

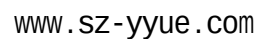
产品承认书

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	SNS104B14100FE1L040EOI
承认书版本号 APPROVAL SHEET VERSION	4.0
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		

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1、规格型号 PART IDENTIFICATION

SN S 104 B₁ 4100 F E 1 L 040 E OI
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

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°C)	104指100KΩ
	104 MEANS 100KΩ
④ B 值代码 B-VALUE CODE	B ₂ 指 25/50
	B ₂ means 25/50
⑤ B 值数值 B-VALUE TOLERANCE	4100 指B 值为 4100K;
	B4100 INDICATE 4100K
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
	THE COLOR OF THE FINGER WIRE IS BLACK
⑨ 线材规格 WIRE SPECIFICATION	L指UL3302HF#30单线;
	L REFERS TO UL3302HF#30 SINGLE LINE

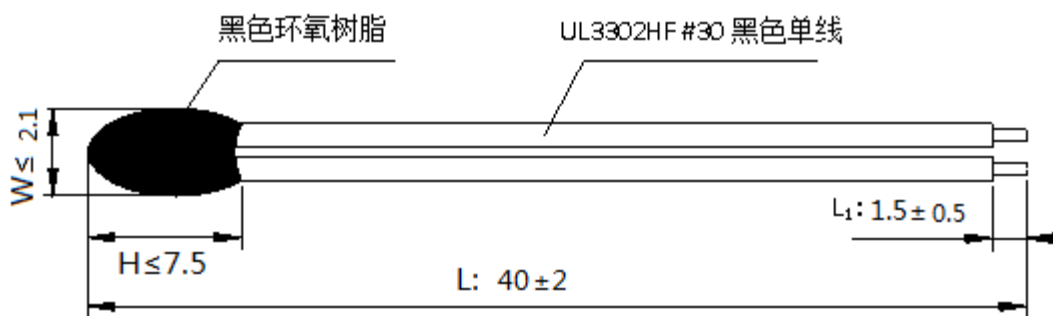
⑩ 线材长度 WIRE LENGTH	040指产品总长度为40mm;
	040 REFERS TO THE TOTAL LENGTH OF THE PRODUCT IS 40MM
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	OI表示线长误差为 $\leq 2.1\text{mm}$
	OI INDICATES AN ERROR OF $\leq 2.1\text{MM}$ IN LINE LENGTH.

2、产品特性PRODUCTION FEATURES

2.1 技术参数TECHNICAL PARAMETER

规格型号 PART NO.	额定零功率 电阻值 ZERO POWER RESISTANCE AT 25°C R25(Ω)	B 值常数 B-CONSTANT 25/50°C(K)	耗散系数 DISSIPATION FACTOR (mw/°C)	热时间常数 (S) THERMAL TIME CONSTANT	额定功率 Max. POWER RATING AT 25°C(mw)	工作温度范围 OPERATING TEMPERATURE RANGE (°C)
SNS104B14100FE1L040EOI	100K	4100	≥ 2.5	≤ 10	150	-40 ~ 105

2.2 外形尺寸、材质 PRODUCTION DIMENSION、MATERIAL



(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	检测水平 INSPECTI ON LEVEL	AQL
(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°C HIGH-PRECISION OIL TANK AND MEASURE IT	100KΩ±1%	II	0.15
(2)	B _{25/50}	将待测品置于 25℃、85℃高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 25°C,85°C HIGH-PRECISION OIL TANK AND MEASURE IT HIGH PRECISION OIL TANK	4100K±1%	II	1.0
(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	II	0.65
(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	II	1.0

3.2 型式检验PATTERN INSPECTION

序号 SEQUENCE	检验项目 ITEMS	检验标准 STANDARD	检验方法 INSPECTION METHOD	性能要求 PERFORMANCE REQUIREMENTS
(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℃; 湿度HUMIDITY: 90 ~ 95%RH; 时间 TIME: 500±12h; 工作电流 OPERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤2%
(3)	高温负载 HIGHT TEMPERATURE LOADS	IEC68-2-2/ /CNS5550	温度TEMPERATURE: 85±2℃/105±2℃ 时间TIME: 1000±24h; 工作电流OPERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤2%
(4)	冷热冲击 HOT AND COLD SHOCKS	EC68-2-14	温度 TEMPERATURE: - 40±125℃; 周期 TIME: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℃; 时间 TIME:1000±24 H	无外观损伤NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤2% $\Delta B/B$ ≤2%
(6)	耐久性 ENDURANCE	UL1434	环境温度ENVIRONMENTAL TEMPERATURE:25±2℃; 工作电流 OPERATING CURRENT 周期 CYCLE:6000	无外观损伤NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤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 PACKAGING MATERIAL & DIMENSION	产品数量 PART QUANTITY
(1)	包装袋 PACKING BAG	热封口袋 HEAT SEALED POCKET, W×H = 110mm×130mm	
(2)	内包装盒 INNER BOX	纸箱 CARTON, L×W×H=185mm×70mm×190mm	
(3)	外包装箱 PACKAGING	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、样品检验报告SAMPLE INSPECTIONG REPORT

检验日期 DATE OF INSPECTION			环境温度 AMBIENT TEMPERATURE		样品数量 NUMBER OF SAMPLES	
规格型号 SPECIFICATIONS AND MODELS			环境湿度 AMBIENT HUMIDITY		抽样数量 NUMBER OF SAMPLES	
电性能 ELECTRICAL PROPERTIES			尺寸SIZE (单位UNIT: mm)			
编号 UNMBERING	R25(KΩ)	B25/85(K)	W	H	L	L1
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						
判定						
外观 APPEARANCE						
绝缘电阻测试 INSULATION RESISTANCE TEST						
综合判定 COMPREHENSIVE JUDGMENT						

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

R25 = 100KΩ±1%
B25/50 = 4100K±1%

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	4053.1340	4250.5015	4457.0340	-1	357.6511	365.9813	374.4682
-39	3772.2764	3953.0990	4142.1750	0	338.9792	346.6868	354.5341
-38	3512.9264	3678.6694	3851.8471	1	321.4001	328.5312	335.7869
-37	3273.2891	3425.2804	3583.9708	2	304.8432	311.4405	318.1488
-36	3051.7313	3191.1749	3336.6564	3	289.2431	295.3460	301.5476
-35	2846.7657	2974.7539	3108.1855	4	274.5388	280.1837	285.9162
-34	2657.0372	2774.5616	2896.9947	5	260.6735	265.8942	271.1923
-33	2481.3097	2589.2713	2701.6601	6	247.5946	252.4220	257.3178
-32	2318.4558	2417.6732	2520.8845	7	235.2527	239.7156	244.2388
-31	2167.4459	2258.6638	2353.4852	8	223.6020	227.7271	231.9050
-30	2027.3393	2111.2352	2198.3830	9	212.5999	216.4117	220.2697
-29	1897.2761	1974.4668	2054.5926	10	202.2064	205.7276	209.2893
-28	1776.4697	1847.5172	1921.2140	11	192.3844	195.6362	198.9230
-27	1664.1999	1729.6164	1797.4246	12	183.0992	186.1010	189.1331
-26	1559.8073	1620.0599	1682.4717	13	174.3183	177.0882	179.8842
-25	1462.6875	1518.2023	1575.6666	14	166.0115	168.5663	171.1433
-24	1372.2862	1423.4523	1476.3786	15	158.1505	160.5057	162.8796
-23	1288.0948	1335.2676	1384.0296	16	150.7089	152.8787	155.0643
-22	1209.6464	1253.1506	1298.0896	17	143.6618	145.6597	147.6707
-21	1136.5121	1176.6446	1218.0725	18	136.9862	138.8245	140.6735
-20	1068.2977	1105.3301	1143.5319	19	130.6603	132.3506	134.0493
-19	1004.6405	1038.8214	1074.0579	20	124.6640	126.2167	127.7761
-18	945.2070	976.7640	1009.2736	21	118.9781	120.4033	121.8333
-17	889.6900	918.8315	948.8326	22	113.5850	114.8917	116.2018
-16	837.8065	864.7236	892.4162	23	108.4679	109.6646	110.8635
-15	789.2957	814.1636	839.7309	24	103.6111	104.7058	105.8015
-14	743.9171	766.8964	790.5065	25	99.0000	100.0000	101.0000
-13	701.4488	722.6870	744.4939	26	94.5344	95.5329	96.5323
-12	661.6858	681.3184	701.4634	27	90.2959	91.2911	92.2881
-11	624.4390	642.5903	661.2031	28	86.2718	87.2621	88.2548
-10	589.5336	606.3179	623.5176	29	82.4501	83.4339	84.4210
-9	556.8078	572.3301	588.2262	30	78.8194	79.7955	80.7755
-8	526.1120	540.4689	555.1621	31	75.3693	76.3365	77.3083
-7	497.3079	510.5883	524.1710	32	72.0897	73.0470	74.0095
-6	470.2673	482.5531	495.1102	33	68.9714	69.9178	70.8702
-5	444.8715	456.2379	467.8478	34	66.0055	66.9404	67.8817
-4	421.0104	431.5267	442.2615	35	63.1838	64.1064	65.0360
-3	398.5819	408.3122	418.2381	36	60.4984	61.4082	62.3255
-2	377.4915	386.4945	395.6728	37	57.9422	58.8387	59.7431

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	55.5081	56.3910	57.2821	72	14.7859	15.2191	15.6634
39	53.1898	54.0586	54.9360	73	14.2728	14.6961	15.1304
40	50.9811	51.8356	52.6991	74	13.7801	14.1937	14.6183

41	48.8763	49.7162	50.5655	75	13.3068	13.7109	14.1260
42	46.8698	47.6951	48.5300	76	12.8521	13.2470	13.6526
43	44.9567	45.7672	46.5876	77	12.4151	12.8010	13.1975
44	43.1321	43.9277	44.7335	78	11.9952	12.3722	12.7598
45	41.3915	42.1721	42.9632	79	11.5914	11.9598	12.3387
46	39.7305	40.4963	41.2726	80	11.2033	11.5632	11.9335
47	38.1451	38.8960	39.6577	81	10.8300	11.1817	11.5437
48	36.6315	37.3676	38.1146	82	10.4709	10.8146	11.1684
49	35.1861	35.9074	36.6398	83	10.1255	10.4613	10.8071
50	33.8054	34.5121	35.2300	84	9.7931	10.1212	10.4593
51	32.4862	33.1784	33.8819	85	9.4732	9.7938	10.1243
52	31.2255	31.9033	32.5926	86	9.1653	9.4786	9.8016
53	30.0204	30.6840	31.3592	87	8.8689	9.1750	9.4908
54	28.8681	29.5177	30.1789	88	8.5834	8.8826	9.1913
55	27.7662	28.4019	29.0493	89	8.3085	8.6009	8.9026
56	26.7120	27.3341	27.9678	90	8.0437	8.3294	8.6244
57	25.7034	26.3120	26.9323	91	7.7885	8.0678	8.3562
58	24.7381	25.3334	25.9405	92	7.5427	7.8156	8.0975
59	23.8140	24.3963	24.9904	93	7.3057	7.5724	7.8481
60	22.9293	23.4988	24.0800	94	7.0773	7.3380	7.6075
61	22.0820	22.6388	23.2074	95	6.8571	7.1119	7.3754
62	21.2703	21.8148	22.3710	96	6.6448	6.8938	7.1515
63	20.4926	21.0249	21.5689	97	6.4400	6.6834	6.9354
64	19.7473	20.2677	20.7998	98	6.2424	6.4804	6.7268
65	19.0330	19.5417	20.0619	99	6.0519	6.2845	6.5254
66	18.3480	18.8453	19.3540	100	5.8680	6.0954	6.3310
67	17.6912	18.1772	18.6747	101	5.6905	5.9129	6.1433
68	17.0612	17.5362	18.0226	102	5.5192	5.7366	5.9620
69	16.4568	16.9210	17.3966	103	5.3538	5.5664	5.7868
70	15.8768	16.3305	16.7954	104	5.1942	5.4020	5.6176
71	15.3202	15.7635	16.2180	105	5.0400	5.2432	5.4541