

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	SNS103B23435FE1L060E
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		

目 录

CONTENTS

1、规格型号 PART IDENTIFICATION	1
2、产品特性 PRODUCTION FEATURES	2
2.1 技术参数 TECHNICAL PARAMETER	2
2.2 外形尺寸 PRODUCTION DIMENSION	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、样品检验报告 SAMPLE TEST REPORT	7
6、电阻－温度特性曲线 RESISTANCE-TEMPERATURE CHARACTERISTIC CURVE	8

1、规格型号 PART IDENTIFICATION

SN S 103 B₂ 3435 F E 1 L 060 E
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

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 103KΩ
④ B 值代码 B-VALUE CODE	B ₂ 指 25/85
	B ₂ means 25/85
⑤ B 值数值 B-VALUE TOLERANCE	3435 指B 值为 3435K;
	B3435 INDICATE 3435K
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	指UL3302HF#30单线;
	UL3302HF#32 SINGLE LINE

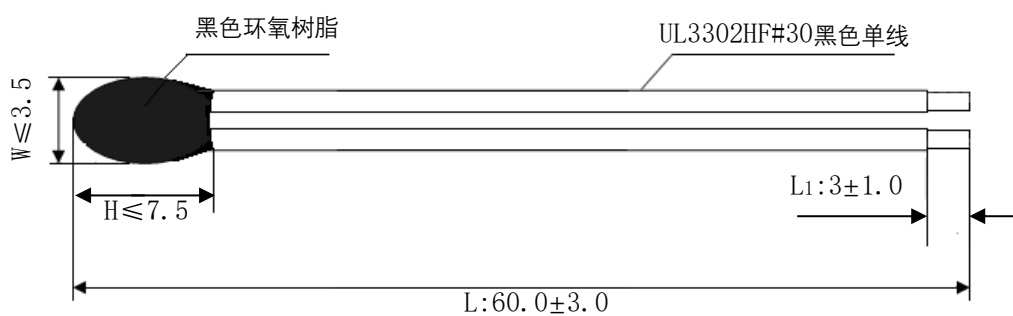
⑩ 线材长度 WIRE LENGTH	060指产品总长度为30mm;
	060 REFERS TO THE TOTAL LENGTH OF THE PRODUCT IS 30MM
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保;
	E IS FOR ENVIRONMENTAL PROTECTION

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 $R_{25}(\Omega)$	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)
SNS103B23435FE1L060E	10K	3435	≥ 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 INSPECTION 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	10KΩ±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	3435K±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
(5)	绝缘电阻测试 INSULATION RESISTANCE TEST	绝缘电压 INSULATION VOLTAGE: 300V _{DC} ; 时间 TIME: 1 min	无外观损伤 NO APPARENT DAMAGE 绝缘电阻 INSULATION RESISTANCE: ≥150 MΩ	S-2	0.65

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} \leq 1\%$ $ \Delta B/B \leq 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 OPERATING CURRENT	无外观损伤 NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \leq 5\%$ $ \Delta B/B \leq 2\%$
(3)	高温负载 HIGHT TEMPERATURE LOADS	IEC68-2-2/ /CNS5550	温度TEMPERATURE: 85±2°C/105±2°C 时间TIME: 1000±24h; 工作电流OPERATING CURRENT	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 HOT AND COLD SHOCKS	EC68-2-14	温度 TEMPERATURE: - 40±125°C; 周期 TIME: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±24 H	无外观损伤NO COSMETIC DAMAGE $ \Delta R_{25}/R_{25} \leq 2\%$ $ \Delta B/B \leq 2\%$
(6)	耐久性 ENDURANCE	UL1434	环境温度ENVIRONMENTAL TEMPERATURE:25±2°C; 工作电流 OPERATING CURRENT 周期 CYCLE: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 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

$R_{25} = 10K\Omega \pm 1\%$
 $B_{25/85} = 3435K \pm 1\%$

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	212.0153	220.8889	230.1108	-1	28.6432	29.2447	29.8558
-39	199.8448	208.0846	216.6426	0	27.4021	27.9650	28.5366
-38	188.4623	196.1166	204.0614	1	26.2226	26.7494	27.2840
-37	177.8114	184.9244	192.3028	2	25.1013	25.5943	26.0943
-36	167.8401	174.4525	181.3073	3	24.0350	24.4962	24.9639
-35	158.5003	164.6495	171.0202	4	23.0206	23.4522	23.8895
-34	149.7478	155.4682	161.3910	5	22.0554	22.4591	22.8680
-33	141.5416	146.8649	152.3732	6	21.1366	21.5143	21.8965
-32	133.8440	138.7994	143.9239	7	20.2617	20.6150	20.9723
-31	126.6200	131.2344	136.0033	8	19.4285	19.7588	20.0928
-30	119.8373	124.1355	128.5749	9	18.6346	18.9435	19.2555
-29	113.4661	117.4708	121.6048	10	17.8780	18.1667	18.4583
-28	107.4785	111.2110	115.0617	11	17.1567	17.4266	17.6989
-27	101.8490	105.3288	108.9166	12	16.4689	16.7210	16.9753
-26	96.5538	99.7989	103.1426	13	15.8129	16.0483	16.2857
-25	91.5709	94.5978	97.7150	14	15.1869	15.4067	15.6282
-24	86.8797	89.7039	92.6106	15	14.5894	14.7946	15.0012
-23	82.4614	85.0971	87.8082	16	14.0191	14.2105	14.4031
-22	78.2982	80.7585	83.2879	17	13.4744	13.6529	13.8325
-21	74.3738	76.6710	79.0312	18	12.9541	13.1205	13.2878
-20	70.6729	72.8183	75.0212	19	12.4570	12.6120	12.7677
-19	67.1815	69.1854	71.2420	20	11.9818	12.1262	12.2711
-18	63.8862	65.7584	67.6787	21	11.5276	11.6620	11.7967
-17	60.7748	62.5243	64.3177	22	11.0933	11.2182	11.3435
-16	57.8359	59.4711	61.1463	23	10.6779	10.7940	10.9102
-15	55.0589	56.5874	58.1525	24	10.2804	10.3882	10.4961
-14	52.4338	53.8628	55.3252	25	9.9000	10.0000	10.1000
-13	49.9513	51.2875	52.6542	26	9.5287	9.6286	9.7285
-12	47.6028	48.8524	50.1299	27	9.1734	9.2731	9.3729
-11	45.3803	46.5491	47.7432	28	8.8334	8.9327	9.0322
-10	43.2761	44.3694	45.4858	29	8.5079	8.6068	8.7059
-9	41.2833	42.3062	43.3500	30	8.1963	8.2946	8.3932
-8	39.3953	40.3523	41.3284	31	7.8979	7.9955	8.0936
-7	37.6060	38.5014	39.4142	32	7.6120	7.7089	7.8063
-6	35.9095	36.7474	37.6010	33	7.3380	7.4342	7.5308
-5	34.3005	35.0846	35.8830	34	7.0755	7.1708	7.2666
-4	32.7739	33.5077	34.2545	35	6.8238	6.9182	7.0131
-3	31.3251	32.0118	32.7103	36	6.5824	6.6759	6.7699
-2	29.9496	30.5923	31.2456	37	6.3510	6.4434	6.5365

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	6.1289	6.2203	6.3124	72	2.0421	2.0952	2.1495
39	5.9158	6.0061	6.0972	73	1.9830	2.0351	2.0885

40	5.7114	5.8005	5.8905	74	1.9258	1.9770	2.0294
41	5.5150	5.6031	5.6920	75	1.8706	1.9209	1.9724
42	5.3265	5.4135	5.5013	76	1.8172	1.8666	1.9172
43	5.1455	5.2313	5.3179	77	1.7656	1.8141	1.8638
44	4.9716	5.0562	5.1417	78	1.7157	1.7634	1.8122
45	4.8045	4.8879	4.9723	79	1.6675	1.7143	1.7622
46	4.6439	4.7261	4.8093	80	1.6208	1.6668	1.7139
47	4.4896	4.5706	4.6526	81	1.5757	1.6208	1.6671
48	4.3412	4.4210	4.5018	82	1.5320	1.5764	1.6218
49	4.1985	4.2771	4.3567	83	1.4898	1.5333	1.5780
50	4.0612	4.1386	4.2170	84	1.4489	1.4917	1.5355
51	3.9292	4.0054	4.0826	85	1.4094	1.4513	1.4944
52	3.8021	3.8771	3.9531	86	1.3711	1.4123	1.4546
53	3.6798	3.7536	3.8285	87	1.3340	1.3745	1.4161
54	3.5621	3.6347	3.7084	88	1.2981	1.3379	1.3787
55	3.4488	3.5202	3.5927	89	1.2633	1.3024	1.3425
56	3.3396	3.4099	3.4812	90	1.2297	1.2680	1.3074
57	3.2345	3.3036	3.3738	91	1.1970	1.2347	1.2734
58	3.1332	3.2011	3.2702	92	1.1654	1.2024	1.2404
59	3.0356	3.1024	3.1703	93	1.1348	1.1711	1.2085
60	2.9416	3.0072	3.0740	94	1.1051	1.1408	1.1775
61	2.8509	2.9155	2.9811	95	1.0764	1.1114	1.1474
62	2.7635	2.8269	2.8915	96	1.0485	1.0829	1.1183
63	2.6793	2.7416	2.8051	97	1.0214	1.0552	1.0900
64	2.5980	2.6592	2.7216	98	0.9952	1.0284	1.0626
65	2.5196	2.5797	2.6411	99	0.9698	1.0024	1.0359
66	2.4439	2.5030	2.5633	100	0.9451	0.9771	1.0101
67	2.3709	2.4290	2.4883	101	0.9212	0.9526	0.9850
68	2.3005	2.3575	2.4158	102	0.8979	0.9288	0.9607
69	2.2324	2.2885	2.3457	103	0.8754	0.9058	0.9370
70	2.1668	2.2218	2.2781	104	0.8536	0.8834	0.9141
71	2.1034	2.1575	2.2127	105	0.8323	0.8616	0.8918