

产品承认书

PRODUCT SPECIFICATION FOR APPROVAL

客 户 名 称 CUSTOMER NAME	
客 户 料 号 P/N OF CUSTOMER	
承 认 字 号 APPROVAL NO.	
产 品 名 称 PRODUCT NAME	贴片型负温度系数热敏电阻 SMD NTC THERMISTOR
规 格 型 号 TYPE SPECIFICATION	CN0603R104B4100FT
承认书版本号 APPROVAL SHEET VERSION	4.0
承 认 日 期 DATE OF APPROVAL	

供 应 商 SUPPLIER		
制 定 DESIGNED	审 核 CHECKED	批 准 APPROVED
供应商品管部印鉴 SUPPLIER QA SEAL		

客 户 CUSTOMER		
检 验 INSPECTED	审 核 CHECKED	批 准 APPROVED
客户承认印鉴 CUSTOMER APPROVAL SEAL		

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1、规格型号 PART IDENTIFICATION

CN	0603	R103	B4100	F	T
①	②	③	④	⑤	⑥

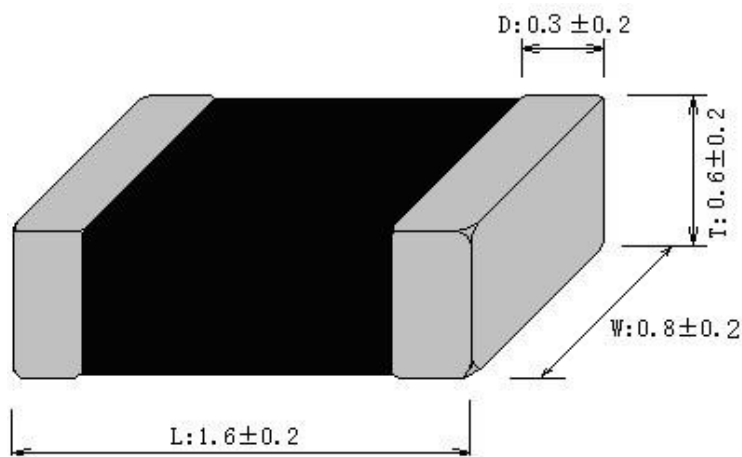
① 产品系列 PRODUCT FAMILY	CN 指贴片型负温度系数热敏电阻;
	CN REFERS TO SMD TYPE NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS
② 产品尺寸 PRODUCT SIZE	0603 指 2.2 图所示尺寸;
	0603 REFERS TO THE SIZE SHOWN IN FIGURE 2.2
③ 产品阻值 (25°C 零功率电阻值) PRODUCTION RESISTANCE (ZERO POWER RESISTANCE AT 25°C)	R104 指 100KΩ;
	R104 STANDS FOR 100 KΩ
④ B 值数值 B-VALUE TOLERANCE	4100 指 B 值为 4100K;
	B3435 MEANS THAT THE B VALUE IS 3435K
⑤ 阻值误差 RESISTANCE ERROR	F 指±1%;
	F INDICATES ±1%
⑥ 包装方式 PACKAGING METHOD	T 指盘装;
	T REFERS TO THE TRAY

2、 产品特性 PRODUCTION FEATURES

2.1 技术参数 TECHNICAL PARAMETER

规格型号 PART NO.	额定零功率电阻值 ZERO POWER RESISTANCE AT 25°C $R_{25}(\Omega)$	B 值常数 B-CONSTANT 25/50°C(K)	耗散系数 DISSIPATION FACTOR (mw/°C)	热时间常数(S) THERMAL TIME CONSTANT	额定功率 Max. POWER RATING AT 25°C (mw)	工作温度范围 OPERATING TEMPERATURE RANGE (°C)
CN0603R104B4100FT	100K	4100	≥ 2	≤ 3	200	-40 ~ 125

2.2 外形尺寸 PRODUCTION DIMENSION



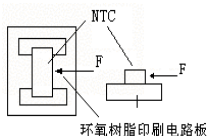
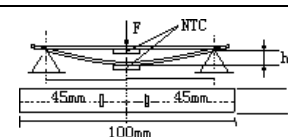
单位 (unit): mm

3、 检验规则 INSPECTION REGULATIONS

3.1 出厂检验 DELIVERY INSPECTION

序号 SEQUENCE	检验项目 ITEMS	检验方法 METHOD	性能要求 PERFORMANCE REQUIREMENTS	检测水平 INSPECTI ON LEVEL	AQL
(1)	R ₂₅	将待测品置于 25℃ 高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 25°C HIGH-PRECISION OIL TANK AND MEASURE IT	100KΩ±1%	II	0.15
(2)	B _{25/50}	将待测品置于 25℃、50℃ 高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 25°C, 50°C HIGH-PRECISION OIL TANK AND MEASURE IT HIGH PRECISION OIL TANK	4100K±1%	II	1.0
(3)	外观 APPEARANCE	在 20X 的显微镜下目测检查 VISUAL INSPECTION UNDER A 20X MICROSCOPE	符合图 2.2 的外形要求, 无腐蚀、流挂、断片、崩边、崩角等 MEETS THE SHAPE REQUIREMENTS OF THE DRAWING 2.2, WITHOUT CORROSION, SAGGING, FRAGMENTATION, CHIPPING, ETC.	II	0.65
(4)	尺寸 DIMENSION	用精度不小于 0.01MM 的卡尺测量 MEASURE WITH CALIPER WITH AN ACCURACY OF NOT LESS THAN 0.01MM	符合图 2.2 的外形尺寸 MEETS THE SHAPE REQUIREMENTS OF THE DRAWING 2.2	II	1.0
(5)	可焊性 SOLDERABILITY	焊接温度 SOLDERING TEMPERATURE: 260±5°C; DIPPING TIME 浸入时间: 3±1S	着锡面积 ≥ 95% AT LEAST 95% OF TERMINAL ELECTRODE IS COVERED BY NEW SOLDER	S-2	0.65
(6)	耐焊性 RESISTANCE TO SOLDERING HEAT	焊接温度 SOLDERING TEMPERATURE: 280±10°C; DIPPING TIME 浸入时间: 10±1S	无外观损伤 NO VISIBLE DAMAGE ΔR ₂₅ / R ₂₅ ≤ 5%	S-2	0.65

3.2 型式检验 PATTERN INSPECTION

序号 SEQUENCE	检验项目 ITEMS	检验标准 STANDARD	检验方法 INSPECTION METHOD	性能要求 PERFORMANCE REQUIREMENTS
(1)	端头强度 TERMINAL STRENGTH	IEC68-2-21	 $F \geq 8N$	无外观损伤 NO COSMETIC DAMAGE
(2)	抗弯强度 FLEXTURE STRENGTH	IEC68-2-21	 $h: 1 \pm 0.1mm$	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 3\%$
(3)	跌落 DROP	IEC68-2-32	跌落高度 HEIGHT OF DROP: $1.0 \pm 0.1M$; 跌落次数 NUMBER OF DROPS: 1 跌落面 DROP SURFACE: 水泥地面: CONCRETE FLOOR	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 1\%$ $\Delta B/ B$ $\leq 2\%$
(4)	湿热负载 MOIST HEAT LOAD	IEC68-2-2/ IEC68-2-3 /CNS5550	温度 TEMPERATURE: $40 \pm 2^{\circ}C$; 湿度 HUMIDITY: $90 \sim 95\%RH$; 时间 TIME: $500 \pm 12H$; 工作电流 OPERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 5\%$ $\Delta B/ B$ $\leq 2\%$
(5)	高温负载 HIGH TEMPERATURE STORAGE	IEC68-2-2/ CNS5550	温度: $125 \pm 2^{\circ}C$; 时间: $1000 \pm 24H$; 工作电流 OPERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 5\%$ $\Delta B/ B$ $\leq 2\%$
(6)	冷热冲击 RAPID CHANGE OF TEMPERATURE	IEC68-2-14	温度 TEMPERATURE: $-40^{\circ}C, +125^{\circ}C$; 周期 CYCLE: 100, 30MIN/CYCLE	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 5\%$ $\Delta B/ B$ $\leq 2\%$

(7)	低温存储 LOW TEMPERATURE STORAGE	IEC68-2-1	温度 TEMPERATURE: - 40 ±2°C; 时间 TIME:1000±24 H	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 2\%$ $\Delta B/ B$ $\leq 2\%$
(8)	耐久性 ENDURANCE	UL1434	环境温度 ENVIRONMENTAL TEMPERATURE:25±2°C; 工作电流 OPERATING CURRENT 周期 CYCLE:6000	无外观损伤 NO COSMETIC DAMAGE $\Delta R25/ R25$ $\leq 5\%$ $\Delta B/ B$ $\leq 2\%$

4、 包装、贮存 PACKAGE & STORAGE

4.1 包装 PACKAGE

序号 SEQUENCE	包装方式 PACKAGING	包装材料、尺寸 PACKAGING MATERIAL & DIMENSION	产品数量 PART QUANTITY
(1)	编带 TAPING	0603 纸带, 标准带轮 0603 PAPER TAPE, STANDARD TAPE WHEEL	
(2)	内包装盒 INNER BOX	纸箱 CARTON, L×W×H=185mm×70mm×190mm	
(3)	外包装箱 PACKAGING	纸箱 CARTON, L×W×H=370mm×205mm×215mm	

4.2 贮存 STORAGE

产品密封保存, 存放产品的仓库环境温度 - 10°C ~ + 40°C、相对湿度不大于 70%, 仓库内不允许有各种有害气体、易爆的产品及有腐蚀性的化学物品, 并且无强烈的机械振动、冲击和强辐射的作用, 包装箱应垫高地面至少 20cm, 距离墙壁、热源、冷源、窗口或空气入口至少 50cm。

- THIS PRODUCT MUST BE KEPT SEALED.
- STORE IN AN ORDINARY ENVIRONMENT (NORMAL ROOM TEMPERATURE, HUMIDITY AND ATMOSPHERIC PRESSURE).
- STORAGE TEMPERATURE: -10°C ~ +40°C
- RELATIVE HUMIDITY: ≤70%RH.
- KEEP AWAY FROM CORROSIVE GASES, DEOXIDIZING GAS, FLAMMABLE GAS OR DIRECT SUNLIGHT.
- AVOID STRONG MECHANICAL VIBRATION, SHOCK.
- THE PACKING BOX SHOULD BE RAISED AT LEAST 20CM ABOVE THE GROUND AND AT LEAST 50CM AWAY FROM THE WALL, HEAT SOURCE, COLD SOURCE, WINDOWS OR AIR INLET.
- ABNORMAL STORAGE AND OPERATING CONDITIONS MAY CAUSE MALFUNCTION FUNCTION OR FAILURE OF OUR PRODUCTS.

5、电阻 – 温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABLE

R25 = 100KΩ±1%
B25/50 = 4100K±1%

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	3942.1210	4132.9231	4332.5270	-1	354.2636	362.4801	370.8501
-39	3670.9525	3845.8603	4028.6989	0	335.9028	343.5087	351.2518
-38	3420.4131	3580.8259	3748.3869	1	318.6095	325.6500	332.8127
-37	3188.7917	3335.9781	3489.6092	2	302.3154	308.8320	315.4575
-36	2974.5304	3109.6414	3250.5645	3	286.9568	292.9880	299.1160
-35	2776.2095	2900.2902	3029.6136	4	272.4744	278.0557	283.7230
-34	2592.5348	2706.5343	2825.2641	5	258.8131	263.9774	269.2178
-33	2422.3257	2527.1067	2636.1565	6	245.9215	250.6991	255.5440
-32	2264.5041	2360.8511	2461.0513	7	233.7518	238.1708	242.6492
-31	2118.0853	2206.7122	2298.8177	8	222.2592	226.3458	230.4844
-30	1982.1690	2063.7259	2148.4235	9	211.4023	215.1803	219.0040
-29	1855.9320	1931.0108	2008.9260	10	201.1422	204.6340	208.1655
-28	1738.6206	1807.7611	1879.4632	11	191.4425	194.6687	197.9295
-27	1629.5447	1693.2390	1759.2470	12	182.2695	185.2493	188.2589
-26	1528.0718	1586.7690	1647.5561	13	173.5916	176.3426	179.1192
-25	1433.6220	1487.7320	1543.7300	14	165.3792	167.9178	170.4783
-24	1345.6634	1395.5607	1447.1634	15	157.6047	159.9462	162.3061
-23	1263.7073	1309.7341	1357.3016	16	150.2423	152.4007	154.5746
-22	1187.3054	1229.7745	1273.6354	17	143.2677	145.2562	147.2575
-21	1116.0451	1155.2428	1195.6977	18	136.6585	138.4891	140.3302
-20	1049.5473	1085.7356	1123.0593	19	130.3933	132.0773	133.7698
-19	987.4632	1020.8818	1055.3259	20	124.4524	126.0003	127.5548
-18	929.4715	960.3403	992.1350	21	118.8171	120.2387	121.6651
-17	875.2764	903.7966	933.1529	22	113.4701	114.7743	116.0819
-16	824.6052	850.9616	878.0726	23	108.3949	109.5901	110.7874
-15	777.2064	801.5684	826.6113	24	103.5764	104.6704	105.7653
-14	732.8481	755.3711	778.5085	25	99.0000	100.0000	101.0000
-13	691.3161	712.1429	733.5238	26	94.5665	95.5650	96.5645
-12	652.4127	671.6744	691.4357	27	90.3571	91.3524	92.3494
-11	615.9551	633.7722	652.0395	28	86.3592	87.3496	88.3425
-10	581.7743	598.2576	615.1464	29	82.5611	83.5451	84.5324
-9	549.7140	564.9654	580.5818	30	78.9517	79.9280	80.9084
-8	519.6297	533.7428	548.1845	31	75.5206	76.4881	77.4604
-7	491.3872	504.4485	517.8052	32	72.2580	73.2158	74.1788
-6	464.8627	476.9516	489.3058	33	69.1548	70.1019	71.0549
-5	439.9411	451.1307	462.5586	34	66.2023	67.1380	68.0801
-4	416.5158	426.8736	437.4452	35	63.3925	64.3161	65.2466
-3	394.4879	404.0761	413.8559	36	60.7176	61.6285	62.5468
-2	373.7656	382.6414	391.6889	37	58.1705	59.0682	59.9738

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	55.7443	56.6285	57.5210	82	9.9492	10.2810	10.6227
39	53.4328	54.3031	55.1820	83	9.6138	9.9377	10.2715
40	51.2299	52.0860	52.9511	84	9.2653	9.5810	9.9064
41	49.1299	49.9716	50.8227	85	8.9557	9.2639	9.5818
42	47.1275	47.9547	48.7915	86	8.6330	8.9334	9.2433
43	45.2176	46.0301	46.8525	87	8.3227	8.6154	8.9175
44	43.3515	44.1489	44.9565	88	8.0242	8.3095	8.6040
45	41.5682	42.3504	43.1430	89	7.7372	8.0151	8.3022
46	39.8636	40.6305	41.4081	90	7.4611	7.7319	8.0117
47	38.2786	39.0307	39.7936	91	7.1955	7.4593	7.7320
48	36.7205	37.4574	38.2053	92	6.9615	7.2191	7.4855
49	35.2305	35.9523	36.6852	93	6.7151	6.9660	7.2257
50	33.8054	34.5121	35.2300	94	6.4986	6.7436	6.9973
51	32.4862	33.1784	33.8819	95	6.2699	6.5086	6.7558
52	31.1816	31.8589	32.5477	96	6.0694	6.3026	6.5440
53	29.9332	30.5958	31.2699	97	5.8570	6.0841	6.3194
54	28.7384	29.3864	30.0460	98	5.6713	5.8931	6.1230
55	27.6460	28.2802	28.9261	99	5.4739	5.6900	5.9140
56	26.5506	27.1705	27.8021	100	5.3019	5.5129	5.7317
57	25.5519	26.1585	26.7767	101	5.1183	5.3239	5.5372
58	24.5468	25.1394	25.7438	102	4.9588	5.1596	5.3679
59	23.5839	24.1629	24.7537	103	4.7880	4.9837	5.1867
60	22.6616	23.2271	23.8044	104	4.6400	4.8311	5.0295
61	21.7778	22.3301	22.8941	105	4.4811	4.6672	4.8606
62	20.9310	21.4702	22.0211	106	4.3437	4.5255	4.7144
63	20.1425	20.6693	21.2077	107	4.1957	4.3728	4.5570
64	19.4022	19.9170	20.4434	108	4.0681	4.2411	4.4211
65	18.6554	19.1578	19.6718	109	3.9302	4.0988	4.2742
66	17.9761	18.4670	18.9695	110	3.8116	3.9763	4.1477
67	17.2889	17.7679	18.2583	111	3.6972	3.8581	4.0256
68	16.6652	17.1332	17.6125	112	3.5866	3.7438	3.9075
69	16.0322	16.4887	16.9565	113	3.4798	3.6335	3.7935
70	15.4593	15.9052	16.3623	114	3.3767	3.5269	3.6833
71	14.8826	15.3177	15.7638	115	3.2771	3.4238	3.5768
72	14.3094	14.7335	15.1685	116	3.1809	3.3243	3.4738
73	13.7722	14.1857	14.6101	117	3.0879	3.2280	3.3742
74	13.2883	13.6921	14.1067	118	2.9980	3.1350	3.2779
75	12.7988	13.1926	13.5972	119	2.9112	3.0451	3.1848
76	12.3532	12.7378	13.1330	120	2.8272	2.9581	3.0947
77	11.8954	12.2703	12.6558	121	2.7460	2.8740	3.0076
78	11.4850	11.8511	12.2276	122	2.6675	2.7926	2.9233
79	11.0677	11.4247	11.7920	123	2.5916	2.7139	2.8417
80	10.6894	11.0380	11.3968	124	2.5181	2.6377	2.7627
81	10.3258	10.6662	11.0166	125	2.4471	2.5640	2.6863

6、 样品检验报告（如需）SAMPLE INSPECTION REPORT(IF REQUIRED)

检验日期 DATE		环境温度 ENVIRONMENTAL TEMPERATURE		样品数量 SAMPLE QUANTITY	
规格型号 PART TYPE		环境湿度 ENVIRONMENTAL HUMIDITY		抽样数量 SAMPLING QUANTITY	
电性能 ELECTRICAL SPECIFICATION			尺寸 DIMENSION (单位: mm) UNIT :mm		
编号 SEQUENCE	R ₂₅ (KΩ)	B _{25/50} (K)	L	W	T
(1)					
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					
(11)					
(12)					
(13)					
(14)					
(15)					
(16)					
(17)					
(18)					
(19)					
(20)					
判定 JUDGMENT					
外观 APPEARANCE					
可焊性 SOLDERABILITY					
耐焊性 RESISTANCE TO SOLDERING HEAT					
综合判定 COMPREHENSIVE JUDGMENT					