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	SNS103B$_2$3435FE1DS048EWR30
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

REVISION LIST			
版 本	修订时间	制 定	修 订 内 容
1.0	2023-02-07	李宝建 LI BAOJIAN	初始发行 INITIAL ISSUE

目 录

CONTENTS

1、 规格型号 PART IDENTIFICATION

SN	S	103	B_2	3435	F	E	I	DS	048	E	WR	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 PRODUCT 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	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; 1 THE COLOR OF THE FINGER WIRE IS BLACK
⑨ 线材规格 WIRE SPECIFIVATION	DS指UL4484 #30并线; DS MEANS UL4484 #30 PARALLEL;
⑩ 线材长度	048指产品总长度为48mm;

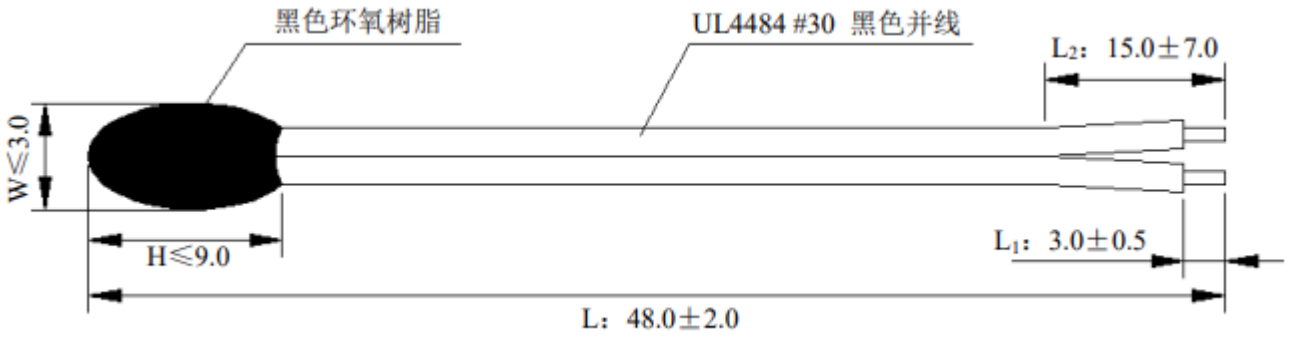
WIRE LENGTH	048 REFERS TO THE TOTAL LENGTH OF THE PRODUCT IS 48MM;
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保
	E IS FOR ENVIRONMENTAL PROTECTION
⑫ 特殊定义 SPECIAL DEFINITION	WR表示线尾撕线15±7mm;
	WR INDICATES THE TEAR LINE AT THE END OF THE LINE 15±7MM;
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	30指产品线尾剥线长度为3.0mm。
	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$3435FE1DS048EWR30	10K	3435	≥2.5	≤15	150	-40~150

2.2 外形尺寸PRODUCTION DIMENSION



（单位UNIT：MM）

备注：环氧树脂 耐温150℃。
NOTE: EPOXY RESIN TEMPERATURE RESISTANCE 150℃.

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℃ HIGH PRECISION OIL TANK FOR STABILITY	10KΩ±1%
(2)	$B_{25/85}$	将待测品置于25℃、85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℃ AND 85AND THEN MEASURED	3435K±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的卡尺测量 MEASURE WITH CALIPERS WITH	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：≥150 MΩ

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 $\lvert \triangle R_{25}/R_{25} \rvert \leq 1\%$ $\lvert \triangle B/B \rvert \leq 2\%$
(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 $\lvert \triangle R_{25}/R_{25} \rvert \leq 5\%$ $\lvert \triangle B/B \rvert \leq 2\%$
(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 $\lvert \triangle R_{25}/R_{25} \rvert \leq 5\%$ $\lvert \triangle B/B \rvert \leq 2\%$
(4)	冷热冲击 COLD AND HEAT SHOCK	IEC68-2-14	温度 TEMPERATURE：-40,+150°C 周期 PERIOD：100,30min/cyc	无外观损伤 NO COSMETIC DAMAGE $\lvert \triangle R_{25}/R_{25} \rvert \leq 5\%$ $\lvert \triangle B/B \rvert \leq 2\%$
(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 $\lvert \triangle R_{25}/R_{25} \rvert \leq 2\%$ $\lvert \triangle B/B \rvert \leq 2\%$
(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 $\lvert \triangle R_{25}/R_{25} \rvert \leq 5\%$ $\lvert \triangle B/B \rvert \leq 2\%$

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 SEALED POCKET	1000PCS
(2)	内包装盒 INNER PACKING 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、 电阻－温度特性表 RESISTANCE-TEMPERATURE CHARACTERISTIC TABLE

R_{25}=10KΩ±1%

B25/50=3435K±1%

T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	191.4889	199.2982	207.4053	-1	28.1746	28.7614	29.3576
-39	181.0213	188.2967	195.8451	0	26.9889	27.5390	28.0976
-38	171.1980	177.9784	185.0087	1	25.8593	26.3750	26.8984
-37	161.9752	168.2962	174.8462	2	24.7829	25.2663	25.7566
-36	153.3123	159.2068	165.3113	3	23.7568	24.2099	24.6692
-35	145.1716	150.6700	156.3610	4	22.7786	23.2032	23.6333
-34	137.5183	142.6488	147.9558	5	21.8457	22.2435	22.6463
-33	130.3200	135.1085	140.0590	6	20.9558	21.3284	21.7055
-32	123.5468	128.0174	132.6365	7	20.1067	20.4557	20.8086
-31	117.1708	121.3457	125.6568	8	19.2963	19.6230	19.9533
-30	111.1663	115.0661	119.0908	9	18.5227	18.8285	19.1375
-29	105.5091	109.1529	112.9112	10	17.7839	18.0701	18.3592
-28	100.1771	103.5825	107.0929	11	17.0783	17.3461	17.6163
-27	95.1495	98.3328	101.6124	12	16.4043	16.6547	16.9073
-26	90.4071	93.3835	96.4482	13	15.7601	15.9943	16.2302
-25	85.9318	88.7153	91.5799	14	15.1445	15.3633	15.5837
-24	81.7070	84.3107	86.9887	15	14.5559	14.7602	14.9660
-23	77.7171	80.1531	82.6573	16	13.9930	14.1838	14.3758
-22	73.9476	76.2272	78.5692	17	13.4547	13.6327	13.8118
-21	70.3850	72.5186	74.7094	18	12.9396	13.1057	13.2726
-20	67.0166	69.0139	71.0636	19	12.4468	12.6016	12.7571
-19	63.8674	65.7389	67.6584	20	11.9751	12.1193	12.2640
-18	60.8844	62.6382	64.4361	21	11.5235	11.6577	11.7924
-17	58.0580	59.7017	61.3858	22	11.0911	11.2159	11.3411
-16	55.3789	56.9196	58.4973	23	10.6769	10.7930	10.9092
-15	52.8387	54.2829	55.7611	24	10.2802	10.3879	10.4958
-14	50.4294	51.7834	53.1684	25	9.9000	10.0000	10.1000
-13	48.1435	49.4130	50.7109	26	9.5287	9.6286	9.7285
-12	45.9741	47.1644	48.3807	27	9.1734	9.2731	9.3729
-11	43.9146	45.0307	46.1705	28	8.8334	8.9327	9.0322
-10	41.9587	43.0053	44.0736	29	8.5079	8.6068	8.7059
-9	40.1008	41.0823	42.0835	30	8.1963	8.2946	8.3932
-8	38.3353	39.2557	40.1942	31	7.8979	7.9955	8.0936
-7	36.6573	37.5204	38.4001	32	7.6120	7.7089	7.8063
-6	35.0618	35.8713	36.6957	33	7.3380	7.4342	7.5308
-5	33.5444	34.3035	35.0762	34	7.0755	7.1708	7.2666
-4	32.1009	32.8127	33.5370	35	6.8238	6.9182	7.0131
-3	30.7272	31.3947	32.0735	36	6.5824	6.6759	6.7699
-2	29.4196	30.0455	30.6816	37	6.3510	6.4434	6.5365

T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	6.1289	6.2203	6.3124	82	1.5320	1.5764	1.6218
39	5.9158	6.0061	6.0972	83	1.4898	1.5333	1.5780
40	5.7114	5.8005	5.8905	84	1.4489	1.4917	1.5355
41	5.5150	5.6031	5.6920	85	1.4094	1.4513	1.4944
42	5.3265	5.4135	5.5013	86	1.3711	1.4123	1.4546
43	5.1455	5.2313	5.3179	87	1.3340	1.3745	1.4161
44	4.9716	5.0562	5.1417	88	1.2981	1.3379	1.3787
45	4.8045	4.8879	4.9723	89	1.2633	1.3024	1.3425
46	4.6439	4.7261	4.8093	90	1.2297	1.2680	1.3074
47	4.4896	4.5706	4.6526	91	1.1970	1.2347	1.2734
48	4.3412	4.4210	4.5018	92	1.1654	1.2024	1.2404
49	4.1985	4.2771	4.3567	93	1.1348	1.1711	1.2085
50	4.0612	4.1386	4.2170	94	1.1051	1.1408	1.1775
51	3.9292	4.0054	4.0826	95	1.0764	1.1114	1.1474
52	3.8021	3.8771	3.9531	96	1.0485	1.0829	1.1183
53	3.6798	3.7536	3.8285	97	1.0214	1.0552	1.0900
54	3.5621	3.6347	3.7084	98	0.9952	1.0284	1.0626
55	3.4488	3.5202	3.5927	99	0.9698	1.0024	1.0359
56	3.3396	3.4099	3.4812	100	0.9451	0.9771	1.0101
57	3.2345	3.3036	3.3738	101	0.9212	0.9526	0.9850
58	3.1332	3.2011	3.2702	102	0.8979	0.9288	0.9607
59	3.0356	3.1024	3.1703	103	0.8754	0.9058	0.9370
60	2.9416	3.0072	3.0740	104	0.8536	0.8834	0.9141
61	2.8509	2.9155	2.9811	105	0.8323	0.8616	0.8918
62	2.7635	2.8269	2.8915	106	0.8117	0.8405	0.8702
63	2.6793	2.7416	2.8051	107	0.7917	0.8200	0.8492
64	2.5980	2.6592	2.7216	108	0.7723	0.8001	0.8287
65	2.5196	2.5797	2.6411	109	0.7535	0.7807	0.8089
66	2.4439	2.5030	2.5633	110	0.7351	0.7619	0.7896
67	2.3709	2.4290	2.4883	111	0.7173	0.7437	0.7709
68	2.3005	2.3575	2.4158	112	0.7001	0.7259	0.7527
69	2.2324	2.2885	2.3457	113	0.6833	0.7087	0.7350
70	2.1668	2.2218	2.2781	114	0.6669	0.6919	0.7178
71	2.1034	2.1575	2.2127	115	0.6511	0.6756	0.7010
72	2.0421	2.0952	2.1495	116	0.6357	0.6598	0.6847
73	1.9830	2.0351	2.0885	117	0.6207	0.6444	0.6689
74	1.9258	1.9770	2.0294	118	0.6061	0.6294	0.6535
75	1.8706	1.9209	1.9724	119	0.5919	0.6148	0.6386
76	1.8172	1.8666	1.9172	120	0.5782	0.6007	0.6240
77	1.7656	1.8141	1.8638	121	0.5648	0.5869	0.6098
78	1.7157	1.7634	1.8122	122	0.5518	0.5735	0.5960
79	1.6675	1.7143	1.7622	123	0.5391	0.5604	0.5826
80	1.6208	1.6668	1.7139	124	0.5267	0.5477	0.5695
81	1.5757	1.6208	1.6671	125	0.5147	0.5354	0.5568

T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(℃)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
126	0.5031	0.5234	0.5444	139	0.3766	0.3929	0.4099
127	0.4917	0.5117	0.5324	140	0.3685	0.3846	0.4013
128	0.4807	0.5003	0.5206	141	0.3607	0.3764	0.3929
129	0.4699	0.4892	0.5092	142	0.3530	0.3685	0.3847
130	0.4594	0.4784	0.4981	143	0.3455	0.3608	0.3767
131	0.4492	0.4679	0.4872	144	0.3383	0.3533	0.3690
132	0.4393	0.4576	0.4767	145	0.3312	0.3460	0.3614
133	0.4296	0.4476	0.4664	146	0.3242	0.3388	0.3540
134	0.4202	0.4379	0.4563	147	0.3175	0.3318	0.3467
135	0.4110	0.4284	0.4466	148	0.3109	0.3250	0.3397
136	0.4020	0.4192	0.4370	149	0.3045	0.3184	0.3328
137	0.3933	0.4102	0.4278	150	0.2982	0.3119	0.3261
138	0.3848	0.4014	0.4187				