

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	SNC472B;3400G0805EL
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

[illegible]

目 录

CONTENTS

1、规格型号 PART IDENTIFICATION	1
2、产品特性 PRODUCTION FEATURES	2
2.1 技术参数 TECHNICAL PARAMETER	2
2.2 外形尺寸、材质 PRODUCTION DIMENSION、MATERIAL	2
3、检验规则 INSPECTION REGULATIONS	3
3.1 出厂检验 DELIVERY INSPECTION	3
3.2 型式检验 PATTERN INSPECTION	5
4、包装、贮存 PACKAGE & STORAGE	7
4.1 包装 PACKAGE	7
4.2 贮存 STORAGE	7
5、电阻-温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABLE	8

1、规格型号 PART IDENTIFICATION

SN C 472 B1 3400 G 0805 E L
 ① ② ③ ④ ④ ⑥ ⑦ ⑧ ⑨

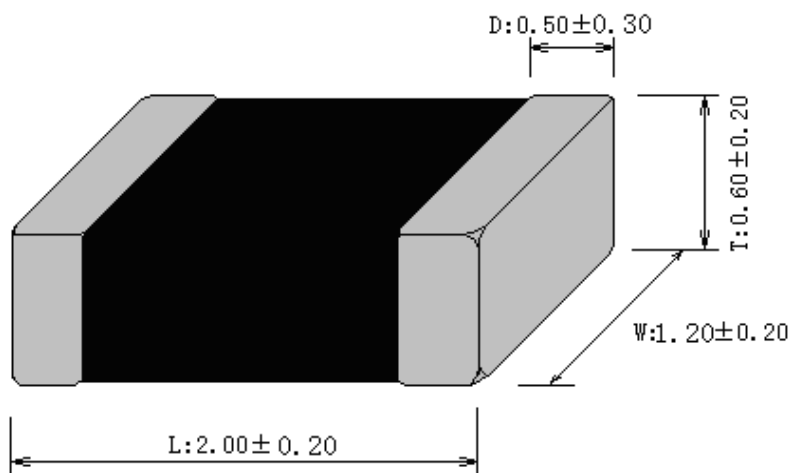
① 产品类别 PART NUMBER ENTIFICATION	SN指敏感型负温度系数热敏电阻;
	SN INDICATES SMD NTC THERMISTOR
② 系列类别 SERIES CATEGORY	C指贴片
	C REFERS TO THE PATCH
③ 产品阻值 (25°C零功率电阻值) PRODUCT RESISTANCE (25°C ZERO POWER RESISTANCE)	472指4.7KΩ
	472 MEANS 4.7KΩ;
④ B 值代码 B-VALUE CODE	B1指 25/50
	B1 MEANS 25/50
⑤ B 值数值 B-VALUE TOLERANCE	3400指B值为3400K
	3400 MEANS THAT B VALUE IS 3400K
⑥ 阻值误差 PACKAGING STYLE	G指±2%;
	G MEANS ±2%;
⑦ 本体尺寸 BODY SIZE	0805指2.2图所示尺寸
	0805 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	L表示产品阻值误差±2%，B指误差±3%。
	L MEANS THE PRODUCT RESISTANCE ERROR OF ±2%, B MEANS THE ERROR OF ±3%.

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)
SNC472B;3400G0805EL	4.7K	3400	≥ 3	≤ 5	300	-40~125

2.2 外形尺寸 PRODUCTION DIMENSION



(单位UNIT: MM)

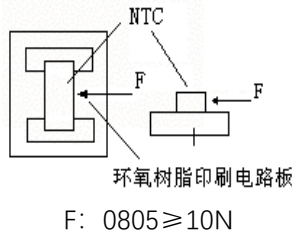
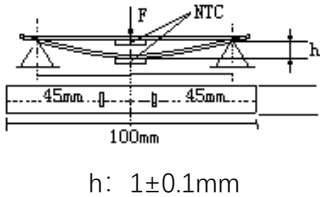
3、检验规则 INSPECTION REGULATIONS

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	4.7KΩ±2%
(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	3400K±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, 着锡面积 $\geq 75\%$ 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 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: 0805 ≥ 10N	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°C, +125°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	0805纸带, 标准带轮 0805 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

 $R_{25}=4.7K\Omega\pm 2\%$
 $B_{25/50}=3400K\pm 1\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	92.7198	103.8178	116.1976	-1	13.0434	13.7450	14.4786
-39	87.5018	97.7998	109.2661	0	12.4894	13.1435	13.8265
-38	82.6158	92.1748	102.7988	1	11.9624	12.5722	13.2078
-37	78.0384	86.9145	96.7614	2	11.4610	12.0293	12.6207
-36	73.7481	81.9927	91.1225	3	10.9837	11.5132	12.0634
-35	69.7248	77.3853	85.8530	4	10.5294	11.0225	11.5342
-34	65.9502	73.0701	80.9261	5	10.0966	10.5558	11.0315
-33	62.4072	69.0265	76.3174	6	9.6843	10.1117	10.5537
-32	59.0799	65.2357	72.0041	7	9.2914	9.6890	10.0997
-31	55.9539	61.6802	67.9653	8	8.9169	9.2866	9.6679
-30	53.0155	58.3437	64.1816	9	8.5597	8.9034	9.2572
-29	50.2523	55.2113	60.6354	10	8.2191	8.5384	8.8665
-28	47.6527	52.2692	57.3100	11	7.8940	8.1905	8.4947
-27	45.2059	49.5045	54.1903	12	7.5838	7.8589	8.1407
-26	42.9018	46.9055	51.2622	13	7.2877	7.5427	7.8035
-25	40.7313	44.4610	48.5127	14	7.0049	7.2412	7.4824
-24	38.6857	42.1608	45.9297	15	6.7348	6.9535	7.1764
-23	36.7571	39.9956	43.5021	16	6.4767	6.6789	6.8847
-22	34.9379	37.9565	41.2194	17	6.2301	6.4169	6.6066
-21	33.2213	36.0354	39.0722	18	5.9943	6.1666	6.3414
-20	31.6007	34.2246	37.0515	19	5.7688	5.9277	6.0884
-19	30.0703	32.5171	35.1490	20	5.5531	5.6993	5.8470
-18	28.6244	30.9064	33.3571	21	5.3468	5.4811	5.6166
-17	27.2578	29.3864	31.6686	22	5.1493	5.2726	5.3966
-16	25.9657	27.9514	30.0769	23	4.9603	5.0732	5.1865
-15	24.7435	26.5961	28.5759	24	4.7793	4.8824	4.9858
-14	23.5871	25.3155	27.1597	25	4.6060	4.7000	4.7940
-13	22.4924	24.1051	25.8232	26	4.4299	4.5254	4.6212
-12	21.4557	22.9606	24.5613	27	4.2615	4.3583	4.4556
-11	20.4738	21.8781	23.3693	28	4.1005	4.1984	4.2969
-10	19.5432	20.8536	22.2431	29	3.9465	4.0452	4.1447
-9	18.6610	19.8839	21.1784	30	3.7991	3.8985	3.9988
-8	17.8245	18.9656	20.1717	31	3.6581	3.7579	3.8589
-7	17.0308	18.0957	19.2194	32	3.5231	3.6232	3.7246
-6	16.2777	17.2713	18.3181	33	3.3939	3.4941	3.5958
-5	15.5628	16.4897	17.4650	34	3.2701	3.3703	3.4721
-4	14.8838	15.7486	16.6570	35	3.1515	3.2515	3.3534
-3	14.2389	15.0456	15.8916	36	3.0378	3.1377	3.2394
-2	13.6260	14.3784	15.1662	37	2.9289	3.0284	3.1300

T(°C)	R _{Min} (KΩ)	R _{No} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{No} (KΩ)	R _{Max} (KΩ)
38	2.8245	2.9235	3.0248	82	0.6869	0.7409	0.7988
39	2.7244	2.8229	2.9237	83	0.6676	0.7207	0.7776
40	2.6284	2.7263	2.8266	84	0.6489	0.7011	0.7571
41	2.5363	2.6335	2.7332	85	0.6309	0.6821	0.7373
42	2.4480	2.5443	2.6434	86	0.6134	0.6638	0.7180
43	2.3631	2.4587	2.5571	87	0.5965	0.6460	0.6993
44	2.2817	2.3764	2.4740	88	0.5801	0.6288	0.6813
45	2.2035	2.2973	2.3941	89	0.5643	0.6121	0.6637
46	2.1285	2.2213	2.3172	90	0.5490	0.5960	0.6467
47	2.0563	2.1482	2.2432	91	0.5341	0.5803	0.6302
48	1.9870	2.0779	2.1720	92	0.5197	0.5651	0.6143
49	1.9205	2.0102	2.1033	93	0.5058	0.5504	0.5987
50	1.8565	1.9451	2.0373	94	0.4923	0.5362	0.5837
51	1.7949	1.8825	1.9736	95	0.4792	0.5223	0.5691
52	1.7357	1.8222	1.9123	96	0.4666	0.5089	0.5549
53	1.6788	1.7642	1.8532	97	0.4543	0.4959	0.5412
54	1.6241	1.7083	1.7962	98	0.4424	0.4833	0.5278
55	1.5714	1.6545	1.7413	99	0.4309	0.4711	0.5149
56	1.5207	1.6026	1.6883	100	0.4197	0.4592	0.5023
57	1.4719	1.5527	1.6372	101	0.4089	0.4477	0.4901
58	1.4249	1.5045	1.5880	102	0.3984	0.4366	0.4782
59	1.3797	1.4581	1.5404	103	0.3882	0.4257	0.4667
60	1.3361	1.4134	1.4946	104	0.3783	0.4152	0.4555
61	1.2941	1.3703	1.4503	105	0.3687	0.4050	0.4446
62	1.2537	1.3287	1.4076	106	0.3594	0.3950	0.4340
63	1.2147	1.2885	1.3663	107	0.3504	0.3854	0.4237
64	1.1771	1.2498	1.3265	108	0.3416	0.3760	0.4137
65	1.1409	1.2125	1.2880	109	0.3331	0.3669	0.4040
66	1.1060	1.1764	1.2509	110	0.3249	0.3581	0.3946
67	1.0723	1.1416	1.2150	111	0.3168	0.3495	0.3854
68	1.0398	1.1080	1.1803	112	0.3091	0.3412	0.3765
69	1.0085	1.0756	1.1467	113	0.3015	0.3331	0.3678
70	0.9782	1.0443	1.1143	114	0.2942	0.3252	0.3594
71	0.9490	1.0140	1.0830	115	0.2870	0.3175	0.3512
72	0.9209	0.9848	1.0527	116	0.2801	0.3101	0.3432
73	0.8937	0.9565	1.0234	117	0.2734	0.3029	0.3354
74	0.8674	0.9292	0.9950	118	0.2668	0.2958	0.3278
75	0.8420	0.9028	0.9676	119	0.2605	0.2890	0.3205
76	0.8175	0.8773	0.9411	120	0.2543	0.2823	0.3133
77	0.7939	0.8526	0.9154	121	0.2483	0.2758	0.3063
78	0.7710	0.8288	0.8905	122	0.2424	0.2695	0.2995
79	0.7489	0.8057	0.8665	123	0.2368	0.2634	0.2929
80	0.7275	0.7834	0.8432	124	0.2312	0.2574	0.2865
81	0.7069	0.7618	0.8206	125	0.2259	0.2516	0.2802