

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	敏感型负温度系数热敏电阻 SN NTC THERMISTOR
规格型号 TYPE SPECIFICATION	SNS104B13950JE3BZ018EST15
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 S 104 B₁ 3950 J E 3 BZ 018 E ST 15
 ① ② ③ ④ ④ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

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	S指传感器
	S-FINGER SENSOR
③ 产品阻值 (25°零功率电阻值) PRODUCT RESISTANCE (25° ZERO POWER RESISTANCE)	104指100KΩ
	104 MEANS 100KΩ;
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 INDICATES ±5%
⑦ 头部外观结构 HEAD APPEARANCE STRUCTURE	E指环氧树脂包封;
	E MEANS EPOXY RESIN ENCAPSULATION;
⑧ 线材颜色 WIRE COLOR	3指线材颜色为红色;
	3 FINGER WIRE COLOR IS RED;
⑨ 线材规格 WIRE SPECIFICATION	BZ指线材为漆包线;
	BZ WIRE IS ENAMELLED WIRE;
⑩ 线材长度	018指产品总长度为18mm;

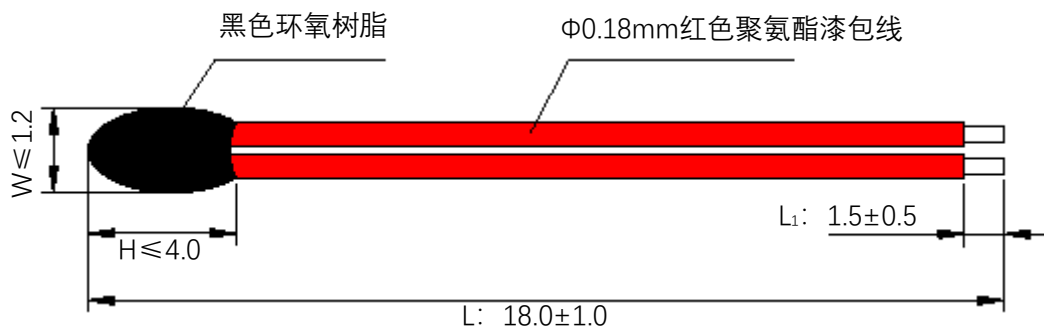
WIRE LENGTH	018 MEANS THE TOTAL LENGTH OF THE PRODUCT IS 18MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	ST指产品头部宽度尺寸 $W \leq 1.2\text{mm}$, 深度 $H \leq 4.0\text{mm}$;
	ST REFERS TO THE WIDTH OF THE PRODUCT HEAD $W \leq 1.2\text{MM}$, DEPTH $H \leq 4.0\text{MM}$;
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	15指产品尾线剥线长度为1.5mm。
	THE STRIP LENGTH OF THE 15-FINGER TAIL CABLE IS 1.5MM.

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)
SNS104B ₁ 3950JE3BZ018EST15	100K	3950	≥2.5	≤10	30	-40~105

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°C HIGH PRECISION OIL TANK FOR STABILITY	$100K\Omega \pm 5\%$
(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 HIGH PRECISION OIL TANK AT 25°C AND 85AND THEN MEASURED	$3950K \pm 3\%$
(3)	外观 APPEARANCE	目测 VISUAL INSPECTION	产品符合2.2的外形要求，无针孔、氧化、烫伤等 THE PRODUCT MEETS THE APPEARANCE REQUIREMENTS OF 2.2,WITHOUT PINHOLES,OXIDATION,BURNS,ETC
(4)	尺寸 DIMENSION	用精度为0.01mm卡尺测量 MEASURE WITH A CALIPER ACCURACY OF 0.01MM	符合2.2的外形尺寸 CONFORM TO THE DIMENSIONS OF 2.2
(5)	绝缘电阻测试 INSULATION RESISTANCE TEST	绝缘电压INSULATION VOLTAGE: 200V _{DC} 时间TIME: 1min	无外观损伤 NO APPARENT DAMAGE 绝缘电阻 INSULATION RESISTANCE: $\geq 150 M\Omega$

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)	跌落 FALL	IEC68-2-32	跌落高度 DROP HEIGHT: 1±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/B \leq 2\%$
(2)	湿热负载 MOIST HEAT LOAD	IEC68-2-2/IEC68-2-3/CNS5550	温度 TEMPERATURE: 40±2°C 湿度 HUMIDITY: 90~95%RH 时间 TIME: 500±12h; 工作电流 PERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(3)	高温存储 HIGHT TEMPERATURE LOADS	IEC68-2-2/CNS5550	温度 TEMPERATURE: 105±2°C 时间 TIME: 1000±24h	无外观损伤 NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(4)	冷热冲击 COLD AND HEAT SHOCK	IEC68-2-14	温度 TEMPERATURE: -40°C, +105°C 周期 PERIOD: 100,30min/cyc	无外观损伤 NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(5)	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 2\%$ $ \Delta B/B \leq 2\%$
(6)	耐久性 DURABILITY	UL1434	环境温度 ENVIRONMENT TEMPERATURE: 25±2°C 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)	包装袋 PACKING BAG	热封口袋 HEAT SEAL POCKET	1000PCS
(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，存放产品的仓库环境温度-10℃~+40℃、相遇湿度不大于70%，仓库内不允许有各、易爆的种有害气体、易爆的产品及有腐蚀腐蚀性的化学物品，并且无强烈的机械震动、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

 $R_{25}=100K\pm 5\%$
 $B25/85=3950K\pm 3\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	2840.5118	3321.3325	3873.8342	-1	313.5917	342.5164	373.1738
-39	2663.5679	3108.2479	3618.0987	0	298.4701	325.5021	354.0949
-38	2498.8385	2910.2652	3380.9585	1	284.0972	309.3549	336.0161
-37	2345.4016	2726.2170	3160.9420	2	270.5034	294.1062	318.9691
-36	2202.4103	2555.0331	2956.7031	3	257.6420	279.7009	302.8894
-35	2069.0869	2395.7322	2767.0099	4	245.4694	266.0875	287.7163
-34	1944.7159	2247.4139	2590.7342	5	233.9446	253.2179	273.3937
-33	1828.6396	2109.2515	2426.8421	6	223.0297	241.0472	259.8690
-32	1720.2524	1980.4857	2274.3859	7	212.6887	229.5336	247.0933
-31	1618.9965	1860.4184	2132.4961	8	202.8884	218.6379	235.0209
-30	1524.3581	1748.4076	2000.3743	9	193.5974	208.3234	223.6091
-29	1435.8636	1643.8627	1877.2875	10	184.7863	198.5558	212.8180
-28	1353.0758	1546.2397	1762.5621	11	176.5054	189.3891	202.7052
-27	1275.5916	1455.0378	1655.5786	12	168.6331	180.6871	193.1187
-26	1203.0386	1369.7952	1555.7671	13	161.1476	172.4242	184.0286
-25	1135.0727	1290.0859	1462.6031	14	154.0280	164.5762	175.4072
-24	1071.3760	1215.5173	1375.6035	15	147.2548	157.1205	167.2280
-23	1011.6543	1145.7265	1294.3231	16	140.8095	150.0356	159.4665
-22	955.6356	1080.3787	1218.3514	17	134.6749	143.3014	152.0994
-21	903.0680	1019.1642	1147.3100	18	128.8345	136.8991	145.1049
-20	853.7181	961.7970	1080.8494	19	123.2730	130.8108	138.4626
-19	807.3108	907.9437	1018.5679	20	117.9758	125.0198	132.1531
-18	763.7140	857.4390	960.2595	21	112.9292	119.5101	126.1584
-17	722.7408	810.0548	905.6473	22	108.1202	114.2670	120.4613
-16	684.2177	765.5797	854.4751	23	103.5365	109.2763	115.0458
-15	647.9838	723.8181	806.5060	24	99.1668	104.5248	109.8968
-14	613.8895	684.5884	761.5207	25	95.0000	100.0000	105.0000
-13	581.7961	647.7223	719.3161	26	90.7891	95.6937	100.6112
-12	551.5743	613.0636	679.7043	27	86.7890	91.5977	96.4311
-11	523.1041	580.4674	642.5109	28	82.9881	87.7005	92.4488
-10	496.2739	549.7991	607.5743	29	79.3753	83.9914	88.6538
-9	470.9799	520.9334	574.7447	30	75.9404	80.4604	85.0362
-8	447.1251	493.7541	543.8829	31	72.6737	77.0978	81.5869
-7	424.6195	468.1532	514.8597	32	69.5659	73.8949	78.2970
-6	403.3791	444.0299	487.5553	33	66.6086	70.8431	75.1585
-5	383.3257	421.2906	461.8580	34	63.7935	67.9345	72.1634
-4	364.3861	399.8481	437.6643	35	61.1132	65.1616	69.3045
-3	346.4922	379.6212	414.8778	36	58.5605	62.5174	66.5749
-2	329.5806	360.5341	393.4088	37	56.1286	59.9952	63.9680

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
38	53.8111	57.5888	61.4777	72	14.6632	16.2982	18.0703
39	51.6021	55.2922	59.0981	73	14.1628	15.7580	17.4890
40	49.4960	53.0999	56.8238	74	13.6819	15.2383	16.9292
41	47.4874	51.0065	54.6495	75	13.2198	14.7383	16.3901
42	45.5713	49.0072	52.5704	76	12.7755	14.2571	15.8709
43	43.7429	47.0971	50.5817	77	12.3483	13.7940	15.3706
44	41.9978	45.2718	48.6791	78	11.9374	13.3482	14.8885
45	40.3318	43.5272	46.8584	79	11.5422	12.9190	14.4239
46	38.7408	41.8593	45.1157	80	11.1621	12.5057	13.9760
47	37.2212	40.2642	43.4471	81	10.7962	12.1076	13.5442
48	35.7693	38.7385	41.8493	82	10.4441	11.7240	13.1279
49	34.3818	37.2788	40.3187	83	10.1052	11.3545	12.7263
50	33.0555	35.8818	38.8524	84	9.7789	10.9984	12.3389
51	31.7875	34.5447	37.4471	85	9.4647	10.6551	11.9652
52	30.5747	33.2644	36.1002	86	9.1621	10.3242	11.6046
53	29.4147	32.0383	34.8088	87	8.8706	10.0051	11.2565
54	28.3047	30.8639	33.5704	88	8.5897	9.6974	10.9205
55	27.2424	29.7387	32.3826	89	8.3190	9.4006	10.5962
56	26.2256	28.6604	31.2431	90	8.0582	9.1143	10.2830
57	25.2520	27.6269	30.1495	91	7.8067	8.8380	9.9805
58	24.3195	26.6359	29.1000	92	7.5643	8.5714	9.6883
59	23.4264	25.6857	28.0924	93	7.3305	8.3141	9.4061
60	22.5706	24.7742	27.1249	94	7.1050	8.0657	9.1334
61	21.7505	23.8998	26.1958	95	6.8875	7.8258	8.8698
62	20.9644	23.0607	25.3032	96	6.6776	7.5942	8.6151
63	20.2107	22.2554	24.4456	97	6.4751	7.3705	8.3688
64	19.4879	21.4823	23.6215	98	6.2797	7.1545	8.1307
65	18.7947	20.7399	22.8293	99	6.0911	6.9457	7.9005
66	18.1296	20.0270	22.0677	100	5.9089	6.7440	7.6779
67	17.4914	19.3422	21.3354	101	5.7331	6.5491	7.4625
68	16.8789	18.6842	20.6310	102	5.5633	6.3606	7.2541
69	16.2908	18.0520	19.9534	103	5.3992	6.1785	7.0525
70	15.7263	17.4442	19.3015	104	5.2408	6.0024	6.8574
71	15.1840	16.8600	18.6742	105	5.0877	5.8321	6.6686