

APPROVAL SHEET

Customer	
Customer P/N	
Approved P/N	
Product name	Chip Type NTC Thermistor
Part number	SNC103B₁3435J0603E
Version	4.0
REV. date	

Manufacturer		
Checked by	Audit	Approval
Supplier seal		

Customer		
Checked by	Audit	Approval
Customer seal		

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1、 Part number

SN C 103 B₁ 3435 J 0603 E
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Product type:SN refers to Compensation Type NTC;
- ② Series type:C refers to Chip NTC thermistor;
- ③ Product resistance (the resistance value of 25°C zero power):103 refers to 10KΩ;
- ④ B-value code: B₁ refers to B_{25/50};
- ⑤ B-value:3435 refers to the B-value is 3435K;
- ⑥ Resistance tolerance:J refers to ±5%;
- ⑦ Dimensions:0603 figures the size of 2.2 chart;
- ⑧ Environment product:E refers to environment protection.

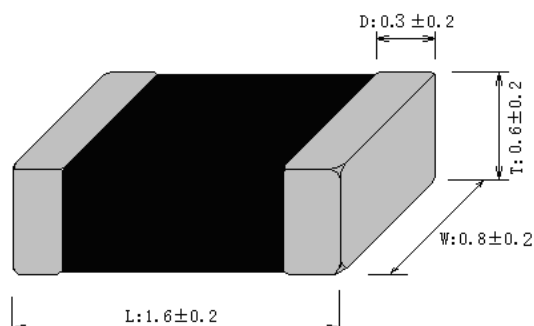
2、 Product characteristics

2.1 Electrical characteristics

Part number	The resistance value of zero power R ₂₅ (Ω)	B value(K)	Dissipation factor (mw/°C)	Hot time-constant (S)	Rated power (mw)	Operating temperature (°C)
SNC103B ₁ 3435J0603E	10K	3435	≥2	≤3	200	-40~125

2.2 Dimensions

(unit: mm)

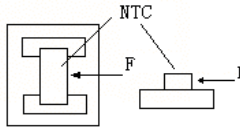
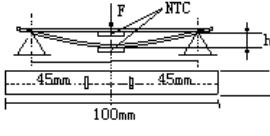


3、 Inspection rules

3.1 Ship inspection

Item	Inspect item	Test conditions/Methods	Specifications	Inspect level	AQL
(1)	R ₂₅	High-precision oil tank	10KΩ±5%	II	0.15
(2)	B _{25/50}	High-precision oil tank	3435K ±3%	II	1.0
(3)	Appearance	20X Microscope	Products accord with requirements of 2.2 chart, Appearance requirement: no couresion,hanged class fragment,couapsed side and corner	II	0.65
(4)	Size	Vernier caliper	The part is fit to picture 2.2 external size	II	1.0
(5)	Solderability	Solder Temperature: 260±5℃; Dipping Time: 3±1s	Terminal electrode is covered by new solder ≥95%	S-2	0.65
(6)	Resistance to Soldering	Solder Temperature: 280±10℃ Dipping Time: 10±1s	No visible damage ΔR ₂₅ / R ₂₅ ≤10%	S-2	0.65

3.2 Reliability

Item	Inspect item	Insect standard	Test conditions/Methods	Specifications
(1)	Terminal Strength	IEC68-2-21	 <p>F: 0402≥3N, 0603≥8N, 0805≥10N</p>	No visible damage
(2)	Flexture strength	IEC68-2-21	 <p>h: 1±0.1mm</p>	No visible damage ΔR ₂₅ / R ₂₅ ≤3%
(3)	Free fall	IEC68-2-32	Dropped Height: 1.0±0.1m ; Dropped Times: 1 ; Floor: Concrete	No visible damage ΔR ₂₅ / R ₂₅ ≤1% ΔB/ B ≤2%

Item	Inspect item	Insect standard	Test conditions/Methods	Specifications
(4)	Humidity load	IEC68-2-2/ IEC68-2-3 /CNS5550	Temperature: $40 \pm 2^{\circ}\text{C}$; Humidity: 90~95%RH; Time: $500 \pm 12\text{h}$; working current	No visible damage $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(5)	High temperature load	IEC68-2-2/ CNS5550	Temperature: $125 \pm 2^{\circ}\text{C}$; Time: $1000 \pm 24\text{h}$; working current	No visible damage $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(6)	Cold thermal cycling	IEC68-2-14	Temperature: -40°C , $+125^{\circ}\text{C}$; Cycle: 100, 30min/cyc	No visible damage $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(7)	Cold storage	IEC68-2-1	Temperature: $-40 \pm 2^{\circ}\text{C}$; Time: $1000 \pm 24\text{h}$	No visible damage $ \Delta R_{25}/R_{25} \leq 2\%$ $ \Delta B/B \leq 2\%$
(8)	Endurance	UL1434	Environment temperature: $25 \pm 2^{\circ}\text{C}$; working current Cycle: 6000	No visible damage $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$

4、Package、Storage

4.1 Package

NO.	Packing	Packing material, size	Product quantity
(1)	Arranges the belt	0603 paper tapes, standard brede	
(2)	In packing box	Paper box, $L \times W \times H = 185\text{mm} \times 70\text{mm} \times 190\text{mm}$	
(3)	Outside wrapping box	Paper box, $L \times W \times H = 370\text{mm} \times 205\text{mm} \times 215\text{mm}$	

4.2 Storage condition of products

- Storage temperature: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
- relative humidity: $\leq 70\%$
- Thermistors must be kept away from sunlight and store in a non-corrosive atmosphere and no strong mechanical vibration, impact and the role of strong radiation, the box should elevate the ground at least 20cm, from the walls, heat, cold source, window or air intake of at least 50cm.

5、 Sample inspection report

Inspect date		Ambient temperature		Sample quantity		
Part p/n		Environment humidity		Sampling quantity		
Electricity performance			Size (unit: mm)			
NO.	R ₂₅ (KΩ)	B _{25/50} (K)	L	W	T	D
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						
(11)						
(12)						
(13)						
(14)						
(15)						
(16)						
(17)						
(18)						
(19)						
(20)						
Appearance						
Solderability						
Resistance to Soldering Heat						
Integrated to determine						

6、 R-T table

$R_{25}=10K\Omega\pm 5\%$

$B_{25/50}=3435K\pm 3\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	192.1064	221.9240	255.7288	-1	26.9441	29.2916	31.7639
-39	181.2790	209.0406	240.4512	0	25.7980	28.0080	30.3312
-38	171.1415	196.9997	226.1981	1	24.7079	26.7887	28.9721
-37	161.6452	185.7404	212.8938	2	23.6708	25.6302	27.6824
-36	152.7452	175.2066	200.4686	3	22.6837	24.5290	26.4581
-35	144.4000	165.3466	188.8585	4	21.7439	23.4820	25.2957
-34	136.5711	156.1128	178.0044	5	20.8489	22.4862	24.1915
-33	129.2232	147.4610	167.8521	6	19.9963	21.5388	23.1424
-32	122.3234	139.3507	158.3513	7	19.1838	20.6372	22.1452
-31	115.8413	131.7443	149.4559	8	18.4094	19.7789	21.1971
-30	109.7490	124.6073	141.1234	9	17.6709	18.9615	20.2954
-29	104.0204	117.9074	133.3142	10	16.9667	18.1829	19.4376
-28	98.6312	111.6150	125.9921	11	16.2947	17.4410	18.6212
-27	93.5593	105.7026	119.1235	12	15.6535	16.7338	17.8440
-26	88.7837	100.1448	112.6773	13	15.0414	16.0596	17.1040
-25	84.2853	94.9180	106.6248	14	14.4569	15.4166	16.3991
-24	80.0461	90.0003	100.9393	15	13.8986	14.8033	15.7274
-23	76.0495	85.3713	95.5962	16	13.3652	14.2179	15.0873
-22	72.2800	81.0124	90.5727	17	12.8555	13.6592	14.4770
-21	68.7234	76.9059	85.8475	18	12.3682	13.1258	13.8950
-20	65.3661	73.0357	81.4011	19	11.9023	12.6164	13.3399
-19	62.1957	69.3865	77.2152	20	11.4567	12.1297	12.8102
-18	59.2007	65.9445	73.2729	21	11.0303	11.6647	12.3046
-17	56.3702	62.6965	69.5584	22	10.6224	11.2202	11.8219
-16	53.6941	59.6303	66.0572	23	10.2319	10.7952	11.3610
-15	51.1630	56.7346	62.7556	24	9.8580	10.3888	10.9207
-14	48.7682	53.9989	59.6411	25	9.5000	10.0000	10.5000
-13	46.5015	51.4133	56.7018	26	9.1362	9.6280	10.1209
-12	44.3552	48.9687	53.9268	27	8.7885	9.2720	9.7577
-11	42.3221	46.6564	51.3060	28	8.4559	8.9312	9.4096
-10	40.3957	44.4685	48.8296	29	8.1379	8.6049	9.0759
-9	38.5695	42.3976	46.4890	30	7.8336	8.2923	8.7560
-8	36.8379	40.4366	44.2759	31	7.5424	7.9929	8.4491
-7	35.1953	38.5791	42.1825	32	7.2636	7.7059	8.1547
-6	33.6367	36.8189	40.2015	33	6.9968	7.4309	7.8723
-5	32.1571	35.1505	38.3264	34	6.7412	7.1672	7.6012
-4	30.7521	33.5683	36.5508	35	6.4964	6.9144	7.3409
-3	29.4176	32.0675	34.8688	36	6.2618	6.6719	7.0910
-2	28.1495	30.6434	33.2749	37	6.0370	6.4392	6.8510

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
38	5.8215	6.2159	6.6205	82	1.3190	1.4706	1.6355
39	5.6149	6.0016	6.3990	83	1.2806	1.4290	1.5906
40	5.4167	5.7959	6.1861	84	1.2399	1.3849	1.5430
41	5.2267	5.5983	5.9814	85	1.2041	1.3461	1.5010
42	5.0443	5.4086	5.7847	86	1.1661	1.3048	1.4563
43	4.8693	5.2263	5.5955	87	1.1293	1.2648	1.4131
44	4.6964	5.0460	5.4082	88	1.0938	1.2262	1.3711
45	4.5301	4.8725	5.2277	89	1.0594	1.1888	1.3305
46	4.3701	4.7053	5.0536	90	1.0262	1.1526	1.2912
47	4.2212	4.5496	4.8913	91	0.9941	1.1175	1.2531
48	4.0731	4.3945	4.7295	92	0.9661	1.0870	1.2199
49	3.9305	4.2451	4.5734	93	0.9360	1.0541	1.1841
50	3.7933	4.1012	4.4229	94	0.9099	1.0255	1.1529
51	3.6663	3.9678	4.2834	95	0.8817	0.9946	1.1193
52	3.5392	3.8341	4.1433	96	0.8573	0.9679	1.0900
53	3.4167	3.7053	4.0082	97	0.8308	0.9389	1.0583
54	3.2988	3.5811	3.8778	98	0.8080	0.9138	1.0309
55	3.1913	3.4677	3.7586	99	0.7832	0.8866	1.0011
56	3.0819	3.3522	3.6371	100	0.7619	0.8631	0.9754
57	2.9824	3.2471	3.5265	101	0.7386	0.8375	0.9473
58	2.8808	3.1397	3.4132	102	0.7186	0.8155	0.9232
59	2.7829	3.0360	3.3039	103	0.6968	0.7914	0.8967
60	2.6885	2.9360	3.1983	104	0.6781	0.7708	0.8740
61	2.5976	2.8396	3.0963	105	0.6576	0.7481	0.8491
62	2.5099	2.7465	2.9978	106	0.6400	0.7288	0.8278
63	2.4283	2.6597	2.9058	107	0.6208	0.7075	0.8043
64	2.3514	2.5779	2.8192	108	0.6044	0.6893	0.7842
65	2.2728	2.4942	2.7303	109	0.5862	0.6692	0.7621
66	2.2015	2.4182	2.6496	110	0.5709	0.6522	0.7432
67	2.1283	2.3401	2.5666	111	0.5560	0.6357	0.7250
68	2.0622	2.2695	2.4914	112	0.5415	0.6196	0.7072
69	1.9940	2.1966	2.4137	113	0.5275	0.6040	0.6900
70	1.9326	2.1309	2.3437	114	0.5139	0.5889	0.6732
71	1.8699	2.0638	2.2720	115	0.5007	0.5743	0.6569
72	1.8069	1.9962	2.1998	116	0.4880	0.5600	0.6411
73	1.7478	1.9327	2.1320	117	0.4756	0.5462	0.6258
74	1.6948	1.8758	2.0710	118	0.4635	0.5328	0.6109
75	1.6404	1.8174	2.0084	119	0.4518	0.5197	0.5964
76	1.5911	1.7644	1.9515	120	0.4405	0.5071	0.5823
77	1.5396	1.7089	1.8920	121	0.4295	0.4948	0.5685
78	1.4938	1.6594	1.8389	122	0.4188	0.4828	0.5552
79	1.4464	1.6084	1.7839	123	0.4084	0.4712	0.5423
80	1.4037	1.5622	1.7343	124	0.3984	0.4599	0.5297
81	1.3625	1.5177	1.6863	125	0.3886	0.4490	0.5174

