

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	SNS103B13950FE1BL015SE32
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 103 B₁ 3950 F E I BL 015 S E 32
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

① 产品别 PART NUMBER ENTIFICATION	SN 指敏感型负温度系数热敏电阻;
	SN INDICATES SMD NTC THERMISTOR
② 系列别 DIMENSION (L×W×T) (MM)	S指传感器;
	S-FINGER SENSOR
③ 产品阻值 (25℃零功率电阻值) PRODUCTION RESISTANCE (ZERO POWER RESISTANCE AT 25℃)	103指10KΩ
	103 MEANS 10 KΩ
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
	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	E指环氧树脂包封;
	E REFERS TO EPOXY RESIN ENCAPSULATION
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 SPECIFICATION	BL指UL3266 HF #28单线;
	BL MEANS UL3266 HF #28 SINGLE LINE;
⑩ 线材长度Wire length WIRE LENGTH	015指产品总长度为14.5mm;
	015 REFERS TO THE TOTAL LENGTH OF THE PRODUCT IS 14.5MM;

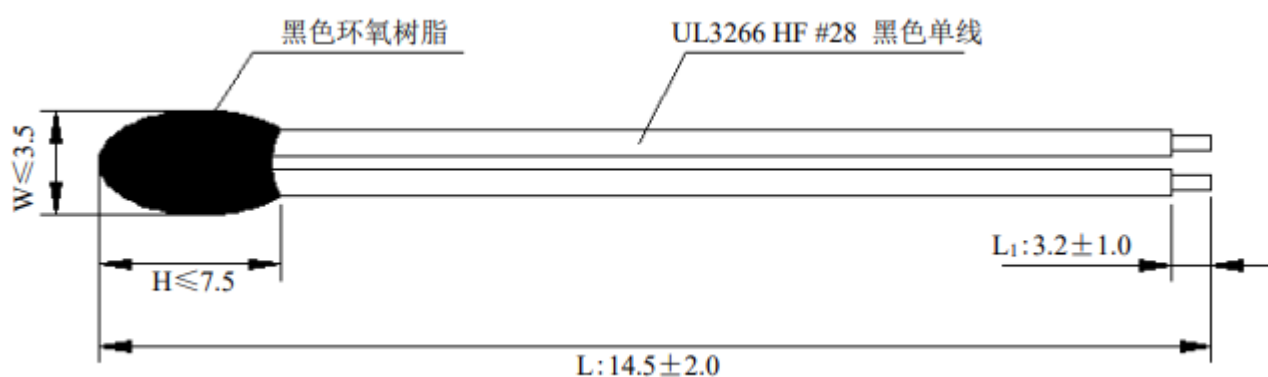
⑪ 高温保湿 (85/85) HIGH TEMPERATURE MOISTURIZING (85/85)	S表示温度85°C/湿度85%RH的实验;
	S REPRESENTS THE EXPERIMENT OF 85°C TEMPERATURE / 85%RH HUMIDITY;
⑫ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保。
	E IS FOR ENVIRONMENTAL PROTECTION.
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	32指产品线尾剥线长度3.2mm。
	32 REFERS TO THE TAIL STRIP LENGTH OF THE PRODUCT LINE 3.2MM.

2、产品特性PRODUCTION FEATURES

2.1 技术参数TECHNICAL PARAMETER

规格型号 SPECIFICATION AND MODEL	SNS103B;3950FE1BL015SE32
额定零功率电阻值 RATED ZERO POWER RESISTANCE VALUE	10K
B (K)	3950
耗散系数 (mw/°C) DISSIPATION COEFFICIENT (mw/°C)	≥2.5
热时间常数 (S) THERMAL TIME CONSTANT	≤15
额定功率 (mw) RATED POWER	150
工作温度范围 (°C) OPERATING TEMPERATURE RANGE	-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	检验项目 ITEMS	检验方法 METHOD	性能要求 PERFORMANCE REQUIREMENTS
(1)	R_{25}	将待测品置于 25℃高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 50℃ HIGH-PRECISION OIL TANK AND MEASURE IT	$10K\Omega \pm 1\%$
(2)	$B_{25/50}$	将待测品置于 25℃、50℃高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 25℃, 50℃ HIGH-PRECISION OIL TANK AND MEASURE IT HIGH PRECISION OIL TANK	$3950K \pm 1\%$
(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	用精度不小于 0.01MM 的卡尺测量 MEASURE WITH CALIPER WITH AN ACCURACY OF 0.01MM	符合图 2.2 的外形尺寸 MEETS THE SHAPE REQUIREMENTS OF THE DRAWING 2.2
(5)	绝缘体测试 INSULATOR TEST	绝缘电压 INSULATION VOLTAGE: 300V _{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 SERIAL NUMBER	检测项目 TEST ITEM	检测标准 TESTING STANDARD	检测方法 DETECTION METHOD	性能要求 PERFORMANCE REQUIREMENT
(1)	跌落 FALL	IEC68-2-32	跌落高度HEIGHT OF FALL: 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 $\Delta R_{25}/R_{25}$ ≤1% $\Delta B/B$ ≤2%
(2)	湿热负载 DAMP-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WORKING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤2%
(3)	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%
(4)	冷热冲击 COLD AND HEAT 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%
(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 $\Delta R_{25}/R_{25}$ ≤2% $\Delta B/B$ ≤2%
(6)	耐久性 DURABILITY	UL1434	环境温度AMBIENT TEMPERATURE: 25±2°C 工作电流 WORKING CURRENT 周期PERIOD: 6000	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤2%
(7)	高温高湿 (85/85) HIGH TEMPERATURE AND HUMIDITY (85/85)		温度TEMPERATURE: 85±2°C 湿度HUMIDITY: 85±5%RH 时间TIME: 168±2h	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤3% $\Delta B/B$ ≤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 PACKING MATERIAL&SIZE	产品数量 QUANTITY OF PRODUCT
(1)	包装袋 PACKING BAG	热封口袋HEAT SEALED POCKET	1000PCS
(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.

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

R25=10KΩ±1%
B25/50=3950±1%

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	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(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	5.6699	5.7589	5.8487	82	1.1361	1.1724	1.2098
39	5.4416	5.5292	5.6177	83	1.0999	1.1354	1.1720
40	5.2237	5.3100	5.3971	84	1.0651	1.0998	1.1356
41	5.0158	5.1007	5.1865	85	1.0315	1.0655	1.1005
42	4.8172	4.9007	4.9852	86	0.9991	1.0324	1.0667
43	4.6276	4.7097	4.7928	87	0.9680	1.0005	1.0340
44	4.4465	4.5272	4.6088	88	0.9379	0.9697	1.0026
45	4.2735	4.3527	4.4330	89	0.9089	0.9401	0.9722
46	4.1081	4.1859	4.2648	90	0.8810	0.9114	0.9429
47	3.9501	4.0264	4.1039	91	0.8540	0.8838	0.9146
48	3.7989	3.8739	3.9499	92	0.8280	0.8571	0.8872
49	3.6544	3.7279	3.8025	93	0.8029	0.8314	0.8609
50	3.5161	3.5882	3.6614	94	0.7786	0.8066	0.8354
51	3.3838	3.4545	3.5263	95	0.7553	0.7826	0.8108
52	3.2571	3.3264	3.3969	96	0.7327	0.7594	0.7870
53	3.1359	3.2038	3.2729	97	0.7109	0.7371	0.7641
54	3.0198	3.0864	3.1541	98	0.6899	0.7154	0.7419
55	2.9086	2.9739	3.0403	99	0.6695	0.6946	0.7205
56	2.8021	2.8660	2.9311	100	0.6499	0.6744	0.6998
57	2.7001	2.7627	2.8264	101	0.6309	0.6549	0.6797
58	2.6023	2.6636	2.7261	102	0.6126	0.6361	0.6604
59	2.5085	2.5686	2.6298	103	0.5949	0.6178	0.6416
60	2.4187	2.4774	2.5374	104	0.5778	0.6002	0.6235
61	2.3325	2.3900	2.4487	105	0.5612	0.5832	0.6060
62	2.2498	2.3061	2.3636	106	0.5452	0.5667	0.5891
63	2.1704	2.2255	2.2818	107	0.5297	0.5508	0.5727
64	2.0943	2.1482	2.2033	108	0.5147	0.5354	0.5568
65	2.0212	2.0740	2.1279	109	0.5003	0.5205	0.5414
66	1.9510	2.0027	2.0555	110	0.4862	0.5060	0.5266
67	1.8837	1.9342	1.9859	111	0.4727	0.4921	0.5122
68	1.8190	1.8684	1.9190	112	0.4596	0.4785	0.4982
69	1.7568	1.8052	1.8547	113	0.4469	0.4655	0.4847
70	1.6971	1.7444	1.7929	114	0.4346	0.4528	0.4717
71	1.6397	1.6860	1.7334	115	0.4227	0.4405	0.4590
72	1.5845	1.6298	1.6763	116	0.4112	0.4286	0.4467
73	1.5315	1.5758	1.6212	117	0.4000	0.4171	0.4349
74	1.4805	1.5238	1.5683	118	0.3892	0.4059	0.4233
75	1.4314	1.4738	1.5173	119	0.3787	0.3951	0.4122
76	1.3842	1.4257	1.4683	120	0.3686	0.3846	0.4013
77	1.3388	1.3794	1.4211	121	0.3588	0.3745	0.3909
78	1.2951	1.3348	1.3756	122	0.3492	0.3646	0.3807
79	1.2531	1.2919	1.3318	123	0.3400	0.3551	0.3708
80	1.2126	1.2506	1.2896	124	0.3311	0.3458	0.3612
81	1.1736	1.2108	1.2490	125	0.3224	0.3369	0.3520