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	SNS103B13950FX1A075EAES
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	修订时间	制 定	修 订 内 容
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1、 规格型号 PART IDENTIFICATION

SN	S	103	B_1	3950	F	X	I	A	075	E	AFS
①	②	③	④	④	⑥	⑦	⑧	⑨	⑩	⑪	⑫

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 PRODUCT RESISTANCE	103指10KΩ; 103 MEANS 10KΩ;
④ B 值代码 B-VALUE CODE	B_1 指 25/50 B_1 means 25/50
⑤ B 值数值 B-VALUE TOLERANCE	3950指B值为3950K B3950 INDICATE 3950K
⑥ 阻值误差 PACKAGING STYLE	F 指±1% F INDICATES ±1%
⑦ 头部外观结构 HEAD APPEARANCE STRUCTURE	X指扁平部位带圆型螺丝孔的端子; X REFERS TO THE FLAT PART OF THE TERMINAL WITH A ROUND SCREW HOLE;
⑧ 线材颜色 WIRE COLOR	1指线材颜色为黑色; 1 THE COLOR OF THE FINGER WIRE IS BLACK
⑨ 线材规格 WIRE SPECIFIVATION	A指UL2651 #28并线; A REFERS TO UL2651 #28 PARALLEL LINES;

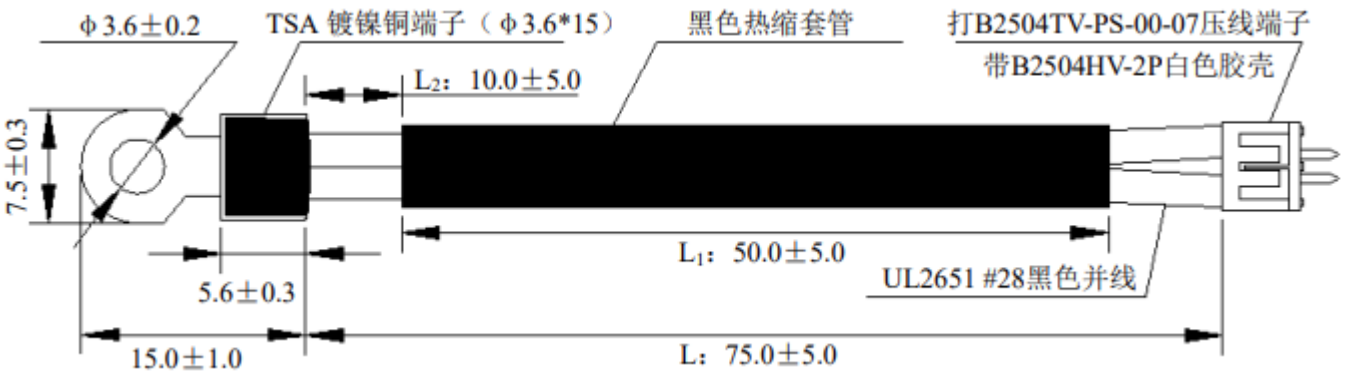
⑩ 线材长度 WIRE LENGTH	075指产品线材长度为75mm;
	075 REFERS TO THE PRODUCT WIRE LENGTH OF 75MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	AES表示头部带TSA镀镍铜端子（φ3.6*15），线材表面加套热缩套管，线尾打B2504TV-PS-00-07压线端子，带B2504HV-2P白色胶壳（2.5mm间距）。
	AES INDICATES THAT THE HEAD IS EQUIPPED WITH TSA NICKEL-PLATED COPPER TERMINAL (Φ3.6*15), THE WIRE SURFACE IS COVERED WITH HEAT SHRINK SLEEVE, AND THE TAIL IS CONNECTED WITH B2504TV-PS-00-07 CRIMPING WIRE TERMINAL, WITH B2504HV-2P WHITE RUBBER SHELL (2.5MM SPACING).

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)
SNS103B13950FX1A075EAES	10K	3950	≥2.5	≤18	150	-40~105

2.2 外形尺寸PRODUCTION DIMENSION



（单位UNIT：MM）

备注：产品的工作温度范围，不包含尾部连接器的使用温度。

NOTE: THE OPERATING TEMPERATURE RANGE OF THE PRODUCT DOES NOT INCLUDE THE OPERATING TEMPERATURE OF THE TAIL CONNECTOR.

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±1%
(2)	$B_{25/50}$	将待测品置于25℃、50℃高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℃ AND 50℃ AND THEN MEASURED	3950K±1%
(3)	外观 APPEARANCE	目视检查 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0.01mm的卡尺测量 MEASURE WITH CALIPERS WITH	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：300V_{DC} 时间：1min	无外观损伤 NO APPARENT DAMAGE 绝缘电阻 INSULATION RESISTANCE: ≥150 MΩ

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 HEIGHE 跌落次数 NUMBER OF DROPS：1 跌落面 FALLING SURFACE：水泥CEMENT	无外观损伤 NO COSMETIC DAMAGE $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 1\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$
(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 $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 5\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$
(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 $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 5\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$
(4)	冷热冲击 COLD AND HEAT SHOCK	IEC68-2-14	温度 TEMPERATURE：105±2°C 时间 TIME：1000±24h	无外观损伤 NO COSMETIC DAMAGE $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 5\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$
(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 $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 2\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$
(6)	耐久性 DURABILITY	UL1434	环境温度 ENVIRONMENT TEMPERATURE：25±2°C 工作电流 PERATING CURRENT 周期 PERIOD：6000	无外观损伤 NO COSMETIC DAMAGE $\lvert \triangle R_{25}/ R_{25} \rvert \leqslant 5\%$ $\lvert \triangle B/ B \rvert \leqslant 2\%$

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 SEALED POCKET	200PCS
(2)	内包装盒 INNER PACKING 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.

5、 电阻－温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABLE

R_{25}=10KΩ±1%
B25/50=3950K±1%

T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	309.8854	324.0953	338.9228	-1	32.7202	33.4522	34.1972
-39	289.9330	303.0241	316.6747	0	31.1327	31.8133	32.5054
-38	271.4112	283.4769	296.0494	1	29.6745	30.3084	30.9529
-37	254.2075	265.3329	276.9175	2	28.2900	28.8804	29.4803
-36	238.2192	248.4817	259.1605	3	26.9753	27.5251	28.0832
-35	223.3520	232.8225	242.6703	4	25.7265	26.2383	26.7575
-34	209.5198	218.2628	227.3478	5	24.5402	25.0164	25.4993
-33	196.6434	204.7179	213.1026	6	23.4129	23.8559	24.3049
-32	184.6504	192.1103	199.8515	7	22.3415	22.7534	23.1707
-31	173.4742	180.3688	187.5186	8	21.3229	21.7059	22.0935
-30	163.0538	169.4281	176.0341	9	20.3545	20.7103	21.0703
-29	153.3329	159.2283	165.3339	10	19.4335	19.7640	20.0981
-28	144.2599	149.7142	155.3592	11	18.5574	18.8642	19.1742
-27	135.7875	140.8353	146.0562	12	17.7239	18.0086	18.2960
-26	127.8718	132.5449	137.3751	13	16.9308	17.1948	17.4611
-25	120.4726	124.8002	129.2703	14	16.1759	16.4205	16.6672
-24	113.5529	117.5616	121.6997	15	15.4573	15.6838	15.9121
-23	107.0784	110.7929	114.6247	16	14.7730	14.9827	15.1938
-22	101.0176	104.4603	108.0096	17	14.1214	14.3153	14.5104
-21	95.3414	98.5331	101.8215	18	13.5007	13.6799	13.8600
-20	90.0229	92.9827	96.0301	19	12.9094	13.0748	13.2410
-19	85.0618	87.8081	90.6340	20	12.3459	12.4985	12.6517
-18	80.4066	82.9554	85.5765	21	11.8090	11.9495	12.0905
-17	76.0366	78.4027	80.8343	22	11.2971	11.4264	11.5561
-16	71.9326	74.1294	76.3857	23	10.8091	10.9280	11.0471
-15	68.0768	70.1168	72.2107	24	10.3438	10.4529	10.5621
-14	64.4525	66.3473	68.2909	25	9.9000	10.0000	10.1000
-13	61.0446	62.8047	64.6090	26	9.4695	9.5694	9.6693
-12	57.8387	59.4739	61.1492	27	9.0602	9.1598	9.2595
-11	54.8216	56.3410	57.8968	28	8.6709	8.7700	8.8693
-10	51.9811	53.3931	54.8380	29	8.3006	8.3991	8.4979
-9	49.3058	50.6181	51.9601	30	7.9482	8.0460	8.1441
-8	46.7850	48.0048	49.2514	31	7.6129	7.7098	7.8072
-7	44.4090	45.5428	46.7009	32	7.2935	7.3895	7.4860
-6	42.1685	43.2226	44.2985	33	6.9893	7.0843	7.1798
-5	40.0551	41.0349	42.0346	34	6.6995	6.7934	6.8879
-4	38.0607	38.9716	39.9004	35	6.4235	6.5162	6.6096
-3	36.1779	37.0248	37.8878	36	6.1602	6.2517	6.3439
-2	34.3999	35.1873	35.9891	37	5.9092	5.9995	6.0905

T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	5.6699	5.7589	5.8487	72	1.5845	1.6298	1.6762
39	5.4416	5.5292	5.6177	73	1.5315	1.5758	1.6212
40	5.2237	5.3100	5.3972	74	1.4804	1.5238	1.5683
41	5.0158	5.1007	5.1865	75	1.4314	1.4738	1.5173
42	4.8172	4.9007	4.9851	76	1.3842	1.4257	1.4683
43	4.6276	4.7097	4.7927	77	1.3388	1.3794	1.4211
44	4.4465	4.5272	4.6089	78	1.2951	1.3348	1.3756
45	4.2735	4.3527	4.4329	79	1.2531	1.2919	1.3318
46	4.1081	4.1859	4.2647	80	1.2126	1.2506	1.2896
47	3.9500	4.0264	4.1038	81	1.1736	1.2108	1.2490
48	3.7990	3.8739	3.9499	82	1.1361	1.1724	1.2098
49	3.6544	3.7279	3.8025	83	1.0999	1.1354	1.1720
50	3.5161	3.5882	3.6614	84	1.0650	1.0998	1.1356
51	3.3838	3.4545	3.5263	85	1.0315	1.0655	1.1005
52	3.2571	3.3264	3.3968	86	0.9991	1.0324	1.0667
53	3.1359	3.2038	3.2729	87	0.9680	1.0005	1.0340
54	3.0198	3.0864	3.1541	88	0.9379	0.9697	1.0025
55	2.9087	2.9739	3.0403	89	0.9090	0.9401	0.9722
56	2.8021	2.8660	2.9311	90	0.8809	0.9114	0.9428
57	2.7001	2.7627	2.8265	91	0.8540	0.8838	0.9146
58	2.6023	2.6636	2.7261	92	0.8279	0.8571	0.8872
59	2.5086	2.5686	2.6298	93	0.8029	0.8314	0.8609
60	2.4186	2.4774	2.5373	94	0.7787	0.8066	0.8354
61	2.3325	2.3900	2.4487	95	0.7553	0.7826	0.8108
62	2.2498	2.3061	2.3636	96	0.7327	0.7594	0.7870
63	2.1704	2.2255	2.2818	97	0.7109	0.7371	0.7641
64	2.0943	2.1482	2.2033	98	0.6898	0.7154	0.7419
65	2.0212	2.0740	2.1280	99	0.6696	0.6946	0.7205
66	1.9510	2.0027	2.0555	100	0.6499	0.6744	0.6998
67	1.8837	1.9342	1.9859	101	0.6309	0.6549	0.6797
68	1.8189	1.8684	1.9190	102	0.6126	0.6361	0.6604
69	1.7568	1.8052	1.8547	103	0.5948	0.6178	0.6416
70	1.6971	1.7444	1.7929	104	0.5777	0.6002	0.6235
71	1.6397	1.6860	1.7334	105	0.5612	0.5832	0.6060