

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	SNS104B13950FG1AW055EACM20
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 G I AW 055 E ACM 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	3950指B值为3950K
	3950 MEANS THAT B VALUE IS 3950K
⑥ 阻值误差 PACKAGING STYLE	F 指±1%
	F INDICATES ±1%
⑦ 头部外观结构 HEAD APPEARANCE STRUCTURE	G指头部使用玻封管;
	G USE GLASS SEAL TUBE FOR FINGER PART;
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	AW指UL4413 #26并线;
	AW REFERS TO UL4413 #26 LINE MERGING;
⑩ 线材长度	055指产品总长度为55mm;

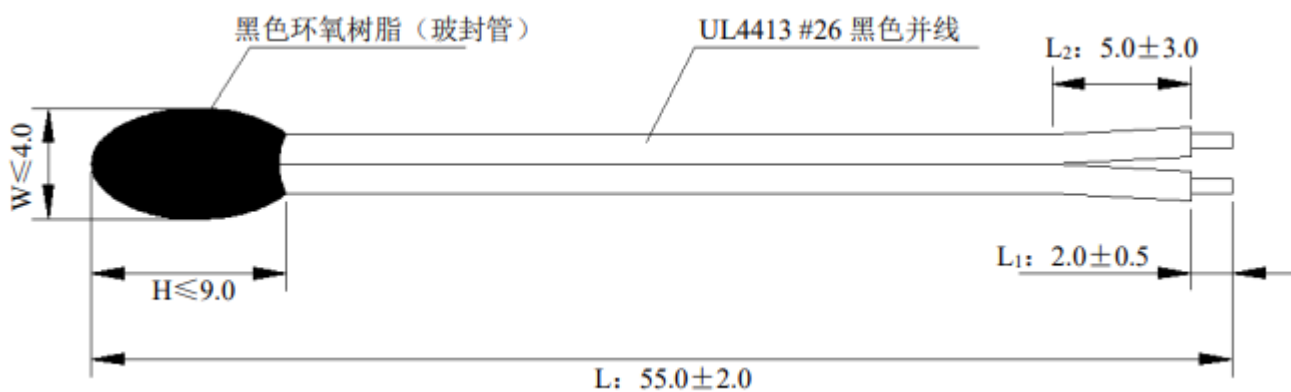
WIRE LENGTH	055 MEANS THE TOTAL LENGTH OF THE PRODUCT IS 55MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	ACM指产品线尾撕线 $5\pm 3\text{mm}$ (不含尾线剥线长度) ;
	ACM REFERS TO THE TAIL TEAR LINE OF THE PRODUCT LINE $5\pm 3\text{MM}$ (EXCLUDING THE TAIL STRIP LENGTH);
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)
SNS104B13950FG1AW055EACM20	100K	3950	≥ 2.5	≤ 15	150	-40~150

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	$100K\Omega \pm 1\%$
(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	$3950K \pm 1\%$
(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: 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 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: 150±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, +150°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

 $R_{25}=100K\Omega\pm1\%$
 $B25/85=3950K\pm1\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	3100.651	3242.850	3391.232	-1	334.242	341.794	349.481
-39	2902.200	3033.271	3169.945	0	317.921	324.939	332.079
-38	2718.237	2839.122	2965.085	1	302.480	309.002	315.633
-37	2547.554	2659.105	2775.264	2	287.868	293.928	300.086
-36	2389.056	2492.050	2599.223	3	274.037	279.667	285.383
-35	2241.755	2336.896	2435.831	4	260.941	266.170	271.476
-34	2104.748	2192.677	2284.051	5	248.537	253.392	258.317
-33	1977.219	2058.520	2142.950	6	236.785	241.293	245.862
-32	1858.423	1933.629	2011.677	7	225.648	229.832	234.071
-31	1747.682	1817.279	1889.457	8	215.092	218.974	222.904
-30	1644.380	1708.810	1775.588	9	205.082	208.683	212.326
-29	1547.949	1607.619	1669.423	10	195.589	198.928	202.304
-28	1457.874	1513.156	1570.376	11	186.583	189.678	192.805
-27	1373.684	1424.916	1477.912	12	178.037	180.904	183.800
-26	1294.944	1342.440	1391.538	13	169.925	172.581	175.260
-25	1221.259	1265.303	1310.804	14	162.224	164.682	167.161
-24	1152.265	1193.119	1235.299	15	154.911	157.185	159.476
-23	1087.626	1125.532	1164.643	16	147.964	150.067	152.184
-22	1027.034	1062.213	1098.488	17	141.364	143.307	145.262
-21	970.207	1002.863	1036.514	18	135.092	136.886	138.689
-20	916.883	947.203	978.428	19	129.130	130.785	132.447
-19	866.821	894.978	923.957	20	123.461	124.987	126.518
-18	819.800	845.953	872.853	21	118.070	119.475	120.885
-17	775.613	799.908	824.882	22	112.942	114.235	115.531
-16	734.071	756.645	779.834	23	108.063	109.251	110.441
-15	694.999	715.975	737.511	24	103.420	104.511	105.602
-14	658.233	677.728	697.730	25	99.000	100.000	101.000
-13	623.623	641.743	660.322	26	94.709	95.708	96.707
-12	591.030	607.872	625.132	27	90.626	91.622	92.619
-11	560.322	575.979	592.014	28	86.740	87.731	88.725
-10	531.381	545.937	560.835	29	83.041	84.026	85.014
-9	504.094	517.627	531.469	30	79.520	80.498	81.479
-8	478.357	490.939	503.801	31	76.166	77.135	78.109
-7	454.073	465.771	477.722	32	72.971	73.931	74.897
-6	431.152	442.028	453.133	33	69.928	70.878	71.833
-5	409.510	419.621	429.940	34	67.027	67.966	68.911
-4	389.068	398.469	408.056	35	64.263	65.190	66.124
-3	369.755	378.494	387.401	36	61.627	62.542	63.465
-2	351.501	359.625	367.900	37	59.113	60.016	60.927

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
38	56.716	57.606	58.504	82	11.235	11.596	11.967
39	54.429	55.306	56.190	83	10.872	11.224	11.587
40	52.247	53.110	53.981	84	10.522	10.867	11.222
41	50.164	51.013	51.871	85	10.185	10.522	10.870
42	48.176	49.011	49.855	86	9.861	10.190	10.530
43	46.278	47.099	47.929	87	9.548	9.870	10.203
44	44.465	45.272	46.088	88	9.247	9.562	9.887
45	42.733	43.526	44.328	89	8.956	9.265	9.583
46	41.079	41.857	42.645	90	8.677	8.978	9.289
47	39.498	40.262	41.036	91	8.407	8.702	9.006
48	37.987	38.736	39.496	92	8.147	8.435	8.733
49	36.542	37.277	38.023	93	7.896	8.178	8.469
50	35.161	35.882	36.614	94	7.654	7.929	8.214
51	33.916	34.624	35.343	95	7.420	7.690	7.969
52	32.638	33.332	34.037	96	7.195	7.459	7.731
53	31.414	32.094	32.786	97	6.978	7.236	7.502
54	30.242	30.908	31.586	98	6.768	7.020	7.281
55	29.119	29.772	30.436	99	6.565	6.812	7.068
56	28.044	28.683	29.334	100	6.370	6.611	6.861
57	27.013	27.639	28.277	101	6.181	6.417	6.662
58	26.025	26.638	27.263	102	5.999	6.230	6.469
59	25.078	25.678	26.290	103	5.822	6.049	6.283
60	24.170	24.757	25.356	104	5.652	5.874	6.103
61	23.299	23.874	24.461	105	5.488	5.704	5.929
62	22.464	23.026	23.601	106	5.329	5.541	5.761
63	21.662	22.213	22.775	107	5.176	5.383	5.598
64	20.894	21.432	21.983	108	5.027	5.230	5.440
65	20.156	20.683	21.221	109	4.884	5.082	5.288
66	19.447	19.963	20.490	110	4.745	4.939	5.141
67	18.767	19.271	19.787	111	4.611	4.801	4.998
68	18.114	18.607	19.112	112	4.481	4.667	4.860
69	17.487	17.969	18.463	113	4.356	4.538	4.727
70	16.884	17.356	17.839	114	4.234	4.412	4.598
71	16.305	16.767	17.240	115	4.117	4.291	4.473
72	15.749	16.200	16.663	116	4.003	4.174	4.352
73	15.214	15.656	16.108	117	3.893	4.060	4.234
74	14.700	15.132	15.575	118	3.786	3.950	4.121
75	14.206	14.628	15.061	119	3.683	3.844	4.011
76	13.731	14.144	14.567	120	3.583	3.741	3.904
77	13.274	13.677	14.092	121	3.487	3.641	3.801
78	12.834	13.229	13.634	122	3.393	3.544	3.701
79	12.411	12.797	13.193	123	3.302	3.450	3.604
80	12.004	12.381	12.769	124	3.214	3.359	3.510
81	11.612	11.981	12.360	125	3.129	3.271	3.418

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
126	3.047	3.185	3.330	139	2.176	2.283	2.395
127	2.967	3.103	3.244	140	2.123	2.227	2.337
128	2.889	3.022	3.161	141	2.070	2.173	2.280
129	2.814	2.945	3.081	142	2.019	2.120	2.225
130	2.741	2.869	3.002	143	1.970	2.069	2.172
131	2.671	2.796	2.927	144	1.922	2.019	2.120
132	2.602	2.725	2.853	145	1.876	1.971	2.070
133	2.536	2.656	2.781	146	1.831	1.924	2.021
134	2.471	2.589	2.712	147	1.787	1.878	1.974
135	2.409	2.524	2.645	148	1.744	1.834	1.927
136	2.348	2.461	2.580	149	1.703	1.790	1.883
137	2.289	2.400	2.516	150	1.662	1.748	1.839
138	2.232	2.341	2.455				