-9.82	8.24
79.0	1656.0679	2306.1891	3083.0667	-3.39	-28.19	33.69	-9.95	8.32
80.0	1598.3720	2229.6052	2985.7216	-3.37	-28.31	33.91	-10.07	8.41
81.0	1542.9950	2155.9756	2891.9741	-3.35	-28.43	34.14	-10.19	8.49
82.0	1489.8325	2085.1718	2801.6734	-3.33	-28.55	34.36	-10.32	8.57
83.0	1438.7848	2017.0715	2714.6758	-3.31	-28.67	34.59	-10.45	8.66
84.0	1389.7575	1951.5581	2630.8443	-3.29	-28.79	34.81	-10.57	8.74
85.0	1342.6608	1888.5206	2550.0482	-3.27	-28.90	35.03	-10.70	8.83
86.0	1297.4091	1827.8535	2472.1628	-3.26	-29.02	35.25	-10.83	8.91
87.0	1253.9213	1769.4561	2397.0691	-3.24	-29.14	35.47	-10.95	9.00
88.0	1212.1199	1713.2324	2324.6534	-3.22	-29.25	35.69	-11.08	9.08
89.0	1171.9315	1659.0910	2254.8074	-3.20	-29.36	35.91	-11.21	9.17
90.0	1133.2859	1606.9447	2187.4274	-3.18	-29.48	36.12	-11.34	9.26
91.0	1096.1165	1556.7104	2122.4144	-3.17	-29.59	36.34	-11.47	9.34
92.0	1060.3598	1508.3088	2059.6741	-3.15	-29.70	36.56	-11.61	9.43
93.0	1025.9554	1461.6642	1999.1160	-3.13	-29.81	36.77	-11.74	9.52
94.0	992.8456	1416.7045	1940.6538	-3.12	-29.92	36.98	-11.87	9.60
95.0	960.9756	1373.3608	1884.2050	-3.10	-30.03	37.20	-12.00	9.69
96.0	930.2930	1331.5673	1829.6908	-3.08	-30.14	37.41	-12.14	9.78
97.0	900.7480	1291.2612	1777.0356	-3.07	-30.24	37.62	-12.27	9.87
98.0	872.2929	1252.3825	1726.1673	-3.05	-30.35	37.83	-12.41	9.95
99.0	844.8825	1214.8740	1677.0168	-3.03	-30.46	38.04	-12.54	10.04
100.0	818.4734	1178.6809	1629.5181	-3.02	-30.56	38.25	-12.68	10.13
101.0	793.0244	1143.7510	1583.6079	-3.00	-30.66	38.46	-12.82	10.22
102.0	768.4960	1110.0341	1539.2255	-2.98	-30.77	38.66	-12.96	10.31

103.0	744.8508	1077.4826	1496.3132	-2.97	-30.87	38.87	-13.09	10.40
104.0	722.0527	1046.0507	1454.8153	-2.95	-30.97	39.08	-13.23	10.49
105.0	700.0674	1015.6948	1414.6787	-2.94	-31.08	39.28	-13.37	10.58
106.0	678.8623	986.3729	1375.8524	-2.92	-31.18	39.49	-13.52	10.67
107.0	658.4060	958.0452	1338.2875	-2.91	-31.28	39.69	-13.66	10.76
108.0	638.6686	930.6732	1301.9374	-2.89	-31.38	39.89	-13.80	10.85
109.0	619.6216	904.2205	1266.7571	-2.88	-31.47	40.09	-13.94	10.94
110.0	601.2376	878.6518	1232.7037	-2.86	-31.57	40.29	-14.08	11.04
111.0	583.4905	853.9336	1199.7359	-2.85	-31.67	40.50	-14.23	11.13
112.0	566.3554	830.0337	1167.8141	-2.83	-31.77	40.69	-14.37	11.22
113.0	549.8083	806.9214	1136.9004	-2.82	-31.86	40.89	-14.52	11.31
114.0	533.8264	784.5671	1106.9584	-2.80	-31.96	41.09	-14.66	11.41
115.0	518.3879	762.9424	1077.9532	-2.79	-32.05	41.29	-14.81	11.50
116.0	503.4717	742.0204	1049.8513	-2.77	-32.15	41.49	-14.96	11.59
117.0	489.0580	721.7749	1022.6203	-2.76	-32.24	41.68	-15.11	11.69
118.0	475.1274	702.1811	996.2296	-2.75	-32.34	41.88	-15.25	11.78
119.0	461.6617	683.2151	970.6492	-2.73	-32.43	42.07	-15.40	11.87
120.0	448.6431	664.8539	945.8509	-2.72	-32.52	42.26	-15.55	11.97
121.0	436.0550	647.0756	921.8071	-2.70	-32.61	42.46	-15.70	12.06
122.0	423.8811	629.8591	898.4916	-2.69	-32.70	42.65	-15.86	12.16
123.0	412.1060	613.1841	875.8790	-2.68	-32.79	42.84	-16.01	12.25
124.0	400.7148	597.0313	853.9451	-2.66	-32.88	43.03	-16.16	12.35
125.0	389.6934	581.3818	832.6666	-2.65	-32.97	43.22	-16.31	12.44
126.0	379.0280	566.2179	812.0209	-2.64	-33.06	43.41	-16.47	12.54
127.0	368.7056	551.5224	791.9864	-2.62	-33.15	43.60	-16.62	12.64
128.0	358.7138	537.2787	772.5424	-2.61	-33.24	43.79	-16.78	12.73
129.0	349.0404	523.4709	753.6690	-2.60	-33.32	43.98	-16.93	12.83
130.0	339.6739	510.0838	735.3468	-2.58	-33.41	44.16	-17.09	12.93
131.0	330.6032	497.1028	717.5574	-2.57	-33.49	44.35	-17.25	13.03
132.0	321.8177	484.5138	700.2830	-2.56	-33.58	44.53	-17.40	13.12
133.0	313.3073	472.3033	683.5065	-2.55	-33.66	44.72	-17.56	13.22
134.0	305.0620	460.4581	667.2113	-2.53	-33.75	44.90	-17.72	13.32
135.0	297.0726	448.9660	651.3816	-2.52	-33.83	45.08	-17.88	13.42
136.0	289.3299	437.8147	636.0021	-2.51	-33.91	45.27	-18.04	13.52
137.0	281.8253	426.9927	621.0580	-2.50	-34.00	45.45	-18.20	13.62
138.0	274.5504	416.4889	606.5352	-2.48	-34.08	45.63	-18.36	13.72
139.0	267.4973	406.2926	592.4200	-2.47	-34.16	45.81	-18.53	13.82
140.0	260.6582	396.3935	578.6993	-2.46	-34.24	45.99	-18.69	13.92
141.0	254.0256	386.7816	565.3602	-2.45	-34.32	46.17	-18.85	14.02

142.0	247.5926	377.4474	552.3907	-2.44	-34.40	46.35	-19.02	14.12
143.0	241.3523	368.3817	539.7789	-2.43	-34.48	46.53	-19.18	14.22
144.0	235.2980	359.5756	527.5134	-2.41	-34.56	46.70	-19.35	14.32
145.0	229.4235	351.0207	515.5832	-2.40	-34.64	46.88	-19.52	14.42
146.0	223.7225	342.7086	503.9779	-2.39	-34.72	47.06	-19.68	14.52
147.0	218.1894	334.6315	492.6872	-2.38	-34.80	47.23	-19.85	14.62
148.0	212.8185	326.7818	481.7012	-2.37	-34.87	47.41	-20.02	14.73
149.0	207.6042	319.1522	471.0106	-2.36	-34.95	47.58	-20.19	14.83
150.0	202.5414	311.7354	460.6060	-2.35	-35.03	47.76	-20.36	14.93
151.0	197.6251	304.5247	450.4786	-2.33	-35.10	47.93	-20.53	15.04
152.0	192.8505	297.5136	440.6201	-2.32	-35.18	48.10	-20.70	15.14
153.0	188.2127	290.6957	431.0220	-2.31	-35.25	48.27	-20.87	15.24
154.0	183.7075	284.0648	421.6764	-2.30	-35.33	48.44	-21.04	15.35
155.0	179.3303	277.6151	412.5757	-2.29	-35.40	48.61	-21.22	15.45
156.0	175.0771	271.3409	403.7125	-2.28	-35.48	48.78	-21.39	15.56
157.0	170.9439	265.2366	395.0796	-2.27	-35.55	48.95	-21.56	15.66
158.0	166.9267	259.2970	386.6700	-2.26	-35.62	49.12	-21.74	15.77
159.0	163.0219	253.5170	378.4770	-2.25	-35.70	49.29	-21.92	15.87
160.0	159.2258	247.8917	370.4944	-2.24	-35.77	49.46	-22.09	15.98
161.0	155.5350	242.4162	362.7156	-2.23	-35.84	49.63	-22.27	16.08
162.0	151.9461	237.0860	355.1348	-2.22	-35.91	49.79	-22.45	16.19
163.0	148.4559	231.8966	347.7462	-2.21	-35.98	49.96	-22.63	16.30
164.0	145.0613	226.8437	340.5439	-2.20	-36.05	50.12	-22.80	16.40
165.0	141.7593	221.9233	333.5228	-2.19	-36.12	50.29	-22.98	16.51
166.0	138.5469	217.1312	326.6773	-2.18	-36.19	50.45	-23.16	16.62
167.0	135.4215	212.4638	320.0025	-2.17	-36.26	50.62	-23.35	16.72
168.0	132.3802	207.9171	313.4934	-2.16	-36.33	50.78	-23.53	16.83
169.0	129.4206	203.4876	307.1452	-2.15	-36.40	50.94	-23.71	16.94
170.0	126.5400	199.1718	300.9534	-2.14	-36.47	51.10	-23.89	17.05
171.0	123.7360	194.9664	294.9134	-2.13	-36.53	51.26	-24.08	17.16
172.0	121.0064	190.8681	289.0210	-2.12	-36.60	51.42	-24.26	17.27
173.0	118.3488	186.8737	283.2719	-2.11	-36.67	51.58	-24.45	17.38
174.0	115.7611	182.9802	277.6621	-2.10	-36.74	51.74	-24.63	17.49
175.0	113.2411	179.1846	272.1876	-2.09	-36.80	51.90	-24.82	17.60
176.0	110.7869	175.4842	266.8448	-2.08	-36.87	52.06	-25.00	17.71
177.0	108.3963	171.8761	261.6299	-2.07	-36.93	52.22	-25.19	17.82
178.0	106.0677	168.3576	256.5393	-2.06	-37.00	52.38	-25.38	17.93

179.0	103.7990	164.9263	251.5697	-2.05	-37.06	52.53	-25.57	18.04
180.0	101.5885	161.5796	246.7176	-2.05	-37.13	52.69	-25.76	18.15
181.0	99.4345	158.3151	241.9798	-2.04	-37.19	52.85	-25.95	18.26
182.0	97.3353	155.1305	237.3532	-2.03	-37.26	53.00	-26.14	18.37
183.0	95.2894	152.0235	232.8348	-2.02	-37.32	53.16	-26.33	18.49
184.0	93.2952	148.9918	228.4216	-2.01	-37.38	53.31	-26.52	18.60
185.0	91.3511	146.0335	224.1107	-2.00	-37.45	53.47	-26.72	18.71
186.0	89.4557	143.1464	219.8995	-1.99	-37.51	53.62	-26.91	18.82
187.0	87.6076	140.3286	215.7852	-1.98	-37.57	53.77	-27.10	18.94
188.0	85.8055	137.5781	211.7651	-1.98	-37.63	53.92	-27.30	19.05
189.0	84.0480	134.8930	207.8369	-1.97	-37.69	54.08	-27.50	19.17
190.0	82.3339	132.2716	203.9981	-1.96	-37.75	54.23	-27.69	19.28
191.0	80.6618	129.7121	200.2462	-1.95	-37.81	54.38	-27.89	19.39
192.0	79.0307	127.2128	196.5790	-1.94	-37.88	54.53	-28.09	19.51
193.0	77.4394	124.7721	192.9943	-1.93	-37.94	54.68	-28.28	19.62
194.0	75.8867	122.3884	189.4898	-1.92	-38.00	54.83	-28.48	19.74
195.0	74.3716	120.0601	186.0636	-1.92	-38.05	54.98	-28.68	19.86
196.0	72.8930	117.7857	182.7135	-1.91	-38.11	55.12	-28.88	19.97
197.0	71.4499	115.5638	179.4376	-1.90	-38.17	55.27	-29.08	20.09
198.0	70.0413	113.3930	176.2339	-1.89	-38.23	55.42	-29.29	20.20
199.0	68.6662	111.2719	173.1007	-1.88	-38.29	55.57	-29.49	20.32
200.0	67.3238	109.1991	170.0360	-1.88	-38.35	55.71	-29.69	20.44

型号: YFTMF11303M4300

R: 30000 ohms ± 20%

B: 4300 °K ± 5%

温度 (°C)	阻值 (Ω)			温度 系数 (%/°C)	阻值精度偏差 (%)		测温精度偏差 (°C)	
	下限值	中心值	上限值		最小	最大	最小	最大
-40.0	1095461.9619	1674339.1163	2456748.9433	-7.92	-34.57	46.73	-5.90	4.37
-39.0	1016434.2242	1547440.3829	2261620.8844	-7.85	-34.32	46.15	-5.88	4.37
-38.0	943709.6522	1431120.3425	2083459.8999	-7.78	-34.06	45.58	-5.86	4.38
-37.0	876740.6005	1324422.0062	1920670.6103	-7.72	-33.80	45.02	-5.84	4.38
-36.0	815030.7023	1226481.4035	1771818.3668	-7.65	-33.55	44.46	-5.81	4.39
-35.0	758129.7366	1136517.9431	1635612.0250	-7.59	-33.29	43.91	-5.79	4.39
-34.0	705629.0423	1053825.8305	1510888.6709	-7.52	-33.04	43.37	-5.77	4.39
-33.0	657157.4156	977766.4229	1396600.0669	-7.46	-32.79	42.84	-5.74	4.40
-32.0	612377.4376	907761.4118	1291800.6135	-7.40	-32.54	42.31	-5.72	4.40
-31.0	570982.1846	843286.7406	1195636.6490	-7.34	-32.29	41.78	-5.69	4.40
-30.0	532692.2793	783867.1713	1107336.9288	-7.28	-32.04	41.27	-5.67	4.40
-29.0	497253.2441	729071.4291	1026204.1501	-7.22	-31.80	40.75	-5.65	4.41
-28.0	464433.1254	678507.8589	951607.3981	-7.16	-31.55	40.25	-5.62	4.41
-27.0	434020.3589	631820.538	882975.4103	-7.10	-31.31	39.75	-5.60	4.41
-26.0	405821.8501	588685.7924	819790.5646	-7.04	-31.06	39.26	-5.57	4.41
-25.0	379661.2467	548809.0748	761583.5091	-6.99	-30.82	38.77	-5.55	4.41
-24.0	355377.3831	511922.1627	707928.3617	-6.93	-30.58	38.29	-5.53	4.41
-23.0	332822.8789	477780.6431	658438.4161	-6.87	-30.34	37.81	-5.50	4.41
-22.0	311862.8747	446161.6526	612762.2969	-6.82	-30.10	37.34	-5.48	4.41
-21.0	292373.8917	416861.8447	570580.515	-6.77	-29.86	36.88	-5.45	4.41
-20.0	274242.8014	389695.562	531602.3795	-6.71	-29.63	36.41	-5.43	4.41
-19.0	257365.8954	364493.189	495563.2261	-6.66	-29.39	35.96	-5.40	4.41
-18.0	241648.0431	341099.6688	462221.9292	-6.61	-29.16	35.51	-5.37	4.41
-17.0	227001.931	319373.1655	431358.6659	-6.56	-28.92	35.06	-5.35	4.41
-16.0	213347.3725	299183.8571	402772.9056	-6.50	-28.69	34.62	-5.32	4.41
-15.0	200610.6841	280412.8455	376281.6008	-6.45	-28.46	34.19	-5.30	4.41
-14.0	188724.1182	262951.1719	351717.5583	-6.40	-28.23	33.76	-5.27	4.41
-13.0	177625.3502	246698.9269	328927.9715	-6.36	-28.00	33.33	-5.24	4.41
-12.0	167257.0115	231564.4447	307773.0965	-6.31	-27.77	32.91	-5.22	4.40
-11.0	157566.2666	217463.574	288125.0584	-6.26	-27.54	32.49	-5.19	4.40
-10.0	148504.4277	204319.0179	269866.7726	-6.21	-27.32	32.08	-5.17	4.40
-9.0	140026.6048	192059.7349	252890.9714	-6.16	-27.09	31.67	-5.14	4.40

-8.0	132091.3871	180620.3961	237099.3226	-6.12	-26.87	31.27	-5.11	4.39
-7.0	124660.5531	169940.8924	222401.6333	-6.07	-26.64	30.87	-5.08	4.39
-6.0	117698.8063	159965.8867	208715.1286	-6.03	-26.42	30.47	-5.06	4.38
-5.0	111173.5346	150644.4078	195963.7982	-5.98	-26.20	30.08	-5.03	4.38
-4.0	105054.5899	141929.4804	184077.8048	-5.94	-25.98	29.70	-5.00	4.38
-3.0	99314.0886	133777.7886	172992.9468	-5.89	-25.76	29.31	-4.97	4.37
-2.0	93926.228	126149.3701	162650.1709	-5.85	-25.54	28.93	-4.95	4.37
-1.0	88867.1189	119007.3371	152995.1302	-5.81	-25.33	28.56	-4.92	4.36
0.0	84114.6332	112317.6222	143977.782	-5.76	-25.11	28.19	-4.89	4.36
1.0	79648.2638	106048.7468	135552.0222	-5.72	-24.89	27.82	-4.86	4.35
2.0	75448.9967	100171.6095	127675.3531	-5.68	-24.68	27.46	-4.83	4.34
3.0	71499.1938	94659.2933	120308.5809	-5.64	-24.47	27.10	-4.80	4.34
4.0	67782.4856	89486.8892	113415.54	-5.60	-24.25	26.74	-4.78	4.33
5.0	64283.6728	84631.335	106962.8423	-5.56	-24.04	26.39	-4.75	4.33
6.0	60988.6363	80071.2684	100919.6479	-5.52	-23.83	26.04	-4.72	4.32
7.0	57884.2539	75786.8916	95257.4569	-5.48	-23.62	25.69	-4.69	4.31
8.0	54958.325	71759.8487	89949.9183	-5.44	-23.41	25.35	-4.66	4.30
9.0	52199.5003	67973.112	84972.6563	-5.40	-23.21	25.01	-4.63	4.30
10.0	49597.2179	64410.8792	80303.1113	-5.36	-23.00	24.67	-4.60	4.29
11.0	47141.6441	61058.4779	75920.3944	-5.33	-22.79	24.34	-4.57	4.28
12.0	44823.6195	57902.2788	71805.1547	-5.29	-22.59	24.01	-4.54	4.27
13.0	42634.6091	54929.6161	67939.4576	-5.25	-22.38	23.68	-4.51	4.26
14.0	40566.6557	52128.7135	64306.6729	-5.22	-22.18	23.36	-4.48	4.25
15.0	38612.3386	49488.6176	60891.3737	-5.18	-21.98	23.04	-4.45	4.24
16.0	36764.7337	46999.1354	57679.2421	-5.14	-21.78	22.72	-4.42	4.23
17.0	35017.378	44650.7776	54656.9837	-5.11	-21.57	22.41	-4.39	4.22
18.0	33364.2364	42434.7062	51812.2488	-5.07	-21.38	22.10	-4.36	4.21
19.0	31799.6707	40342.6863	49133.5606	-5.04	-21.18	21.79	-4.32	4.20
20.0	30318.4119	38367.0418	46610.248	-5.00	-20.98	21.49	-4.29	4.19
21.0	28915.5338	36500.6143	44232.3858	-4.97	-20.78	21.18	-4.26	4.18
22.0	27586.4288	34736.7255	41990.7376	-4.94	-20.58	20.88	-4.23	4.17
23.0	26326.7857	33069.1426	39876.7049	-4.90	-20.39	20.59	-4.20	4.16
24.0	25132.569	31492.046	37882.2796	-4.87	-20.19	20.29	-4.17	4.15
25.0	24000	30000	36000	-4.84	-20.00	20.00	-4.13	4.13
26.0	22815.2741	28587.925	34388.3083	-4.81	-20.19	20.29	-4.22	4.20
27.0	21696.3516	27251.0729	32858.8027	-4.77	-20.38	20.58	-4.31	4.27
28.0	20639.199	25985.0032	31406.8185	-4.74	-20.57	20.87	-4.40	4.34
29.0	19640.0519	24785.5618	30027.9814	-4.71	-20.76	21.15	-4.49	4.41
30.0	18695.3958	23648.861	28718.1874	-4.68	-20.95	21.44	-4.58	4.48
31.0	17801.9481	22571.2607	27473.585	-4.65	-21.13	21.72	-4.67	4.55
32.0	16956.6418	21549.3518	26290.5584	-4.62	-21.31	22.00	-4.76	4.62

33.0	16156.61	20579.9404	25165.7116	-4.59	-21.49	22.28	-4.86	4.68
34.0	15399.1718	19660.0324	24095.8542	-4.56	-21.67	22.56	-4.95	4.75
35.0	14681.8196	18786.8208	23077.9877	-4.53	-21.85	22.84	-5.04	4.83
36.0	14002.2066	17957.6728	22109.2932	-4.50	-22.03	23.12	-5.14	4.90
37.0	13358.1359	17170.1176	21187.1194	-4.47	-22.20	23.40	-5.23	4.97
38.0	12747.5502	16421.8364	20308.9721	-4.44	-22.37	23.67	-5.33	5.04
39.0	12168.5222	15710.6518	19472.504	-4.41	-22.55	23.94	-5.43	5.11
40.0	11619.2455	15034.5186	18675.5052	-4.38	-22.72	24.22	-5.52	5.18
41.0	11098.0267	14391.515	17915.8946	-4.36	-22.88	24.49	-5.62	5.25
42.0	10603.2776	13779.8347	17191.7116	-4.33	-23.05	24.76	-5.72	5.32
43.0	10133.5084	13197.7793	16501.1088	-4.30	-23.22	25.03	-5.82	5.40
44.0	9687.3205	12643.7513	15842.3447	-4.28	-23.38	25.30	-5.92	5.47
45.0	9263.4012	12116.2477	15213.777	-4.25	-23.55	25.57	-6.02	5.54
46.0	8860.5176	11613.8537	14613.8566	-4.22	-23.71	25.83	-6.12	5.62
47.0	8477.5113	11135.2374	14041.1221	-4.20	-23.87	26.10	-6.22	5.69
48.0	8113.2938	10679.1444	13494.1938	-4.17	-24.03	26.36	-6.32	5.76
49.0	7766.8417	10244.3927	12971.7693	-4.14	-24.18	26.62	-6.43	5.84
50.0	7437.1926	9829.8688	12472.6186	-4.12	-24.34	26.88	-6.53	5.91
51.0	7123.4411	9434.5224	11995.5795	-4.09	-24.50	27.15	-6.63	5.99
52.0	6824.7353	9057.3635	11539.5539	-4.07	-24.65	27.41	-6.74	6.06
53.0	6540.2732	8697.4581	11103.5036	-4.04	-24.80	27.66	-6.84	6.14
54.0	6269.2995	8353.9249	10686.4473	-4.02	-24.95	27.92	-6.95	6.21
55.0	6011.103	8025.9319	10287.4563	-3.99	-25.10	28.18	-7.06	6.29
56.0	5765.0133	7712.6937	9905.6525	-3.97	-25.25	28.43	-7.16	6.36
57.0	5530.3988	7413.4686	9540.2046	-3.94	-25.40	28.69	-7.27	6.44
58.0	5306.6638	7127.5556	9190.3255	-3.92	-25.55	28.94	-7.38	6.52
59.0	5093.2465	6854.2926	8855.2702	-3.90	-25.69	29.19	-7.49	6.59
60.0	4889.6172	6593.0535	8534.3329	-3.87	-25.84	29.44	-7.60	6.67
61.0	4695.2755	6343.2464	8226.8449	-3.85	-25.98	29.69	-7.71	6.75
62.0	4509.7496	6104.3113	7932.1724	-3.83	-26.12	29.94	-7.82	6.82
63.0	4332.5936	5875.7185	7649.7147	-3.81	-26.26	30.19	-7.93	6.90
64.0	4163.3864	5656.9667	7378.9021	-3.78	-26.40	30.44	-8.05	6.98
65.0	4001.7304	5447.5813	7119.1943	-3.76	-26.54	30.69	-8.16	7.06
66.0	3847.2496	5247.113	6870.0786	-3.74	-26.68	30.93	-8.27	7.14
67.0	3699.5886	5055.1362	6631.0687	-3.72	-26.82	31.17	-8.39	7.22
68.0	3558.4113	4871.2477	6401.7028	-3.69	-26.95	31.42	-8.50	7.29
69.0	3423.3999	4695.0652	6181.5424	-3.67	-27.09	31.66	-8.62	7.37
70.0	3294.2536	4526.2265	5970.1711	-3.65	-27.22	31.90	-8.74	7.45
71.0	3170.6877	4364.3883	5767.1934	-3.63	-27.35	32.14	-8.85	7.53
72.0	3052.4329	4209.2246	5572.2335	-3.61	-27.48	32.38	-8.97	7.61
73.0	2939.234	4060.4265	5384.9339	-3.59	-27.61	32.62	-9.09	7.69

74.0	2830.8492	3917.7007	5204.9552	-3.57	-27.74	32.86	-9.21	7.78
75.0	2727.0497	3780.7688	5031.9744	-3.55	-27.87	33.09	-9.33	7.86
76.0	2627.6184	3649.3666	4865.6844	-3.53	-28.00	33.33	-9.45	7.94
77.0	2532.3497	3523.2431	4705.7927	-3.51	-28.12	33.56	-9.57	8.02
78.0	2441.0484	3402.1599	4552.0214	-3.49	-28.25	33.80	-9.69	8.10
79.0	2353.5296	3285.8905	4404.1058	-3.47	-28.37	34.03	-9.81	8.18
80.0	2269.6179	3174.2196	4261.7938	-3.45	-28.50	34.26	-9.94	8.27
81.0	2189.1466	3066.9426	4124.8453	-3.43	-28.62	34.49	-10.06	8.35
82.0	2111.9578	2963.8648	3993.0319	-3.41	-28.74	34.72	-10.19	8.43
83.0	2037.9014	2864.8013	3866.1357	-3.39	-28.86	34.95	-10.31	8.51
84.0	1966.8348	2769.5761	3743.9491	-3.37	-28.98	35.18	-10.44	8.60
85.0	1898.6228	2678.0215	3626.2744	-3.35	-29.10	35.41	-10.56	8.68
86.0	1833.1366	2589.9782	3512.9228	-3.33	-29.22	35.64	-10.69	8.77
87.0	1770.2542	2505.2944	3403.7146	-3.32	-29.34	35.86	-10.82	8.85
88.0	1709.8592	2423.8256	3298.4781	-3.30	-29.46	36.09	-10.95	8.93
89.0	1651.8413	2345.4341	3197.0497	-3.28	-29.57	36.31	-11.07	9.02
90.0	1596.0954	2269.9889	3099.2732	-3.26	-29.69	36.53	-11.20	9.10
91.0	1542.5216	2197.365	3004.9995	-3.24	-29.80	36.75	-11.33	9.19
92.0	1491.0247	2127.4434	2914.0864	-3.22	-29.91	36.98	-11.47	9.28
93.0	1441.5144	2060.1105	2826.3979	-3.21	-30.03	37.20	-11.60	9.36
94.0	1393.9044	1995.2582	2741.8043	-3.19	-30.14	37.42	-11.73	9.45
95.0	1348.1127	1932.7831	2660.1816	-3.17	-30.25	37.63	-11.86	9.53
96.0	1304.0613	1872.587	2581.4113	-3.16	-30.36	37.85	-12.00	9.62
97.0	1261.6758	1814.5757	2505.3802	-3.14	-30.47	38.07	-12.13	9.71
98.0	1220.8852	1758.6597	2431.9802	-3.12	-30.58	38.29	-12.27	9.80
99.0	1181.6221	1704.7535	2361.1078	-3.10	-30.69	38.50	-12.40	9.88
100.0	1143.8219	1652.7753	2292.6641	-3.09	-30.79	38.72	-12.54	9.97
101.0	1107.4234	1602.647	2226.5544	-3.07	-30.90	38.93	-12.67	10.06
102.0	1072.368	1554.2943	2162.6882	-3.06	-31.01	39.14	-12.81	10.15
103.0	1038.5998	1507.6459	2100.979	-3.04	-31.11	39.35	-12.95	10.24
104.0	1006.0657	1462.6339	2041.3438	-3.02	-31.22	39.57	-13.09	10.33
105.0	974.7146	1419.1931	1983.7033	-3.01	-31.32	39.78	-13.23	10.42
106.0	944.4982	1377.2615	1927.9816	-2.99	-31.42	39.99	-13.37	10.50
107.0	915.3702	1336.7797	1874.106	-2.98	-31.52	40.20	-13.51	10.59
108.0	887.2862	1297.6908	1822.0067	-2.96	-31.63	40.40	-13.65	10.68
109.0	860.204	1259.9406	1771.6171	-2.94	-31.73	40.61	-13.79	10.78
110.0	834.0834	1223.4769	1722.8732	-2.93	-31.83	40.82	-13.94	10.87
111.0	808.8858	1188.2502	1675.7137	-2.91	-31.93	41.02	-14.08	10.96
112.0	784.5744	1154.2128	1630.0799	-2.90	-32.03	41.23	-14.22	11.05
113.0	761.1138	1121.3191	1585.9156	-2.88	-32.12	41.43	-14.37	11.14
114.0	738.4706	1089.5255	1543.1667	-2.87	-32.22	41.64	-14.51	11.23

115.0	716.6125	1058.7903	1501.7815	-2.85	-32.32	41.84	- 14.66	11.32
116.0	695.5087	1029.0733	1461.7103	-2.84	-32.41	42.04	- 14.81	11.42
117.0	675.1298	1000.3364	1422.9055	-2.82	-32.51	42.24	- 14.95	11.51
118.0	655.4477	972.5427	1385.3214	-2.81	-32.60	42.44	- 15.10	11.60
119.0	636.4353	945.6571	1348.9141	-2.80	-32.70	42.64	- 15.25	11.69
120.0	618.067	919.6458	1313.6415	-2.78	-32.79	42.84	- 15.40	11.79
121.0	600.3179	894.4765	1279.4633	-2.77	-32.89	43.04	- 15.55	11.88
122.0	583.1646	870.1183	1246.3404	-2.75	-32.98	43.24	- 15.70	11.97
123.0	566.5842	846.5413	1214.2358	-2.74	-33.07	43.43	- 15.85	12.07
124.0	550.5552	823.717	1183.1136	-2.73	-33.16	43.63	- 16.00	12.16
125.0	535.0568	801.6182	1152.9394	-2.71	-33.25	43.83	- 16.16	12.26
126.0	520.069	780.2185	1123.6802	-2.70	-33.34	44.02	- 16.31	12.35
127.0	505.5728	759.4927	1095.3042	-2.69	-33.43	44.22	- 16.46	12.45
128.0	491.55	739.4167	1067.7808	-2.67	-33.52	44.41	- 16.62	12.54
129.0	477.9829	719.9673	1041.0808	-2.66	-33.61	44.60	- 16.77	12.64
130.0	464.8548	701.1221	1015.1759	-2.65	-33.70	44.79	- 16.93	12.74
131.0	452.1495	682.8598	990.039	-2.63	-33.79	44.98	- 17.09	12.83
132.0	439.8517	665.1598	965.6439	-2.62	-33.87	45.17	- 17.24	12.93
133.0	427.9464	648.0024	941.9657	-2.61	-33.96	45.36	- 17.40	13.03
134.0	416.4194	631.3685	918.98	-2.59	-34.04	45.55	- 17.56	13.12
135.0	405.2572	615.24	896.6638	-2.58	-34.13	45.74	- 17.72	13.22
136.0	394.4465	599.5993	874.9945	-2.57	-34.21	45.93	- 17.88	13.32
137.0	383.9748	584.4295	853.9508	-2.56	-34.30	46.12	- 18.04	13.42
138.0	373.83	569.7146	833.5118	-2.54	-34.38	46.30	- 18.20	13.52
139.0	364.0005	555.4388	813.6576	-2.53	-34.47	46.49	- 18.36	13.61
140.0	354.4751	541.5872	794.369	-2.52	-34.55	46.67	- 18.53	13.71
141.0	345.2432	528.1455	775.6275	-2.51	-34.63	46.86	- 18.69	13.81
142.0	336.2945	515.0997	757.4153	-2.50	-34.71	47.04	- 18.85	13.91
143.0	327.6191	502.4365	739.7151	-2.48	-34.79	47.23	- 19.02	14.01
144.0	319.2074	490.1431	722.5104	-2.47	-34.87	47.41	- 19.18	14.11
145.0	311.0504	478.2071	705.7852	-2.46	-34.95	47.59	- 19.35	14.21
146.0	303.1393	466.6167	689.5243	-2.45	-35.03	47.77	- 19.52	14.31
147.0	295.4655	455.3603	673.7127	-2.44	-35.11	47.95	- 19.68	14.41
148.0	288.0211	444.427	658.3361	-2.42	-35.19	48.13	- 19.85	14.52
149.0	280.7982	433.8061	643.3809	-2.41	-35.27	48.31	-20.02	14.62
150.0	273.7893	423.4874	628.8337	-2.40	-35.35	48.49	-20.19	14.72
151.0	266.9871	413.4611	614.6816	-2.39	-35.43	48.67	-20.36	14.82
152.0	260.3847	403.7176	600.9123	-2.38	-35.50	48.84	-20.53	14.92
153.0	253.9754	394.2478	587.5139	-2.37	-35.58	49.02	-20.70	15.03
154.0	247.7528	385.043	574.4749	-2.36	-35.66	49.20	-20.87	15.13
155.0	241.7106	376.0945	561.7841	-2.35	-35.73	49.37	-21.05	15.23

156.0	235.843	367.3943	549.4309	-2.34	-35.81	49.55	-21.22	15.33
157.0	230.144	358.9343	537.4048	-2.32	-35.88	49.72	-21.39	15.44
158.0	224.6082	350.707	525.6958	-2.31	-35.96	49.90	-21.57	15.54
159.0	219.2303	342.7051	514.2944	-2.30	-36.03	50.07	-21.74	15.65
160.0	214.005	334.9214	503.1912	-2.29	-36.10	50.24	-21.92	15.75
161.0	208.9275	327.3491	492.3772	-2.28	-36.18	50.41	-22.10	15.86
162.0	203.993	319.9817	481.8437	-2.27	-36.25	50.58	-22.27	15.96
163.0	199.1969	312.8127	471.5822	-2.26	-36.32	50.76	-22.45	16.07
164.0	194.5346	305.836	461.5847	-2.25	-36.39	50.93	-22.63	16.17
165.0	190.002	299.0456	451.8434	-2.24	-36.46	51.10	-22.81	16.28
166.0	185.595	292.436	442.3505	-2.23	-36.53	51.26	-22.99	16.38
167.0	181.3095	286.0014	433.0989	-2.22	-36.61	51.43	-23.17	16.49
168.0	177.1417	279.7366	424.0813	-2.21	-36.68	51.60	-23.35	16.60
169.0	173.0879	273.6365	415.2911	-2.20	-36.75	51.77	-23.53	16.70
170.0	169.1445	267.696	406.7214	-2.19	-36.81	51.93	-23.72	16.81
171.0	165.3081	261.9103	398.366	-2.18	-36.88	52.10	-23.90	16.92
172.0	161.5754	256.2748	390.2186	-2.17	-36.95	52.27	-24.08	17.03
173.0	157.9431	250.785	382.2732	-2.16	-37.02	52.43	-24.27	17.13
174.0	154.4082	245.4366	374.524	-2.15	-37.09	52.60	-24.45	17.24
175.0	150.9676	240.2253	366.9655	-2.14	-37.16	52.76	-24.64	17.35
176.0	147.6185	235.1472	359.5921	-2.13	-37.22	52.92	-24.82	17.46
177.0	144.358	230.1982	352.3986	-2.12	-37.29	53.08	-25.01	17.57
178.0	141.1836	225.3746	345.3799	-2.11	-37.36	53.25	-25.20	17.68
179.0	138.0925	220.6728	338.5312	-2.10	-37.42	53.41	-25.39	17.79
180.0	135.0823	216.0891	331.8475	-2.09	-37.49	53.57	-25.58	17.90

型号: YFTMF11104M4500

R: 100000 ohms ± 20%

B: 4500 °K ± 5%

温度 (°C)	阻值 (Ω)			温度 系数 (%/°C)	阻值精度偏差 (%)		测温精度偏差 (°C)	
	下限值	中心值	上限值		最小	最大	最小	最大
-40.0	4372987.3835	6747540.7030	9995028.4519	-8.30	-35.19	48.13	-5.80	4.24
-39.0	4042977.7169	6212624.6647	9164739.3605	-8.22	-34.92	47.52	-5.78	4.25
-38.0	3740383.4147	5724159.4356	8409662.2478	-8.15	-34.66	46.92	-5.75	4.25
-37.0	3462731.3385	5277781.1710	7722451.5886	-8.08	-34.39	46.32	-5.73	4.25
-36.0	3207788.1958	4869565.4606	7096528.7214	-8.02	-34.13	45.73	-5.71	4.26
-35.0	2973535.7271	4495980.2378	6525996.8428	-7.95	-33.86	45.15	-5.68	4.26
-34.0	2758148.6139	4153844.0284	6005565.9511	-7.88	-33.60	44.58	-5.66	4.26
-33.0	2559974.7939	3840288.9001	5530486.5176	-7.82	-33.34	44.01	-5.63	4.27
-32.0	2377517.9060	3552727.5576	5096490.8166	-7.75	-33.08	43.45	-5.61	4.27
-31.0	2209421.6223	3288824.0918	4699740.9845	-7.69	-32.82	42.90	-5.58	4.27
-30.0	2054455.6525	3046467.9586	4336782.9969	-7.62	-32.56	42.35	-5.56	4.27
-29.0	1911503.2334	2823750.8095	4004505.8542	-7.56	-32.31	41.82	-5.53	4.27
-28.0	1779549.9357	2618945.8450	3700105.3544	-7.50	-32.05	41.28	-5.51	4.27
-27.0	1657673.6429	2430489.4026	3421051.9128	-7.44	-31.80	40.76	-5.48	4.28
-26.0	1545035.5716	2256964.5222	3165061.9506	-7.38	-31.54	40.24	-5.45	4.28
-25.0	1440872.2205	2097086.2669	2930072.4369	-7.32	-31.29	39.72	-5.43	4.28
-24.0	1344488.1440	1949688.6008	2714218.2181	-7.26	-31.04	39.21	-5.40	4.28
-23.0	1255249.4646	1813712.6493	2515811.8131	-7.20	-30.79	38.71	-5.38	4.28
-22.0	1172578.0405	1688196.1886	2333325.3923	-7.14	-30.54	38.21	-5.35	4.28
-21.0	1095946.2224	1572264.2287	2165374.6911	-7.09	-30.30	37.72	-5.32	4.28
-20.0	1024872.1328	1465120.5697	2010704.6397	-7.03	-30.05	37.24	-5.30	4.27
-19.0	958915.4158	1366040.2250	1868176.5157	-6.97	-29.80	36.76	-5.27	4.27
-18.0	897673.4061	1274362.6179	1736756.4508	-6.92	-29.56	36.28	-5.24	4.27
-17.0	840777.6736	1189485.4684	1615505.1389	-6.87	-29.32	35.82	-5.22	4.27
-16.0	787890.9057	1110859.2951	1503568.6158	-6.81	-29.07	35.35	-5.19	4.27

-15.0	738704.0912	1037982.4682	1400169.9902	-6.76	-28.83	34.89	-5.16	4.27
-14.0	692933.9753	970396.7550	1304602.0254	-6.71	-28.59	34.44	-5.14	4.26
-13.0	650320.7588	907683.3052	1216220.4767	-6.66	-28.35	33.99	-5.11	4.26
-12.0	610626.0150	849459.0310	1134438.1052	-6.60	-28.12	33.55	-5.08	4.26
-11.0	573630.8052	795373.3409	1058719.2945	-6.55	-27.88	33.11	-5.05	4.25
-10.0	539133.9691	745105.1903	988575.2065	-6.50	-27.64	32.68	-5.02	4.25
-9.0	506950.5771	698360.4169	923559.4201	-6.45	-27.41	32.25	-5.00	4.25
-8.0	476910.5241	654869.3309	863264.0004	-6.41	-27.17	31.82	-4.97	4.24
-7.0	448857.2548	614384.5357	807315.9552	-6.36	-26.94	31.40	-4.94	4.24
-6.0	422646.6047	576678.9547	755374.0372	-6.31	-26.71	30.99	-4.91	4.23
-5.0	398145.7470	541544.0432	707125.8574	-6.26	-26.48	30.58	-4.88	4.23
-4.0	375232.2356	508788.1690	662285.2766	-6.22	-26.25	30.17	-4.85	4.22
-3.0	353793.1329	478235.1423	620590.0479	-6.17	-26.02	29.77	-4.82	4.22
-2.0	333724.2173	449722.8824	581799.6837	-6.12	-25.79	29.37	-4.80	4.21
-1.0	314929.2598	423102.2062	545693.5248	-6.08	-25.57	28.97	-4.77	4.21
0.0	297319.3653	398235.7286	512068.9920	-6.03	-25.34	28.58	-4.74	4.20
1.0	280812.3721	374996.8613	480740.0014	-5.99	-25.12	28.20	-4.71	4.19
2.0	265332.3029	353268.9032	451535.5270	-5.95	-24.89	27.82	-4.68	4.19
3.0	250808.8648	332944.2117	424298.2968	-5.90	-24.67	27.44	-4.65	4.18
4.0	237176.9913	313923.4484	398883.6087	-5.86	-24.45	27.06	-4.62	4.17
5.0	224376.4246	296114.8918	375158.2552	-5.82	-24.23	26.69	-4.59	4.16
6.0	212351.3330	279433.8099	352999.5452	-5.78	-24.01	26.33	-4.56	4.16
7.0	201049.9609	263801.8890	332294.4151	-5.74	-23.79	25.96	-4.53	4.15
8.0	190424.3086	249146.7110	312938.6195	-5.70	-23.57	25.60	-4.50	4.14
9.0	180429.8388	235401.2773	294835.9940	-5.65	-23.35	25.25	-4.46	4.13
10.0	171025.2077	222503.5727	277897.7844	-5.61	-23.14	24.90	-4.43	4.12
11.0	162172.0179	210396.1676	262042.0342	-5.58	-22.92	24.55	-4.40	4.11
12.0	153834.5928	199025.8530	247193.0264	-5.54	-22.71	24.20	-4.37	4.10
13.0	145979.7685	188343.3077	233280.7748	-5.50	-22.49	23.86	-4.34	4.09
14.0	138576.7032	178302.7926	220240.5579	-5.46	-22.28	23.52	-4.31	4.08
15.0	131596.7016	168861.8710	208012.4948	-5.42	-22.07	23.18	-4.28	4.07
16.0	125013.0544	159981.1522	196541.1566	-5.38	-21.86	22.85	-4.24	4.06
17.0	118800.8896	151624.0565	185775.2109	-5.35	-21.65	22.52	-4.21	4.05
18.0	112937.0364	143756.5989	175667.0972	-5.31	-21.44	22.20	-4.18	4.04
19.0	107399.8994	136347.1917	166172.7295	-5.27	-21.23	21.87	-4.15	4.03
20.0	102169.3436	129366.4620	157251.2231	-5.24	-21.02	21.55	-4.12	4.01
21.0	97226.5870	122787.0847	148864.6459	-5.20	-20.82	21.24	-4.08	4.00
22.0	92554.1034	116583.6289	140977.7886	-5.17	-20.61	20.92	-4.05	3.99
23.0	88135.5308	110732.4161	133557.9551	-5.13	-20.41	20.61	-4.02	3.98

24.0	83955.5885	105211.3908	126574.7696	-5.10	-20.20	20.31	-3.98	3.96
25.0	80000.0000	100000.0000	120000.0000	-5.06	-20.00	20.00	-3.95	3.95
26.0	75871.5965	95079.0834	114383.1317	-5.03	-20.20	20.30	-4.04	4.02
27.0	71981.6891	90430.7713	109064.0621	-5.00	-20.40	20.61	-4.12	4.08
28.0	68315.1273	86038.3912	104025.2847	-4.96	-20.60	20.91	-4.21	4.15
29.0	64857.8055	81886.3813	99250.4173	-4.93	-20.80	21.21	-4.30	4.22
30.0	61596.5858	77960.2105	94724.1243	-4.90	-20.99	21.50	-4.39	4.29
31.0	58519.2262	74246.3051	90432.0444	-4.86	-21.18	21.80	-4.48	4.35
32.0	55614.3154	70731.9803	86360.7236	-4.83	-21.37	22.10	-4.57	4.42
33.0	52871.2116	67405.3780	82497.5530	-4.80	-21.56	22.39	-4.66	4.49
34.0	50279.9871	64255.4081	78830.7117	-4.77	-21.75	22.68	-4.76	4.56
35.0	47831.3763	61271.6951	75349.1135	-4.74	-21.94	22.98	-4.85	4.63
36.0	45516.7285	58444.5286	72042.3570	-4.71	-22.12	23.27	-4.94	4.70
37.0	43327.9638	55764.8167	68900.6805	-4.68	-22.30	23.56	-5.04	4.77
38.0	41257.5324	53224.0440	65914.9189	-4.65	-22.48	23.84	-5.13	4.84
39.0	39298.3774	50814.2318	63076.4644	-4.62	-22.66	24.13	-5.22	4.91
40.0	37443.8999	48527.9017	60377.2298	-4.59	-22.84	24.42	-5.32	4.98
41.0	35687.9271	46358.0417	57809.6145	-4.56	-23.02	24.70	-5.42	5.05
42.0	34024.6825	44298.0747	55366.4725	-4.53	-23.19	24.99	-5.51	5.12
43.0	32448.7587	42341.8296	53041.0832	-4.50	-23.36	25.27	-5.61	5.19
44.0	30955.0917	40483.5136	50827.1238	-4.47	-23.54	25.55	-5.71	5.26
45.0	29538.9377	38717.6879	48718.6438	-4.45	-23.71	25.83	-5.81	5.33
46.0	28195.8508	37039.2438	46710.0413	-4.42	-23.88	26.11	-5.91	5.40
47.0	26921.6633	35443.3811	44796.0410	-4.39	-24.04	26.39	-6.01	5.48
48.0	25712.4667	33925.5881	42971.6730	-4.36	-24.21	26.66	-6.11	5.55
49.0	24564.5941	32481.6228	41232.2543	-4.34	-24.37	26.94	-6.21	5.62
50.0	23474.6045	31107.4954	39573.3703	-4.31	-24.54	27.21	-6.32	5.69
51.0	22439.2676	29799.4519	37990.8586	-4.28	-24.70	27.49	-6.42	5.77
52.0	21455.5495	28553.9595	36480.7928	-4.26	-24.86	27.76	-6.52	5.84
53.0	20520.6006	27367.6919	35039.4684	-4.23	-25.02	28.03	-6.63	5.91
54.0	19631.7426	26237.5167	33663.3891	-4.20	-25.18	28.30	-6.73	5.99
55.0	18786.4581	25160.4829	32349.2540	-4.18	-25.33	28.57	-6.84	6.06
56.0	17982.3798	24133.8097	31093.9457	-4.15	-25.49	28.84	-6.94	6.14
57.0	17217.2808	23154.8757	29894.5195	-4.13	-25.64	29.11	-7.05	6.21
58.0	16489.0659	22221.2090	28748.1926	-4.10	-25.80	29.37	-7.16	6.29
59.0	15795.7629	21330.4780	27652.3347	-4.08	-25.95	29.64	-7.27	6.36
60.0	15135.5146	20480.4831	26604.4590	-4.05	-26.10	29.90	-7.38	6.44
61.0	14506.5723	19669.1478	25602.2134	-4.03	-26.25	30.16	-7.48	6.51
62.0	13907.2882	18894.5121	24643.3726	-4.01	-26.40	30.43	-7.60	6.59

63.0	13336.1092	18154.7249	23725.8312	-3.98	-26.54	30.69	-7.71	6.67
64.0	12791.5716	17448.0377	22847.5958	-3.96	-26.69	30.95	-7.82	6.74
65.0	12272.2948	16772.7979	22006.7792	-3.94	-26.83	31.21	-7.93	6.82
66.0	11776.9765	16127.4441	21201.5940	-3.91	-26.98	31.46	-8.04	6.90
67.0	11304.3881	15510.4994	20430.3468	-3.89	-27.12	31.72	-8.16	6.97
68.0	10853.3697	14920.5676	19691.4331	-3.87	-27.26	31.98	-8.27	7.05
69.0	10422.8266	14356.3275	18983.3317	-3.84	-27.40	32.23	-8.39	7.13
70.0	10011.7246	13816.5292	18304.6006	-3.82	-27.54	32.48	-8.50	7.21
71.0	9619.0869	13299.9894	17653.8721	-3.80	-27.68	32.74	-8.62	7.28
72.0	9243.9904	12805.5879	17029.8488	-3.78	-27.81	32.99	-8.73	7.36
73.0	8885.5627	12332.2638	16431.2995	-3.76	-27.95	33.24	-8.85	7.44
74.0	8542.9788	11879.0121	15857.0558	-3.73	-28.08	33.49	-8.97	7.52
75.0	8215.4586	11444.8805	15306.0083	-3.71	-28.22	33.74	-9.09	7.60
76.0	7902.2641	11028.9664	14777.1036	-3.69	-28.35	33.98	-9.21	7.68
77.0	7602.6969	10630.4141	14269.3411	-3.67	-28.48	34.23	-9.33	7.76
78.0	7316.0961	10248.4122	13781.7701	-3.65	-28.61	34.48	-9.45	7.84
79.0	7041.8357	9882.1909	13313.4871	-3.63	-28.74	34.72	-9.57	7.92
80.0	6779.3231	9531.0200	12863.6335	-3.61	-28.87	34.97	-9.69	8.00
81.0	6527.9970	9194.2063	12431.3925	-3.59	-29.00	35.21	-9.81	8.08
82.0	6287.3252	8871.0920	12015.9877	-3.57	-29.13	35.45	-9.94	8.16
83.0	6056.8037	8561.0524	11616.6804	-3.55	-29.25	35.69	-10.06	8.25
84.0	5835.9544	8263.4941	11232.7678	-3.53	-29.38	35.93	-10.19	8.33
85.0	5624.3242	7977.8535	10863.5808	-3.51	-29.50	36.17	-10.31	8.41
86.0	5421.4830	7703.5950	10508.4828	-3.49	-29.62	36.41	-10.44	8.49
87.0	5227.0231	7440.2096	10166.8674	-3.47	-29.75	36.65	-10.56	8.57
88.0	5040.5573	7187.2134	9838.1572	-3.45	-29.87	36.88	-10.69	8.66
89.0	4861.7182	6944.1461	9521.8022	-3.43	-29.99	37.12	-10.82	8.74
90.0	4690.1570	6710.5702	9217.2782	-3.41	-30.11	37.35	-10.95	8.82
91.0	4525.5424	6486.0691	8924.0858	-3.39	-30.23	37.59	-11.08	8.91
92.0	4367.5596	6270.2466	8641.7488	-3.37	-30.34	37.82	-11.21	8.99
93.0	4215.9097	6062.7257	8369.8133	-3.36	-30.46	38.05	-11.34	9.08
94.0	4070.3085	5863.1473	8107.8463	-3.34	-30.58	38.28	-11.47	9.16
95.0	3930.4859	5671.1694	7855.4349	-3.32	-30.69	38.52	-11.60	9.24
96.0	3796.1849	5486.4665	7612.1851	-3.30	-30.81	38.74	-11.73	9.33
97.0	3667.1613	5308.7283	7377.7208	-3.28	-30.92	38.97	-11.87	9.42
98.0	3543.1827	5137.6592	7151.6833	-3.27	-31.04	39.20	-12.00	9.50
99.0	3424.0280	4972.9775	6933.7298	-3.25	-31.15	39.43	-12.13	9.59
100.0	3309.4867	4814.4145	6723.5332	-3.23	-31.26	39.65	-12.27	9.67
101.0	3199.3586	4661.7142	6520.7810	-3.21	-31.37	39.88	-12.41	9.76

102.0	3093.4529	4514.6324	6325.1747	-3.20	-31.48	40.10	-12.54	9.85
103.0	2991.5879	4372.9361	6136.4291	-3.18	-31.59	40.33	-12.68	9.93
104.0	2893.5907	4236.4029	5954.2715	-3.16	-31.70	40.55	-12.82	10.02
105.0	2799.2964	4104.8206	5778.4415	-3.15	-31.80	40.77	-12.96	10.11
106.0	2708.5478	3977.9869	5608.6899	-3.13	-31.91	40.99	-13.10	10.19
107.0	2621.1953	3855.7084	5444.7785	-3.11	-32.02	41.21	-13.24	10.28
108.0	2537.0960	3737.8004	5286.4794	-3.10	-32.12	41.43	-13.38	10.37
109.0	2456.1138	3624.0866	5133.5747	-3.08	-32.23	41.65	-13.52	10.46
110.0	2378.1188	3514.3985	4985.8557	-3.07	-32.33	41.87	-13.66	10.55
111.0	2302.9872	3408.5753	4843.1229	-3.05	-32.44	42.09	-13.80	10.64
112.0	2230.6007	3306.4630	4705.1853	-3.03	-32.54	42.30	-13.94	10.73
113.0	2160.8466	3207.9147	4571.8599	-3.02	-32.64	42.52	-14.09	10.82
114.0	2093.6170	3112.7896	4442.9715	-3.00	-32.74	42.73	-14.23	10.91
115.0	2028.8093	3020.9535	4318.3524	-2.99	-32.84	42.95	-14.38	11.00
116.0	1966.3251	2932.2776	4197.8419	-2.97	-32.94	43.16	-14.52	11.09
117.0	1906.0708	2846.6391	4081.2861	-2.96	-33.04	43.37	-14.67	11.18
118.0	1847.9565	2763.9201	3968.5373	-2.94	-33.14	43.58	-14.82	11.27
119.0	1791.8969	2684.0081	3859.4541	-2.93	-33.24	43.79	-14.97	11.36
120.0	1737.8099	2606.7953	3753.9011	-2.91	-33.34	44.00	-15.11	11.45
121.0	1685.6173	2532.1783	3651.7481	-2.90	-33.43	44.21	-15.26	11.54
122.0	1635.2444	2460.0584	3552.8706	-2.88	-33.53	44.42	-15.41	11.63
123.0	1586.6196	2390.3409	3457.1490	-2.87	-33.62	44.63	-15.56	11.73
124.0	1539.6745	2322.9352	3364.4686	-2.85	-33.72	44.84	-15.71	11.82
125.0	1494.3437	2257.7543	3274.7193	-2.84	-33.81	45.04	-15.87	11.91
126.0	1450.5644	2194.7149	3187.7956	-2.82	-33.91	45.25	-16.02	12.00
127.0	1408.2768	2133.7374	3103.5959	-2.81	-34.00	45.45	-16.17	12.10
128.0	1367.4234	2074.7453	3022.0232	-2.80	-34.09	45.66	-16.33	12.19
129.0	1327.9494	2017.6651	2942.9838	-2.78	-34.18	45.86	-16.48	12.28
130.0	1289.8021	1962.4266	2866.3881	-2.77	-34.28	46.06	-16.64	12.38
131.0	1252.9311	1908.9623	2792.1498	-2.76	-34.37	46.27	-16.79	12.47
132.0	1217.2883	1857.2075	2720.1863	-2.74	-34.46	46.47	-16.95	12.57
133.0	1182.8272	1807.1001	2650.4179	-2.73	-34.55	46.67	-17.10	12.66
134.0	1149.5038	1758.5807	2582.7682	-2.71	-34.63	46.87	-17.26	12.76
135.0	1117.2754	1711.5919	2517.1637	-2.70	-34.72	47.07	-17.42	12.85
136.0	1086.1014	1666.0790	2453.5339	-2.69	-34.81	47.26	-17.58	12.95
137.0	1055.9427	1621.9892	2391.8107	-2.68	-34.90	47.46	-17.74	13.04
138.0	1026.7619	1579.2719	2331.9290	-2.66	-34.99	47.66	-17.90	13.14
139.0	998.5232	1537.8786	2273.8259	-2.65	-35.07	47.85	-18.06	13.24
140.0	971.1920	1497.7626	2217.4410	-2.64	-35.16	48.05	-18.22	13.33

141.0	944.7354	1458.8789	2162.7162	-2.62	-35.24	48.25	-18.39	13.43
142.0	919.1217	1421.1846	2109.5956	-2.61	-35.33	48.44	-18.55	13.53
143.0	894.3203	1384.6382	2058.0254	-2.60	-35.41	48.63	-18.71	13.63
144.0	870.3022	1349.1999	2007.9539	-2.59	-35.49	48.83	-18.88	13.72
145.0	847.0393	1314.8314	1959.3310	-2.57	-35.58	49.02	-19.04	13.82
146.0	824.5046	1281.4960	1912.1090	-2.56	-35.66	49.21	-19.21	13.92
147.0	802.6724	1249.1583	1866.2415	-2.55	-35.74	49.40	-19.37	14.02
148.0	781.5177	1217.7841	1821.6840	-2.54	-35.82	49.59	-19.54	14.12
149.0	761.0167	1187.3409	1778.3936	-2.53	-35.91	49.78	-19.71	14.22
150.0	741.1465	1157.7970	1736.3292	-2.51	-35.99	49.97	-19.88	14.32