

产品承认书

PRODUCT SPECIFICATION FOR APPROVAL

客户名称 CUSTOMER NAME	
客户料号 P/N OF CUSTOMER	3403008302
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	SNC153B14110F0603E
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	153	B1	4110	F	0603	E
①	②	③	④	⑤	⑥	⑦	⑧

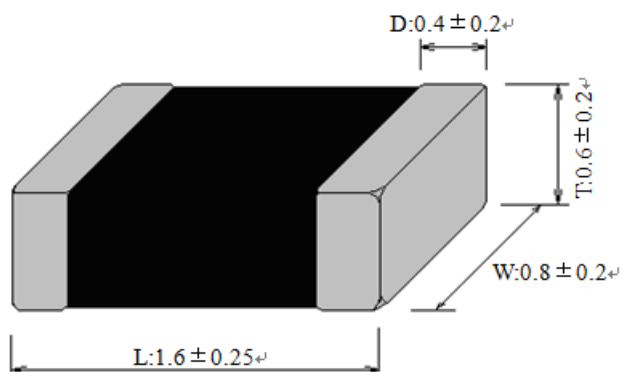
① 产品类别 PRODUCT CATEGORY	SN指敏感型负温度系数热敏电阻;
	SN INDICATES SMD NTC THERMISTOR
② 系列类别 SERIES CATEGORY	C指贴片;
	C IS FOR PATCH
③ 产品阻值 (25°C零功率电阻值) PRODUCT RESISTANCE VALUE (ZERO POWER RESISTANCE VALUE OF 25°C)	153指15KΩ;
	153 MEANS 15 KΩ;
④ B值代码 B-VALUE CODE	B _i 指25/50;
	B1 IS 25/50;
⑤ B值数值 B-VALUE	4110指B值为4110k;
	4110 MEANS THAT B VALUE IS 4110 K;
⑥ 阻值误差 RESISTANCE ERROR	F指±1%;
	F 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 IS FOR ENVIRONMENTALLY FRIENDLY PRODUCTS.

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 R25(Ω)	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 ONSTANT	额定功率 Max POWER RATING AT 25°C(mw)	工作温度范围 OPERATING TEMPERATURE RANGE (°C)
SNC153B:4110F0603E	15K	4110	≥ 2	≤ 3	200	-40 ~ 125

2.2 外形尺寸 PRODUCTION DIMENSION



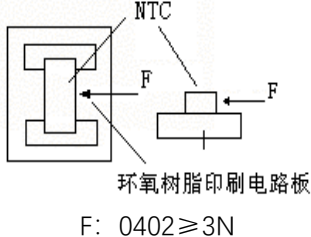
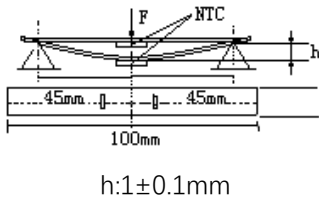
(单位UNIT: MM)

3、检验规则 INSPECTION REGULATIONS

3.1 出厂检验 DELIVERY INSPECTION

序号 SEQUENCE	检测项目 TEST ITEM	检测方法 DETECTION METHOD	性能要求 PERFORMANCE REQUIREMENT
(1)	R_{25}	将待测评置于25°C高精度油槽内稳定后测量 TO BE MEASURED IN 25°C HIGH PRECISION OIL TANK STABILITY AFTER MEASUREMENT	$15K\Omega \pm 1\%$
(2)	$B_{25/50}$	将待测评置于25°C、50°C高精度油槽内稳定后测量 TO BE MEASURED IN 25°C, 50°C HIGH PRECISION OIL TANK STABILITY AFTER MEASUREMENT	$4110K \pm 1\%$
(3)	外观 APPEARANCE	在20X的显微镜下目测检查 VISUAL EXAMINATION 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 PRODUCT CONFORMS TO THE SHAPE REQUIREMENTS OF 2.2, WITHOUT 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	产品符合2.2的外形尺寸 THE PRODUCT CONFORMS TO 2.2 DIMENSIONS
(5)	可焊性 WELDABILITY	焊接温度 WELDING TEMPERATURE: $245 \pm 5^{\circ}\text{C}$; 浸入时间 IMMERSION TIME: $3 \pm 1\text{s}$	着锡面积 TIN AREA $\geq 95\%$
(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, 着锡面积 NO APPEARANCE DAMAGE, TIN AREA $\geq 75\%$ $\Delta R_{25}/R_{25}$ $\leq 5\%$

3.2 型式检验PATTERN INSPECTION

序号 SEQUENCE	检验项目 INSPECTION ITEM	检验标准 INSPECTION STANDARD	检验方法 INSPECTION METHOD	性能要求 PERFORMANCE REQUIREMENT
(1)	端头强度 END STRENGTH	IEC68-2-21		无外观损伤 NO COSMETIC DAMAGE
(2)	抗弯强度 BENDING STRENGTH	IEC68-2-21		无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ $\leq 3\%$
(3)	跌落 FALL	IEC68-2-32	跌落高度 HEIGHT OF FALL: 1.0 ± 0.1m 跌落次数 NUMBER OF DROPS: 1 跌落面 FALLING SURFACE: 水泥 CEMENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ $\leq 1\%$ $\Delta B/\Delta B$ $\leq 2\%$
(4)	湿热负载 DAMP-HEAT LOAD	IEC68-2-2/ IEC68-2-3/CNS5550	温度 TEMPERATURE: -40°C, +125°C 周期 PERIOD: 100, 30min/cyc	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ $\leq 5\%$ $\Delta B/\Delta B$ $\leq 2\%$
(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 $\Delta R_{25}/R_{25}$ $\leq 5\%$ $\Delta B/\Delta B$ $\leq 2\%$
(6)	冷热冲击 COLD AND HEAT SHOCK	IEC68-2-14	温度 TEMPERATURE: -40°C ± 2°C 周期 PERIOD: 100, 30min/cyc	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ $\leq 5\%$ $\Delta B/\Delta B$ $\leq 2\%$
(7)	低温存储 LOW TEMPERATURE STORAGE	IEC68-2-1	温度 TEMPERATURE: -40 ± 2°C 时间 TIME: 1000 ± 24h	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ $\leq 5\%$ $\Delta B/\Delta B$ $\leq 2\%$

(8)	耐久性 DURABILITY	UL1434	环境温度 AMBIENT 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/\Delta B \leq 2\%$
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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 BRAID	0402纸带, 标准带轮 0402 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℃ ~ +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℃~+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.

6、电阻 – 温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABL

R25=100K Ω ±1%

B25/50=4050±1%

T(°C)	RMin(K Ω)	RNor(K Ω)	RMax(K Ω)	T(°C)	RMin(K Ω)	RNor(K Ω)	RMax(K Ω)
-40	685.7197	719.9855	755.8880	-1	55.8356	57.1591	58.5082
-39	637.6838	669.0582	701.9061	0	52.8229	54.0448	55.2894
-38	593.3341	622.0734	652.1395	1	49.9925	51.1205	52.2687
-37	552.3640	578.7005	606.2320	2	47.3264	48.3674	49.4264
-36	514.4945	538.6387	563.8596	3	44.7823	45.7418	46.7172
-35	479.4710	501.6143	524.7278	4	42.3951	43.2795	44.1779
-34	447.0617	467.3778	488.5682	5	40.1540	40.9692	41.7967
-33	417.0550	435.7016	455.1363	6	38.0491	38.8004	39.5627
-32	389.2576	406.3782	424.2092	7	36.0711	36.7636	37.4656
-31	363.4931	379.2181	395.5837	8	34.2116	34.8497	35.4962
-30	339.6002	354.0482	369.0740	9	32.4625	33.0505	33.6457
-29	316.8722	330.1222	343.8919	10	30.8166	31.3583	31.9063
-28	295.8300	307.9863	320.6101	11	29.2670	29.7659	30.2703
-27	276.3371	287.4944	299.0723	12	27.8090	28.2685	28.7326
-26	258.2690	268.5133	279.1361	13	26.4465	26.8699	27.2972
-25	241.5119	250.9215	260.6716	14	25.1595	25.5493	25.9426
-24	225.9619	234.6079	243.5603	15	23.9431	24.3019	24.6637
-23	211.5240	219.4711	227.6940	16	22.7932	23.1233	23.4558
-22	198.1111	205.4183	212.9737	17	21.7057	22.0092	22.3146
-21	185.6437	192.3647	199.3091	18	20.6754	20.9542	21.2346
-20	174.0489	180.2327	186.6175	19	19.7009	19.9568	20.2140
-19	163.2411	168.9315	174.8027	20	18.7787	19.0134	19.2491
-18	153.1810	158.4188	163.8194	21	17.8581	18.0722	18.2869
-17	143.8118	148.6345	153.6036	22	17.0112	17.2067	17.4026
-16	135.0817	139.5233	144.0966	23	16.2314	16.4101	16.5891
-15	126.9428	131.0345	135.2446	24	15.5118	15.6754	15.8391
-14	119.3511	123.1215	126.9982	25	14.8500	15.0000	15.1500
-13	112.2665	115.7414	119.3120	26	14.2055	14.3553	14.5053
-12	105.6515	108.8550	112.1443	27	13.5607	13.7100	13.8595
-11	99.4722	102.4259	105.4568	28	12.9559	13.1045	13.2534
-10	93.6970	96.4209	99.2141	29	12.3764	12.5240	12.6721
-9	88.3099	90.8228	93.3980	30	11.8213	11.9677	12.1147
-8	83.2687	85.5874	87.9619	31	11.2895	11.4345	11.5802
-7	78.5491	80.6888	82.8785	32	10.7802	10.9236	11.0679
-6	74.1286	76.1034	78.1229	33	10.3109	10.4527	10.5954
-5	69.9864	71.8090	73.6718	34	9.8651	10.0051	10.1462
-4	66.1031	67.7855	69.5038	35	9.4412	9.5794	9.7187
-3	62.4609	64.0140	65.5992	36	9.0382	9.1745	9.3119
-2	59.0435	60.4773	61.9396	37	8.6554	8.7897	8.9251

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	8.2907	8.4229	8.5563	82	1.6368	1.6899	1.7445
39	7.9439	8.0740	8.2054	83	1.5862	1.6381	1.6915
40	7.6136	7.7416	7.8709	84	1.5374	1.5881	1.6405
41	7.3010	7.4267	7.5539	85	1.4904	1.5401	1.5913
42	7.0033	7.1269	7.2519	86	1.4447	1.4934	1.5435
43	6.7199	6.8412	6.9641	87	1.4008	1.4484	1.4975
44	6.4498	6.5690	6.6897	88	1.3584	1.4050	1.4531
45	6.1925	6.3095	6.4280	89	1.3176	1.3632	1.4102
46	5.9472	6.0619	6.1783	90	1.2782	1.3229	1.3689
47	5.7133	5.8258	5.9400	91	1.2403	1.2840	1.3291
48	5.4902	5.6006	5.7126	92	1.2037	1.2465	1.2906
49	5.2739	5.3821	5.4919	93	1.1684	1.2103	1.2535
50	5.0575	5.1634	5.2709	94	1.1343	1.1753	1.2177
51	4.8633	4.9670	5.0724	95	1.1015	1.1416	1.1831
52	4.6777	4.7793	4.8827	96	1.0698	1.1091	1.1497
53	4.5005	4.6000	4.7013	97	1.0391	1.0776	1.1175
54	4.3312	4.4286	4.5278	98	1.0096	1.0473	1.0863
55	4.1694	4.2648	4.3619	99	0.9821	1.0191	1.0573
56	4.0146	4.1080	4.2032	100	0.9556	0.9918	1.0293
57	3.8667	3.9581	4.0513	101	0.9289	0.9644	1.0012
58	3.7251	3.8146	3.9059	102	0.9032	0.9379	0.9739
59	3.5897	3.6773	3.7667	103	0.8783	0.9123	0.9476
60	3.4601	3.5458	3.6333	104	0.8542	0.8876	0.9222
61	3.3360	3.4199	3.5055	105	0.8310	0.8637	0.8976
62	3.2172	3.2993	3.3831	106	0.8085	0.8405	0.8738
63	3.1034	3.1837	3.2657	107	0.7867	0.8181	0.8507
64	2.9943	3.0729	3.1532	108	0.7657	0.7965	0.8284
65	2.8898	2.9667	3.0453	109	0.7454	0.7755	0.8068
66	2.7896	2.8648	2.9418	110	0.7257	0.7552	0.7859
67	2.6936	2.7671	2.8425	111	0.7066	0.7356	0.7657
68	2.6014	2.6734	2.7471	112	0.6882	0.7166	0.7461
69	2.5130	2.5835	2.6556	113	0.6703	0.6982	0.7271
70	2.4282	2.4971	2.5677	114	0.6530	0.6803	0.7087
71	2.3468	2.4142	2.4833	115	0.6363	0.6630	0.6909
72	2.2687	2.3346	2.4022	116	0.6200	0.6463	0.6736
73	2.1936	2.2581	2.3243	117	0.6043	0.6301	0.6569
74	2.1215	2.1847	2.2494	118	0.5891	0.6144	0.6407
75	2.0523	2.1140	2.1774	119	0.5743	0.5991	0.6249
76	1.9857	2.0462	2.1082	120	0.5600	0.5844	0.6097
77	1.9218	1.9809	2.0416	121	0.5462	0.5700	0.5949
78	1.8603	1.9181	1.9775	122	0.5327	0.5561	0.5805
79	1.8011	1.8577	1.9159	123	0.5197	0.5427	0.5666
80	1.7442	1.7996	1.8566	124	0.5071	0.5296	0.5531
81	1.6895	1.7437	1.7994	125	0.4948	0.5169	0.5400