

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	SNS104B14250FE1Z015ETP15
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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目 录

CONTENTS

1、规格型号 PART IDENTIFICATION	1
2、产品特性 PRODUCTION FEATURES	3
2.1 技术参数 TECHNICAL PARAMETER	3
2.2 外形尺寸、材质 PRODUCTION DIMENSION、MATERIAL	3
3、检验规则 INSPECTION REGULATIONS	4
3.1 出厂检验 DELIVERY INSPECTION	4
3.2 型式检验 PATTERN INSPECTION	5
4、包装、贮存 PACKAGE & STORAGE	6
4.1 包装 PACKAGE	6
4.2 贮存 STORAGE	6
5、电阻-温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABLE	7

1、规格型号 PART IDENTIFICATION

SN S 104 B₁ 3950 F E I W 150 E WR 20
 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	4250指B值为4250K
	4250 MEANS THAT B VALUE IS 4250K
⑥ 阻值误差 PACKAGING STYLE	F 指±1%
	F INDICATES ±1%
⑦ 头部外观结构 HEAD APPEARANCE STRUCTURE	E指环氧树脂封装;
	E MEANS 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 SPECIFIVATION	Z指UL3302 HF#32单线;
	Z REFERS TO UL3302 HF#32 SINGLE LINE;
⑩ 线材长度	015指产品总长度为15mm;

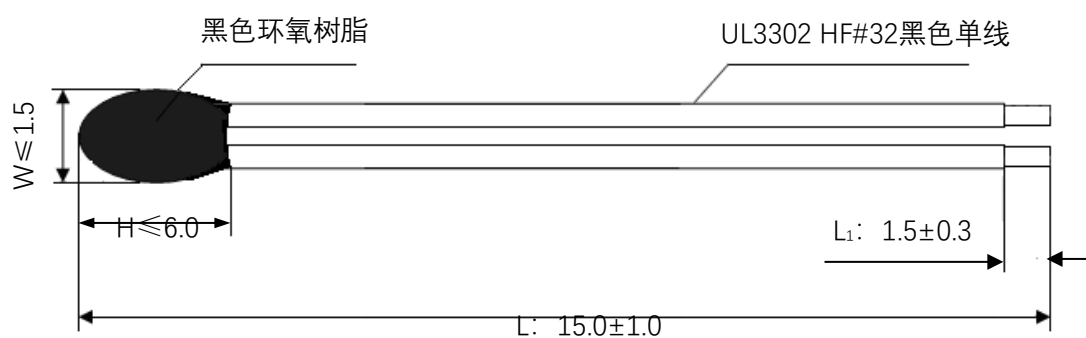
WIRE LENGTH	015 MEANS THE TOTAL LENGTH OF THE PRODUCT IS 15MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	TP表示产品头部宽度 $W \leq 1.5\text{mm}$, 深度 $H \leq 6.0\text{mm}$;
	TP INDICATES THAT THE WIDTH OF THE PRODUCT HEAD $W \leq 1.5\text{MM}$, THE DEPTH $H \leq 6.0\text{MM}$;
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	20指产品线尾剥线长度为2.0mm。
	THE TAIL STRIP LENGTH OF THE 20-FINGER PRODUCT LINE IS 2.0MM.

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)
SNS104B14250FE1Z015ETP15	100K	4250	≥ 2.5	≤ 15	150	-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°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	$100K\Omega \pm 1\%$
(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 HIGH PRECISION OIL TANK AT 25°C AND 85AND THEN MEASURED	$4250K \pm 1\%$
(3)	外观 APPEARANCE	目测检查 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卡尺和精度1mm直尺测量 MEASURE WITH A CALIPER WITH ACCURACY OF 0.01MM AND A STRAIGHT RULER WITH ACCURACY OF 1MM	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: 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 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: 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

 $R_{25}=100K\pm 1\%$
 $B25/85=4250K\pm 1\%$

T(°C)	R _{Low} (KΩ)	R _{Center} (KΩ)	R _{High} (KΩ)	T(°C)	R _{Low} (KΩ)	R _{Center} (KΩ)	R _{High} (KΩ)
-40	4405.2850	4623.6899	4852.4377	-1	361.8794	370.3521	378.9853
-39	4093.5808	4293.3484	4502.4144	0	342.3127	350.1306	358.0913
-38	3806.1922	3989.0012	4180.1723	1	324.9709	332.2183	339.5934
-37	3541.0561	3708.4250	3883.3163	2	308.5736	315.2904	322.1211
-36	3296.2974	3449.6011	3609.6737	3	293.0655	299.2888	305.6136
-35	3070.2116	3210.6954	3357.2716	4	278.3950	284.1593	290.0139
-34	2861.2477	2990.0402	3124.3176	5	264.5136	269.8510	275.2685
-33	2667.9934	2786.1183	2909.1822	6	251.3756	256.3160	261.3274
-32	2489.1622	2597.5484	2710.3829	7	238.9386	243.5097	248.1434
-31	2323.5811	2423.0719	2526.5700	8	227.1623	231.3900	235.6727
-30	2170.1799	2261.5416	2356.5139	9	216.0092	219.9174	223.8740
-29	2027.9817	2111.9109	2199.0936	10	205.4439	209.0551	212.7084
-28	1896.0942	1973.2244	2053.2868	11	195.3838	198.7173	202.0875
-27	1773.7018	1844.6095	1918.1602	12	185.8590	188.9346	192.0419
-26	1660.0584	1725.2687	1792.8612	13	176.8386	179.6747	182.5379
-25	1554.4814	1614.4725	1676.6110	14	168.2939	170.9074	173.5441
-24	1456.3456	1511.5534	1568.6971	15	160.1977	162.6044	165.0308
-23	1365.0782	1415.9002	1468.4675	16	152.5246	154.7393	156.9705
-22	1280.1539	1326.9530	1375.3254	17	145.2506	147.2870	149.3370
-21	1201.0911	1244.1984	1288.7240	18	138.3533	140.2241	142.1060
-20	1127.4474	1167.1654	1208.1618	19	131.8118	133.5287	135.2545
-19	1058.1322	1094.7065	1132.4318	20	125.6060	127.1802	128.7612
-18	993.5740	1027.2635	1061.9891	21	119.7174	121.1590	122.6057
-17	933.4148	964.4558	996.4294	22	114.1285	115.4471	116.7691
-16	877.3256	905.9340	935.3818	23	108.8229	110.0272	111.2337
-15	825.0041	851.3774	878.5060	24	103.7849	104.8832	105.9825
-14	776.1723	800.4911	825.4893	25	99.0000	100.0000	101.0000
-13	730.5746	753.0041	776.0446	26	94.3740	95.3724	96.3718
-12	687.9756	708.6671	729.9079	27	89.9907	90.9856	91.9823
-11	648.1585	667.2505	686.8362	28	85.8362	86.8258	87.8180
-10	610.9235	628.5430	646.6060	29	81.8973	82.8800	83.8661
-9	575.1540	591.3814	608.0058	30	78.1616	79.1361	80.1147
-8	541.7776	556.7270	572.0317	31	74.6176	75.5826	76.5524
-7	510.6163	524.3920	538.4855	32	71.2543	72.2088	73.1687
-6	481.5070	494.2042	507.1855	33	68.0617	69.0047	69.9538
-5	454.2992	466.0051	477.9648	34	65.0300	65.9608	66.8982
-4	428.8548	439.6491	450.6699	35	62.1504	63.0682	63.9932
-3	405.0467	415.0022	425.1599	36	59.4144	60.3187	61.2306
-2	382.7575	391.9411	401.3048	37	56.8141	57.7044	58.6028
T(°C)	R _{Low} (KΩ)	R _{Center} (KΩ)	R _{High} (KΩ)	T(°C)	R _{Low} (KΩ)	R _{Center} (KΩ)	R _{High} (KΩ)
38	54.3421	55.2180	56.1024	72	13.7974	14.2113	14.6362
39	51.9913	52.8525	53.7225	73	13.3017	13.7058	14.1207

40	49.7552	50.6013	51.4567	74	12.8263	13.2207	13.6259
41	47.6276	48.4585	49.2989	75	12.3703	12.7552	13.1508
42	45.6026	46.4181	47.2435	76	11.9327	12.3084	12.6946
43	43.6748	44.4748	45.2850	77	11.5127	11.8794	12.2566
44	41.8389	42.6235	43.4184	78	11.1096	11.4675	11.8357
45	40.0902	40.8593	41.6389	79	10.7225	11.0718	11.4314
46	38.4241	39.1776	39.9419	80	10.3508	10.6918	11.0428
47	36.8362	37.5743	38.3233	81	9.9938	10.3266	10.6694
48	35.3224	36.0451	36.7790	82	9.6509	9.9757	10.3104
49	33.8790	34.5865	35.3052	83	9.3213	9.6383	9.9652
50	32.5022	33.1946	33.8983	84	9.0046	9.3140	9.6332
51	31.1888	31.8662	32.5550	85	8.7002	9.0022	9.3138
52	29.9354	30.5980	31.2721	86	8.4075	8.7023	9.0066
53	28.7390	29.3869	30.0465	87	8.1260	8.4138	8.7109
54	27.5967	28.2302	28.8755	88	7.8553	8.1363	8.4264
55	26.5058	27.1252	27.7562	89	7.5949	7.8692	8.1525
56	25.4638	26.0691	26.6862	90	7.3444	7.6121	7.8888
57	24.4681	25.0597	25.6630	91	7.1033	7.3646	7.6349
58	23.5166	24.0946	24.6844	92	6.8712	7.1264	7.3903
59	22.6070	23.1718	23.7482	93	6.6478	6.8970	7.1547
60	21.7373	22.2890	22.8524	94	6.4327	6.6760	6.9277
61	20.9056	21.4444	21.9949	95	6.2256	6.4631	6.7090
62	20.1099	20.6362	21.1741	96	6.0261	6.2580	6.4982
63	19.3487	19.8626	20.3881	97	5.8339	6.0604	6.2950
64	18.6201	19.1219	19.6353	98	5.6487	5.8699	6.0991
65	17.9226	18.4126	18.9141	99	5.4703	5.6862	5.9101
66	17.2549	17.7332	18.2231	100	5.2983	5.5092	5.7279
67	16.6153	17.0824	17.5608	101	5.1324	5.3384	5.5522
68	16.0027	16.4587	16.9259	102	4.9726	5.1738	5.3826
69	15.4158	15.8609	16.3172	103	4.8184	5.0149	5.2190
70	14.8534	15.2878	15.7335	104	4.6697	4.8617	5.0611
71	14.3142	14.7383	15.1735	105	4.5263	4.7138	4.9086