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	SNC103B$_1$3950J0603EK
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

REVISION LIST			
版 本 EDITION	修订时间 REVISION TIME	制 定 FORMULATE	修 订 内 容 REVISED CONTENT
1.0	2021-05-28	李宝健 LI BAOJIAN	初始发行 INITIAL ISSUE

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1、 规格型号 PART IDENTIFICATION

SN	C	103	B1	3950	J	0603	E	K
①	②	③	④	④	⑥	⑦	⑧	⑨

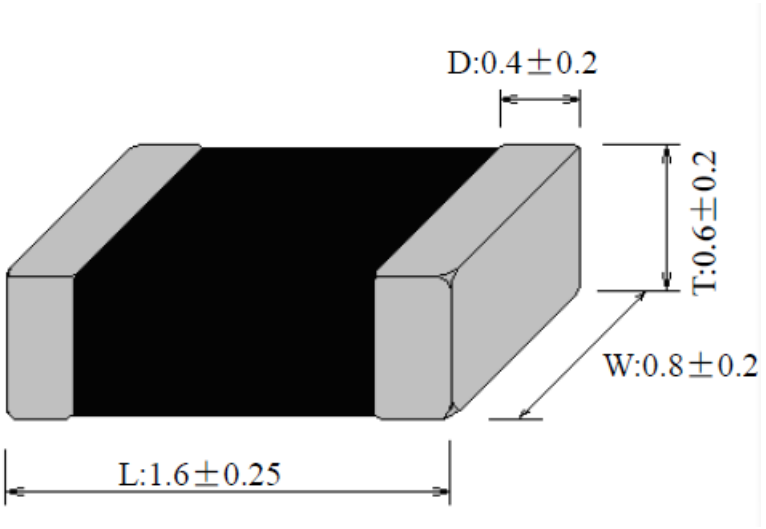
① **产品类别** **PART NUMBER ENTIFICATION**	SN指敏感型负温度系数热敏电阻
	SN INDICATES SMD NTC THERMISTOR
② **系列类别** **SERIES CATEGORY**	C指贴片
	C REFERS TO THE PATCH
③ **产品阻值（25℃零功率电阻值）** **PRODUCT RESISTANCE (25℃ ZERO POWER RESISTANCE)**	103指10KΩ
	103 MEANS 10 KΩ
④ **B 值代码** **B-VALUE CODE**	B1指 25/50
	B1 MEANS 25/50
⑤ **B 值数值** **B-VALUE TOLERANCE**	3950指B值为3950K
	3950 MEANS THAT B VALUE IS 3950K
⑥ **阻值误差** **PACKAGING STYLE**	J指±5%
	J REFERS TO ±5%
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.
⑨ **特殊定义** **SPECIAL DEFINITION**	K表示产品阻值公差为±5%，B值公差为±1%。
	K MEANS THE TOLERANCE OF THE PRODUCT RESISTANCE VALUE IS ±5%, AND THE TOLERANCE OF THE B VALUE IS ±1%.

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 (℃)
SNC103B3950J0603EK	10K	3950	≥2	≤3	200	-40~125

2.2 外形尺寸PRODUCTION DIMENSION



（单位UNIT：MM）

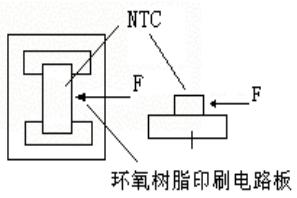
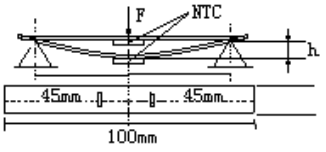
3、 检验规则 INSPECTION REGULATIONS

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℃高精度油槽内稳定后测量 THE PRODUCT TO BE MEASURED IS PLACED IN A 25℃ HIGH PRECISION OIL TANK FOR STABILITY	10KΩ±5%
(2)	$B_{25/50}$	将待测品置于25℃、50℃精度油槽内稳定后测量 THE PRODUCT TO BE TESTED IS PLACED IN A 25℃, 50℃ PRECISION OIL TANK AND THEN MEASURED	3950K±3%
(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℃; 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±10℃ 浸入时间 IMMERSION TIME：10±1s	无外观损伤，着锡面积≥75% NO APPEARANCE DAMAGE, TIN AREA ≥75% $\lvert \triangle R_{25}/R_{25} \rvert \leq 5\%$

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 | $\triangle R_{25}/R_{25}$ | ≤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 | $\triangle R_{25}/R_{25}$ | ≤1% | △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 | $\triangle R_{25}/R_{25}$ | ≤5% | △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 | $\triangle R_{25}/R_{25}$ | ≤5% | △B/ B | ≤2%
(6)	冷热冲击 THERMAL SHOCK	IEC68-2-14	温度 TEMPERATURE：-40±125°C; 周期 PERIOD：100,30min/cyc	无外观损伤 NO COSMETIC DAMAGE | $\triangle R_{25}/R_{25}$ | ≤5% | △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			｜△R_{25}/ R_{25}｜≤2% ｜△B/ B｜≤2%
(8)	耐久性 DURABILITY	UL1434	环境温度 ENVIRONMENT TEMPERATURE：25±2°C 工作电流 WORKING CURRENT 周期 PERIOD：6000	无外观损伤 NO COSMETIC DAMAGE ｜△R_{25}/ R_{25}｜≤5% ｜△B/ B｜≤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°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}=10KΩ±5%
$B_{25/50}$=3950K±1%

T(℃)	R_{Min}(KΩ)	R_{Nor}(KΩ)	R_{Max}(KΩ)	T(℃)	R_{Min}(KΩ)	R_{Nor}(KΩ)	R_{Max}(KΩ)
-40	356.5235	389.2846	423.9935	-1	33.0564	35.2372	37.4680
-39	332.1971	362.4640	394.4998	0	31.3740	33.4262	35.5236
-38	309.7133	337.6925	367.2789	1	29.7884	31.7203	33.6930
-37	288.9196	314.7993	342.1396	2	28.2934	30.1126	31.9687
-36	269.6771	293.6287	318.9083	3	26.8830	28.5968	30.3438
-35	251.8593	274.0391	297.4267	4	25.5523	27.1673	28.8122
-34	235.3508	255.9015	277.5510	5	24.2960	25.8185	27.3678
-33	220.0462	239.0981	259.1500	6	23.1097	24.5454	26.0051
-32	205.8495	223.5216	242.1040	7	21.9889	23.3433	24.7191
-31	192.6729	209.0740	226.3041	8	20.9298	22.2078	23.5050
-30	180.4360	195.6657	211.6504	9	19.9284	21.1348	22.3582
-29	169.0654	183.2149	198.0522	10	18.9813	20.1205	21.2747
-28	158.4939	171.6466	185.4261	11	18.0852	19.1613	20.2506
-27	148.6598	160.8923	173.6960	12	17.2373	18.2540	19.2824
-26	139.5067	150.8892	162.7924	13	16.4344	17.3954	18.3666
-25	130.9831	141.5799	152.6514	14	15.6739	16.5825	17.4999
-24	123.0412	132.9115	143.2147	15	14.9535	15.8128	16.6797
-23	115.6374	124.8355	134.4283	16	14.2706	15.0836	15.9030
-22	108.7319	117.3077	126.2435	17	13.6233	14.3926	15.1674
-21	102.2876	110.2871	118.6149	18	13.0086	13.7368	14.4695
-20	96.2708	103.7362	111.5010	19	12.4257	13.1152	13.8084
-19	90.6502	97.6204	104.8637	20	11.8726	12.5257	13.1816
-18	85.3972	91.9081	98.6681	21	11.3479	11.9666	12.5875
-17	80.4854	86.5699	92.8816	22	10.8496	11.4360	12.0239
-16	75.8902	81.5789	87.4748	23	10.3765	10.9324	11.4893
-15	71.5893	76.9103	82.4202	24	9.9271	10.4542	10.9818
-14	67.5620	72.5412	77.6926	25	9.5000	10.0000	10.5000
-13	63.7889	68.4503	73.2687	26	9.0860	9.5684	10.0513
-12	60.2525	64.6182	69.1270	27	8.6926	9.1582	9.6246
-11	56.9364	61.0269	65.2478	28	8.3189	8.7683	9.2188
-10	53.8254	57.6597	61.6127	29	7.9635	8.3973	8.8326
-9	50.9056	54.5012	58.2049	30	7.6257	8.0445	8.4651
-8	48.1640	51.5371	55.0086	31	7.3042	7.7087	8.1152
-7	45.5885	48.7542	52.0094	32	6.9983	7.3890	7.7820
-6	43.1681	46.1403	49.1938	33	6.7072	7.0846	7.4645
-5	40.8925	43.6841	46.5496	34	6.4300	6.7946	7.1620
-4	38.7521	41.3751	44.0652	35	6.1659	6.5183	6.8736
-3	36.7380	39.2035	41.7299	36	5.9130	6.2535	6.5971
-2	34.8419	37.1603	39.5339	37	5.6718	6.0009	6.3332

T(℃)	R_{Min}(KΩ)	R_{Nor}(KΩ)	R_{Max}(KΩ)	T(℃)	R_{Min}(KΩ)	R_{Nor}(KΩ)	R_{Max}(KΩ)

38	5.4418	5.7599	6.0814	82	1.1339	1.2190	1.3072
39	5.2224	5.5299	5.8409	83	1.1002	1.1831	1.2691
40	5.0131	5.3104	5.6113	84	1.0677	1.1485	1.2323
41	4.8132	5.1008	5.3920	85	1.0365	1.1152	1.1969
42	4.6225	4.9006	5.1825	86	1.0070	1.0838	1.1636
43	4.4404	4.7094	4.9822	87	0.9787	1.0537	1.1316
44	4.2664	4.5267	4.7909	88	0.9514	1.0246	1.1006
45	4.1003	4.3522	4.6080	89	0.9252	0.9966	1.0708
46	3.9417	4.1855	4.4332	90	0.8999	0.9696	1.0421
47	3.7901	4.0260	4.2659	91	0.8755	0.9436	1.0144
48	3.6452	3.8736	4.1060	92	0.8521	0.9186	0.9878
49	3.5065	3.7277	3.9529	93	0.8295	0.8945	0.9622
50	3.3741	3.5883	3.8065	94	0.8077	0.8712	0.9374
51	3.2484	3.4559	3.6675	95	0.7867	0.8488	0.9135
52	3.1282	3.3293	3.5344	96	0.7665	0.8272	0.8905
53	3.0132	3.2081	3.4070	97	0.7470	0.8064	0.8683
54	2.9033	3.0922	3.2851	98	0.7282	0.7863	0.8469
55	2.7981	2.9812	3.1684	99	0.7101	0.7669	0.8262
56	2.6973	2.8749	3.0565	100	0.6927	0.7483	0.8064
57	2.6009	2.7731	2.9493	101	0.6744	0.7287	0.7854
58	2.5085	2.6756	2.8467	102	0.6567	0.7098	0.7653
59	2.4200	2.5821	2.7482	103	0.6395	0.6914	0.7456
60	2.3353	2.4926	2.6538	104	0.6230	0.6737	0.7267
61	2.2542	2.4069	2.5635	105	0.6070	0.6566	0.7085
62	2.1764	2.3246	2.4767	106	0.5915	0.6400	0.6907
63	2.1017	2.2456	2.3934	107	0.5766	0.6240	0.6736
64	2.0301	2.1699	2.3135	108	0.5622	0.6086	0.6572
65	1.9616	2.0973	2.2368	109	0.5482	0.5936	0.6411
66	1.8957	2.0276	2.1632	110	0.5347	0.5791	0.6256
67	1.8325	1.9606	2.0924	111	0.5216	0.5651	0.6107
68	1.7720	1.8965	2.0247	112	0.5091	0.5516	0.5962
69	1.7138	1.8348	1.9595	113	0.4968	0.5385	0.5822
70	1.6578	1.7755	1.8968	114	0.4850	0.5258	0.5686
71	1.6041	1.7185	1.8365	115	0.4736	0.5136	0.5555
72	1.5525	1.6638	1.7786	116	0.4627	0.5018	0.5429
73	1.5029	1.6111	1.7228	117	0.4519	0.4903	0.5306
74	1.4552	1.5605	1.6692	118	0.4417	0.4793	0.5188
75	1.4095	1.5120	1.6179	119	0.4318	0.4686	0.5073
76	1.3654	1.4651	1.5682	120	0.4222	0.4583	0.4963
77	1.3230	1.4201	1.5205	121	0.4129	0.4483	0.4856
78	1.2822	1.3767	1.4745	122	0.4039	0.4387	0.4753
79	1.2430	1.3350	1.4303	123	0.3953	0.4294	0.4653
80	1.2052	1.2948	1.3876	124	0.3869	0.4204	0.4556
81	1.1689	1.2562	1.3467	125	0.3788	0.4117	0.4463