

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	SNS103B23435FG1S645ETF30
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 B₂ 3435 F G 1 S 645 E TF 30
 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)	103指10KΩ
	103 MEANS 10KΩ;
④ B 值代码 B-VALUE CODE	B2指 25/85;
	B2 MEANS 25/85
⑤ B 值数值 B-VALUE TOLERANCE	3435指B值为3435K
	3435 MEANS THAT B VALUE IS 3435K
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 FINGER WITH GLASS SEAL TUBE;
⑧ 线材颜色 WIRE COLOR	1指线材颜色为黑色;
	1 FINGER WIRE COLOR IS BLACK;
⑨ 线材规格 WIRE SPECIFICATION	S指UL2651 #24并线;
	S MEANS UL2651 #24 PARALLEL;
⑩ 线材长度	645指产品总长度为645mm;

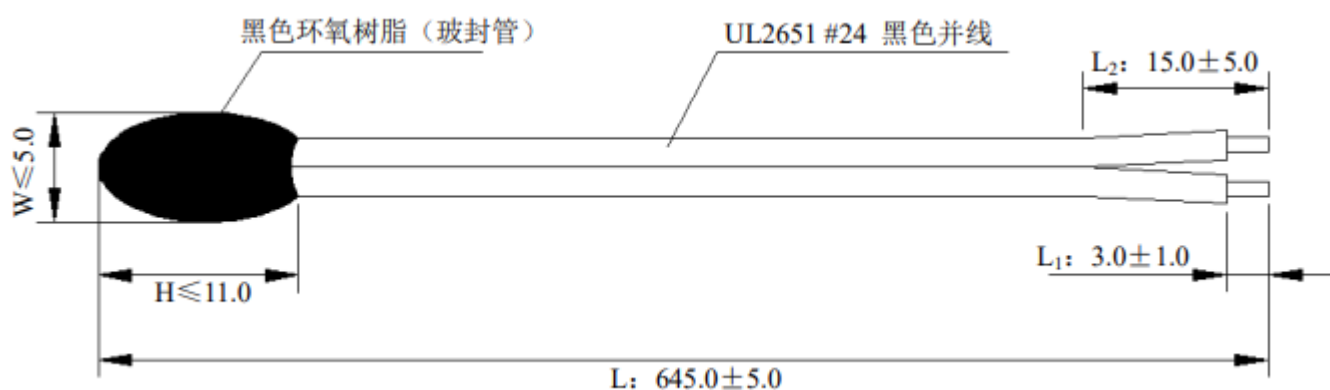
WIRE LENGTH	645 REFERS TO THE TOTAL LENGTH OF THE PRODUCT IS 645MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E STANDS FOR ENVIRONMENTAL PROTECTION;
⑫ 特殊定义 SPECIAL DEFINITION	TF指线尾撕线15±5mm;
	TF FINGERLINE END TEAR LINE 15±5MM;
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	30指产品线尾剥线长度为3.0mm。
	THE TAIL STRIP LENGTH OF THE 30-FINGER PRODUCT LINE IS 3.0MM.

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)
SNS103B ₂ 3435FG1S645ETF30	10K	3435	≥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	$10K\Omega \pm 1\%$
(2)	$B_{25/85}$	将待测品置于 25°C、85°C 精度油 槽内稳定后测量 THE PRODUCT TO BE TESTED IS PLACED IN A 25°C, 85°C PRECISION OIL TANK AND THEN MEASURED	$3435K \pm 1\%$
(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	用游标卡尺、卷尺测量 MEASURE WITH VERNIER CALIPER AND TAPE MEASURE	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: 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 工作电流 WORKING CURRENT 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	200PCS
(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

 $R_{25}=10K\Omega\pm1\%$
 $B_{25/85}=3435K\pm1\%$

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
-40	190.715	198.485	206.551	-1	27.783	28.358	28.941
-39	180.106	187.335	194.835	0	26.622	27.161	27.708
-38	170.169	176.898	183.874	1	25.516	26.021	26.534
-37	160.856	167.122	173.614	2	24.462	24.936	25.416
-36	152.125	157.961	164.005	3	23.458	23.902	24.352
-35	143.935	149.374	155.003	4	22.500	22.917	23.339
-34	136.250	141.320	146.564	5	21.587	21.978	22.373
-33	129.034	133.762	138.649	6	20.717	21.083	21.453
-32	122.256	126.667	131.223	7	19.886	20.229	20.576
-31	115.886	120.002	124.252	8	19.093	19.414	19.739
-30	109.897	113.739	117.704	9	18.336	18.637	18.941
-29	104.263	107.851	111.551	10	17.614	17.895	18.180
-28	98.960	102.312	105.766	11	16.923	17.187	17.453
-27	93.967	97.098	100.324	12	16.264	16.511	16.760
-26	89.263	92.190	95.203	13	15.634	15.865	16.097
-25	84.830	87.566	90.382	14	15.031	15.247	15.465
-24	80.649	83.208	85.840	15	14.456	14.658	14.861
-23	76.705	79.099	81.559	16	13.905	14.094	14.283
-22	72.982	75.222	77.523	17	13.378	13.554	13.732
-21	69.466	71.563	73.715	18	12.874	13.039	13.204
-20	66.145	68.108	70.121	19	12.392	12.546	12.700
-19	63.006	64.844	66.728	20	11.930	12.074	12.217
-18	60.038	61.759	63.522	21	11.488	11.622	11.756
-17	57.230	58.842	60.493	22	11.065	11.190	11.314
-16	54.573	56.083	57.628	23	10.660	10.776	10.892
-15	52.056	53.471	54.919	24	10.272	10.380	10.487
-14	49.673	50.999	52.355	25	9.900	10.000	10.100
-13	47.414	48.657	49.928	26	9.537	9.636	9.736
-12	45.273	46.438	47.629	27	9.188	9.288	9.388
-11	43.243	44.335	45.450	28	8.855	8.954	9.054
-10	41.317	42.341	43.386	29	8.535	8.634	8.733
-9	39.488	40.448	41.428	30	8.229	8.327	8.426
-8	37.752	38.653	39.570	31	7.935	8.033	8.131
-7	36.103	36.948	37.808	32	7.654	7.751	7.848
-6	34.536	35.328	36.135	33	7.384	7.480	7.577
-5	33.047	33.790	34.546	34	7.125	7.220	7.316
-4	31.631	32.328	33.037	35	6.877	6.971	7.066
-3	30.284	30.938	31.602	36	6.638	6.732	6.826
-2	29.003	29.616	30.238	37	6.410	6.502	6.596

T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)	T(°C)	R _{Min} (KΩ)	R _{Nor} (KΩ)	R _{Max} (KΩ)
38	6.190	6.282	6.374	72	2.093	2.147	2.202
39	5.980	6.070	6.162	73	2.029	2.082	2.136
40	5.777	5.867	5.957	74	1.967	2.019	2.072
41	5.583	5.672	5.761	75	1.907	1.958	2.010
42	5.397	5.484	5.572	76	1.850	1.900	1.951
43	5.218	5.304	5.391	77	1.794	1.843	1.893
44	5.046	5.131	5.217	78	1.740	1.788	1.837
45	4.880	4.964	5.049	79	1.688	1.735	1.783
46	4.721	4.804	4.888	80	1.637	1.683	1.731
47	4.568	4.650	4.733	81	1.588	1.634	1.680
48	4.422	4.502	4.583	82	1.541	1.586	1.631
49	4.280	4.360	4.440	83	1.496	1.540	1.584
50	4.144	4.223	4.302	84	1.452	1.495	1.539
51	4.120	4.198	4.277	85	1.409	1.451	1.494
52	3.986	4.063	4.140	86	1.368	1.409	1.452
53	3.856	3.932	4.008	87	1.328	1.369	1.410
54	3.731	3.806	3.881	88	1.290	1.330	1.370
55	3.611	3.684	3.758	89	1.253	1.292	1.332
56	3.494	3.566	3.639	90	1.217	1.255	1.294
57	3.381	3.452	3.524	91	1.182	1.220	1.258
58	3.273	3.342	3.413	92	1.148	1.185	1.223
59	3.168	3.236	3.306	93	1.116	1.152	1.189
60	3.067	3.134	3.202	94	1.084	1.120	1.156
61	2.969	3.035	3.102	95	1.054	1.089	1.124
62	2.875	2.940	3.006	96	1.025	1.058	1.093
63	2.784	2.847	2.912	97	0.996	1.029	1.063
64	2.696	2.758	2.822	98	0.968	1.001	1.034
65	2.611	2.672	2.735	99	0.942	0.974	1.007
66	2.529	2.589	2.651	100	0.916	0.947	0.979
67	2.450	2.509	2.570	101	0.891	0.921	0.953
68	2.374	2.432	2.491	102	0.866	0.897	0.928
69	2.300	2.357	2.415	103	0.843	0.873	0.903
70	2.229	2.285	2.342	104	0.820	0.849	0.879
71	2.160	2.215	2.271	105	0.798	0.827	0.856