

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 CHIP TYPE NTC THERMISTOR
规格型号 TYPE SPECIFICATION	SNC503B;4055H0603E
承认书版本号 APPROVAL SHEET VERSION	1.0
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		



修订履历

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1、规格型号 PART IDENTIFICATION

SN C 503 B₁ 4055 H 0603 E
 ① ② ③ ④ ④ ⑥ ⑦ ⑧

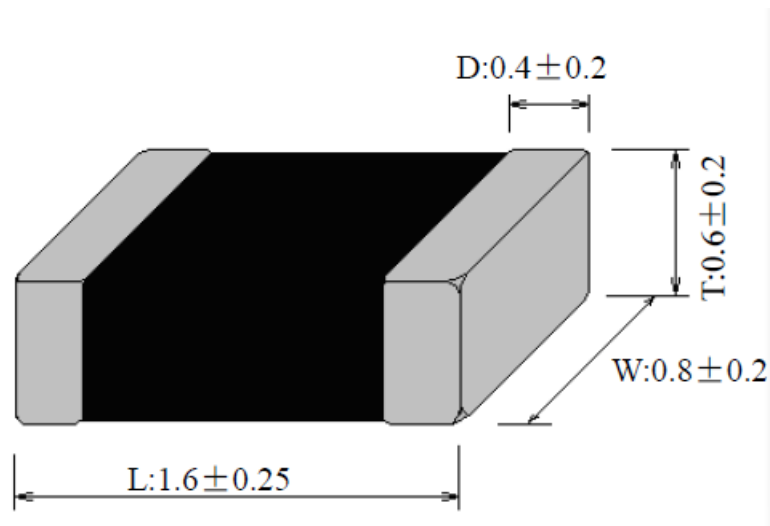
① 产品类别 PART NUMBER ENTIFICATION	SN指敏感型负温度系数热敏电阻;
	SN INDICATES SMD NTC THERMISTOR
② 系列类别 SERIES CATEGORY	C指贴片
	C REFERS TO THE PATCH
③ 产品阻值 (25°C零功率电阻值) PRODUCT RESISTANCE (25°C ZERO POWER RESISTANCE)	503指50KΩ
	503 MEANS 50 KΩ
④ B 值代码 B-VALUE CODE	B1指 25/50
	B1 MEANS 25/50
⑤ B 值数值 B-VALUE TOLERANCE	4055指B值为4055K
	4055 MEANS THAT B VALUE IS 4055K
⑥ 阻值误差 PACKAGING STYLE	H指±1%
	H MEANS ±1%
⑦ 本体尺寸 BODY SIZE	0603指2.2图所示尺寸
	0603 REFERS TO THE SIZE SHOWN IN FIGURE 2.2
⑧ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保产品。
	E STANDS FOR ENVIRONMENTALLY FRIENDLY PRODUCTS.

2、产品特性 PRODUCTION FEATURES

2.1 技术参数 TECHNICAL PARAMETER

型号规格 SPECIFICATION AND MODEL	额定零功率电阻值 RATED ZERO POWER RESISTANCE VALUE	B (K)	耗散系数 DISSIPATION COEFFICIENT (S)	热时间常数 THERMAL TIME CONSTANT (S)	额定功率 RATED POWER (mw)	工作温度范围 (°C)
SNC503B14055H0603E	50K	4055	≥ 2	≤ 3	200	-40~125

2.2 外形尺寸 PRODUCTION DIMENSION



(单位UNIT: MM)

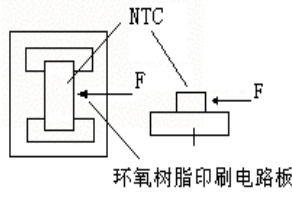
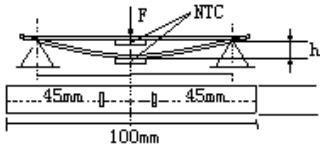
3、检验规则 INSPECTION REGULATIONS

3.1 出厂检验 DELIVERY INSPECTION

序号 SEQUENCE	检测项目 TEST ITEM	检验方法 INSPECTION METHOD	性能要求 PERFORMANCE REQUIREMENT
(1)	R ₂₅	将待测品置于 25°C 高精度油槽内稳定后 测量 THE PRODUCT TO BE MEASURED IS PLACED IN A 25°C HIGH PRECISION OIL TANK FOR STABILITY	50KΩ±3%
(2)	B _{25/50}	将待测品置于 25°C、50°C 精度油槽内稳 定后测量 THE PRODUCT TO BE TESTED IS PLACED IN A 25°C, 50°C PRECISION OIL TANK AND THEN MEASURED	4055K±1%
(3)	外观 APPEARANCE	在 20X 的显微镜下目测检查 VISUAL INSPECTION UNDER A 20X MICROSCOPE	产品符合 2.2 的外形要求，无腐蚀、 流挂、断片、崩边崩角等 THE PRODUCTS MEET THE REQUIREMENTS OF 2.2 SHAPE, NO CORROSION, FLOW HANGING, FRAGMENTATION, EDGE BREAKAGE, ETC
(4)	尺寸 DIMENSION	用精度不小于 0.01mm 的游标卡尺测量 MEASURE WITH VERNIER CALIPER WITH ACCURACY NOT LESS THAN 0.01MM	符合 2.2 的外形尺寸 CONFORM TO THE DIMENSIONS OF 2.2
(5)	可焊性 WELDABILITY	焊接温度 WELDING TEMPERATURE: 245± 5°C; 浸入时间 IMMERSION TIME: 3±1s	着锡面积 TIN AREA ≥ 95%

(6)	耐焊性 WELDING RESISTANCE	焊接温度 WELDING TEMPERATURE: $260 \pm 10^{\circ}\text{C}$ 浸入时间 IMMERSION TIME: $10 \pm 1\text{s}$	无外观损伤 NO APPEARANCE DAMAGE $ \Delta R_{25}/R_{25} \leq 5\%$
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3.2 型式检验 PATTERN INSPECTION

序号 SEQUENCE	检验项目 ITEMS	检验标准 STANDARD	检验标准 STANDARD	性能要求 PERFORMANCE REQUIREMENTS
(1)	端头强度 END STRENGTH	IEC68-2-21	 F: 0603 ≥ 8N	无外观损伤 NO COSMETIC DAMAGE
(2)	抗弯强度 BENDING STRENGTH	IEC68-2-21	 h: 1 ± 0.1mm	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25} / R_{25}$ ≤ 3%
(3)	跌落 FALL	IEC68-2-32	跌落高度 DROP HEIGHT: 1.0 ± 0.1m 跌落次数 NUMBER OF DROPS: 1 跌落面 DROP SURFACE: 水泥 CEMENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25} / R_{25}$ ≤ 1% $\Delta B / B$ ≤ 2%
(4)	湿热负载 DAMP-HEAT LOAD	IEC68-2-2/IEC68-2-3/CNS5550	温度 TEMPERATURE: 40 ± 2°C 湿度 HUMIDNESS: 90 ~ 95% RH 时间 TIME: 500 ± 12h; 工作电流 WORKING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25} / R_{25}$ ≤ 5% $\Delta B / B$ ≤ 2%
(5)	高温存储 HIGH TEMPERATURE STORAGE	IEC68-2-2/CNS5550	温度 TEMPERATURE: 125 ± 2°C 时间 TIME: 1000 ± 24h	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25} / R_{25}$ ≤ 5% $\Delta B / B$ ≤ 2%
(6)	冷热冲击 THERMAL SHOCK	IEC68-2-14	温度 TEMPERATURE: -40 ± 2°C 周期 PERIOD: 100, 30min/cyc	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25} / R_{25}$ ≤ 5% $\Delta B / B$ ≤ 2%
(7)	低温存储 LOW TEMPERATURE	IEC68-2-1	温度 TEMPERATURE: -40 ± 2°C 时间 TIME: 1000 ± 24h	无外观损伤 NO COSMETIC DAMAGE

	STORAGE			$ \Delta R_{25}/R_{25} \leq 2\%$ $ \Delta B/B \leq 2\%$
(8)	耐久性 DURABILITY	UL1434	环境温度 ENVIRONMENT TEMPERATURE: $25 \pm 2^\circ\text{C}$ 工作电流 WORKING CURRENT 周期 PERIOD: 6000	无外观损伤 NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \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 QUANTITY OF PRODUCT
(1)	编带 BRAID	0603纸带, 标准带轮 0603 PAPER TAPE, STANDARD PULLEY	4000PCS
(2)	内包装盒 INNER BOX	纸箱CARTON, L×W×H=185mm×70mm×190mm	
(3)	外包装箱 OUTER PACKING BOX	纸箱CARTON, L×W×H=370mm×205mm×215mm	

4.2 贮存 STORAGE

产品密封保存, 存放产品的产库环境温度-10℃~+40℃、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℃~+40℃
- 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

 $R_{25}=50K\Omega\pm3\%$
 $B_{25/50}=4055K\pm1\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	1904.6097	2037.6797	2178.0848	-1	172.7295	180.3710	188.1811
-39	1774.0789	1896.6684	2025.9040	0	163.8100	170.9653	178.2726
-38	1653.4454	1766.4422	1885.4627	1	155.4074	162.1094	168.9483
-37	1541.8907	1646.1020	1755.7748	2	147.4887	153.7680	160.1703
-36	1438.6694	1534.8296	1635.9435	3	140.0231	145.9080	151.9034
-35	1343.1021	1431.8801	1525.1524	4	132.9821	138.4989	144.1147
-34	1254.5692	1336.5744	1422.6582	5	126.3390	131.5121	136.7738
-33	1172.5054	1248.2932	1327.7836	6	120.0690	124.9211	129.8523
-32	1096.3944	1166.4714	1239.9106	7	114.1489	118.7011	123.3238
-31	1025.7643	1090.5931	1158.4757	8	108.5572	112.8291	117.1637
-30	960.1837	1020.1868	1082.9640	9	103.2737	107.2837	111.3490
-29	899.2581	954.8214	1012.9054	10	98.2797	102.0446	105.8585
-28	842.6260	894.1025	947.8699	11	93.5576	97.0934	100.6721
-27	789.9565	837.6691	887.4640	12	89.0911	92.4124	95.7713
-26	740.9462	785.1905	831.3278	13	84.8649	87.9855	91.1386
-25	695.3169	736.3635	779.1314	14	80.8647	83.7973	86.7580
-24	652.8131	690.9102	730.5726	15	77.0771	79.8336	82.6142
-23	613.2004	648.5755	685.3741	16	73.4895	76.0811	78.6932
-22	576.2633	609.1253	643.2817	17	70.0904	72.5274	74.9816
-21	541.8039	572.3442	604.0618	18	66.8687	69.1608	71.4671
-20	509.6399	538.0345	567.4998	19	63.8142	65.9705	68.1382
-19	479.6038	506.0143	533.3987	20	60.9173	62.9461	64.9840
-18	451.5410	476.1161	501.5769	21	58.1690	60.0782	61.9943
-17	425.3094	448.1859	471.8677	22	55.5607	57.3578	59.1597
-16	400.7779	422.0815	444.1174	23	53.0847	54.7765	56.4712
-15	377.8255	397.6720	418.1844	24	50.7335	52.3263	53.9206
-14	356.3405	374.8368	393.9383	25	48.5000	50.0000	51.5000
-13	336.2201	353.4644	371.2587	26	46.3359	47.7906	49.2465
-12	317.3688	333.4519	350.0346	27	44.2808	45.6915	47.1047
-11	299.6989	314.7043	330.1636	28	42.3287	43.6967	45.0683
-10	283.1288	297.1339	311.5510	29	40.4738	41.8004	43.1316
-9	267.5834	280.6593	294.1093	30	38.7108	39.9972	41.2892
-8	252.9929	265.2056	277.7577	31	37.0345	38.2820	39.5359
-7	239.2928	250.7032	262.4212	32	35.4404	36.6502	37.8671
-6	226.4234	237.0876	248.0307	33	33.9239	35.0971	36.2781
-5	214.3291	224.2993	234.5221	34	32.4808	33.6185	34.7648
-4	202.9586	212.2829	221.8359	35	31.1072	32.2106	33.3231
-3	192.2641	200.9872	209.9170	36	29.7993	30.8695	31.9492
-2	182.2015	190.3647	198.7146	37	28.5537	29.5917	30.6397

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
38	27.3671	28.3738	29.3911	82	5.2567	5.5399	5.8330
39	26.2364	27.2129	28.2003	83	5.0852	5.3608	5.6463
40	25.1586	26.1058	27.0643	84	4.9200	5.1884	5.4665

41	24.1311	25.0499	25.9804	85	4.7610	5.0223	5.2932
42	23.1511	24.0425	24.9457	86	4.6079	4.8624	5.1263
43	22.2162	23.0811	23.9580	87	4.4604	4.7083	4.9655
44	21.3243	22.1634	23.0147	88	4.3183	4.5598	4.8104
45	20.4729	21.2871	22.1137	89	4.1815	4.4167	4.6609
46	19.6602	20.4502	21.2529	90	4.0496	4.2787	4.5168
47	18.8840	19.6508	20.4302	91	3.9225	4.1458	4.3778
48	18.1427	18.8868	19.6438	92	3.8000	4.0175	4.2437
49	17.4345	18.1567	18.8918	93	3.6818	3.8938	4.1144
50	16.7577	17.4587	18.1727	94	3.5679	3.7746	3.9896
51	16.1108	16.7913	17.4847	95	3.4581	3.6595	3.8691
52	15.4922	16.1528	16.8265	96	3.3521	3.5484	3.7529
53	14.9007	15.5421	16.1965	97	3.2499	3.4413	3.6406
54	14.3349	14.9577	15.5934	98	3.1512	3.3378	3.5323
55	13.7935	14.3983	15.0160	99	3.0560	3.2380	3.4277
56	13.2754	13.8627	14.4629	100	2.9642	3.1416	3.3266
57	12.7795	13.3499	13.9331	101	2.8754	3.0485	3.2290
58	12.3047	12.8587	13.4255	102	2.7898	2.9585	3.1347
59	11.8500	12.3881	12.9390	103	2.7071	2.8717	3.0436
60	11.4144	11.9372	12.4727	104	2.6272	2.7878	2.9555
61	10.9971	11.5050	12.0255	105	2.5500	2.7067	2.8704
62	10.5971	11.0907	11.5967	106	2.4754	2.6283	2.7881
63	10.2138	10.6934	11.1854	107	2.4034	2.5525	2.7085
64	9.8463	10.3124	10.7907	108	2.3338	2.4793	2.6316
65	9.4939	9.9468	10.4120	109	2.2665	2.4085	2.5572
66	9.1559	9.5961	10.0485	110	2.2014	2.3400	2.4852
67	8.8316	9.2596	9.6996	111	2.1385	2.2738	2.4155
68	8.5204	8.9365	9.3645	112	2.0776	2.2097	2.3482
69	8.2218	8.6263	9.0426	113	2.0188	2.1478	2.2829
70	7.9351	8.3285	8.7335	114	1.9619	2.0878	2.2198
71	7.6599	8.0424	8.4364	115	1.9068	2.0298	2.1587
72	7.3955	7.7675	8.1509	116	1.8535	1.9736	2.0996
73	7.1416	7.5035	7.8765	117	1.8020	1.9193	2.0423
74	6.8977	7.2497	7.6127	118	1.7521	1.8666	1.9869
75	6.6633	7.0057	7.3591	119	1.7037	1.8156	1.9332
76	6.4380	6.7711	7.1151	120	1.6570	1.7663	1.8811
77	6.2214	6.5456	6.8804	121	1.6117	1.7185	1.8307
78	6.0132	6.3286	6.6546	122	1.5678	1.6722	1.7819
79	5.8129	6.1199	6.4373	123	1.5254	1.6273	1.7346
80	5.6203	5.9191	6.2282	124	1.4842	1.5839	1.6887
81	5.4350	5.7259	6.0269	125	1.4444	1.5417	1.6442