

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	SNS103B13380FE1Q020EYD20
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	B1	3380	F	E	I	Q	020	E	YD	20
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬

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°C零功率电阻值) PRODUCTION RESISTANCE (ZERO POWER RESISTANCE AT 25°C)	103指10KΩ
	103 MEANS 10 KΩ
④ B 值代码 B-VALUE CODE	B1 指 25/50
	B1 means 25/50
⑤ B 值数值 B-VALUE TOLERANCE	3380指B值为3380K
	B3380 INDICATE 3380K
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 SPECIFICATION	Q指UL3302 HF#28单线;
	Q MEANS UL3302 HF#28 SINGLE WIRE;
⑩ 线材长度 WIRE LENGTH	020指产品总长度为20mm;
	020 REFERS TO THE TOTAL LENGTH OF 20MM;

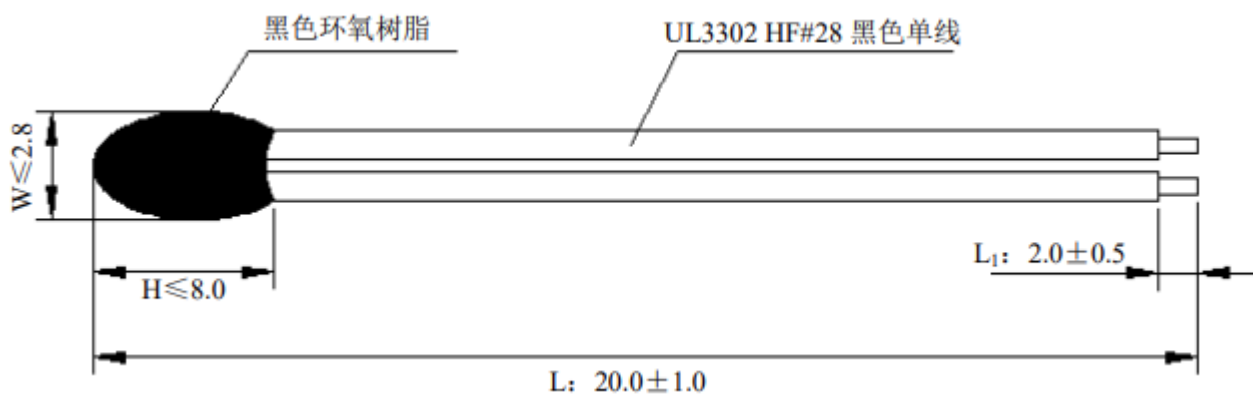
⑪ 环保产品 ENVIRONMENTAL PROTECTION PRODUCTS	E表示环保。
	E IS FOR ENVIRONMENTAL PROTECTION.
⑫ 特殊定义 SPECIAL DEFINITION	YD表示头部尺寸宽度 $W \leq 2.8\text{mm}$ ，深度 $H \leq 8.0\text{mm}$;
	YD INDICATES THAT THE WIDTH OF THE HEAD IS $W \leq 2.8\text{MM}$ AND THE DEPTH IS $H \leq 8.0\text{MM}$.
⑬ 线尾剥线长度 STRIP LENGTH OF WIRE TAIL	20指产品线尾剥线长度2.0mm。
	20 FINGERS PRODUCT LINE TAIL STRIP LENGTH 2.0MM.

2、产品特性PRODUCTION FEATURES

2.1 技术参数TECHNICAL PARAMETER

规格型号 SPECIFICATION AND MODEL	SNS103B13380FE1Q020EYD20
额定零功率电阻值 RATED ZERO POWER RESISTANCE VALUE	10K
B (K)	3380
耗散系数 (mw/°C) DISSIPATION COEFFICIENT (mw/°C)	≥2.5
热时间常数 (S) THERMAL TIME CONSTANT	≤15
额定功率 (mw) RATED POWER	150
工作温度范围 (°C) OPERATING TEMPERATURE RANGE	-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	检验项目 ITEMS	检验方法 METHOD	性能要求 PERFORMANCE REQUIREMENTS
(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℃ HIGH- PRECISION OIL TANK AND MEASURE IT	$10K\Omega \pm 1\%$
(2)	$B_{25/50}$	将待测品置于 25℃、50℃高精度油槽内稳定后测量 IMMERSE SAMPLES IN A 25℃,50℃ HIGH-PRECISION OIL TANK AND MEASURE IT HIGH PRECISION OIL TANK	$3380K \pm 1\%$
(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
(5)	绝缘体测试 INSULATOR 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 SERIAL NUMBER	检测项目 TEST ITEM	检测标准 TESTING STANDARD	检测方法 DETECTION METHOD	性能要求 PERFORMANCE REQUIREMENT
(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°C 湿度HUMIDITY: 90~95%RH 时间TIME: 500±12h 工作电流WORKING CURRENT	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤2%
(3)	高温存储 HIGH TEMPERATURE STORAGE	IEC68-2-2/CNS5550	温度TEMPERATURE: 105±2°C 时间TIME: 1000±24h	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤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 $\Delta R_{25}/R_{25}$ ≤5% $\Delta B/B$ ≤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 $\Delta R_{25}/R_{25}$ ≤2% $\Delta B/B$ ≤2%
(6)	耐久性 DURABILITY	UL1434	环境温度AMBIENT TEMPERATURE: 25±2°C 工作电流 WORKING CURRENT 周期PERIOD: 6000	无外观损伤 NO COSMETIC DAMAGE $\Delta R_{25}/R_{25}$ ≤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 PACKING MATERIAL&SIZE	产品数量 QUANTITY OF PRODUCT
(1)	包装袋 PACKING BAG	热封口袋HEAT SEALED POCKET, W×H = 110mm×130mm	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

R25=10KΩ±1%
B25/50=3380±1%

T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
-40	191.3117	199.1119	207.2095	-1	28.1224	28.7076	29.3020
-39	180.8406	188.1070	195.6457	0	26.9397	27.4884	28.0454
-38	171.0154	177.7865	184.8074	1	25.8135	26.3278	26.8498
-37	161.7918	168.1036	174.6442	2	24.7402	25.2224	25.7114
-36	153.1291	159.0146	165.1097	3	23.7173	24.1692	24.6273
-35	144.9896	150.4792	156.1610	4	22.7420	23.1655	23.5945
-34	137.3382	142.4600	147.7581	5	21.8119	22.2087	22.6104
-33	130.1425	134.9226	139.8643	6	20.9246	21.2963	21.6725
-32	123.3724	127.8348	132.4455	7	20.0780	20.4262	20.7783
-31	117.0000	121.1670	125.4699	8	19.2700	19.5960	19.9256
-30	110.9994	114.8916	118.9084	9	18.4986	18.8038	19.1122
-29	105.3465	108.9830	112.7336	10	17.7620	18.0477	18.3361
-28	100.0190	103.4174	106.9204	11	17.0607	17.3281	17.5978
-27	94.9962	98.1727	101.4453	12	16.3904	16.6404	16.8926
-26	90.2585	93.2285	96.2865	13	15.7494	15.9832	16.2189
-25	85.7882	88.5656	91.4237	14	15.1364	15.3550	15.5752
-24	81.5684	84.1663	86.8382	15	14.5500	14.7542	14.9598
-23	77.5835	80.0140	82.5123	16	13.9890	14.1797	14.3716
-22	73.8190	76.0933	78.4299	17	13.4521	13.6301	13.8091
-21	70.2614	72.3900	74.5756	18	12.9382	13.1042	13.2711
-20	66.8980	68.8906	70.9353	19	12.4462	12.6010	12.7565
-19	63.7519	65.6188	67.5336	20	11.9751	12.1193	12.2640
-18	60.7721	62.5215	64.3148	21	11.5130	11.6471	11.7815
-17	57.9490	59.5885	61.2682	22	11.0835	11.2083	11.3333
-16	55.2734	56.8101	58.3836	23	10.6721	10.7881	10.9043
-15	52.7368	54.1772	55.6514	24	10.2778	10.3856	10.4934
-14	50.3312	51.6815	53.0628	25	9.9000	10.0000	10.1000
-13	48.0491	49.3150	50.6093	26	9.5309	9.6308	9.7307
-12	45.8834	47.0704	48.2832	27	9.1776	9.2772	9.3771
-11	43.8276	44.9406	46.0772	28	8.8394	8.9387	9.0382
-10	41.8754	42.9191	43.9844	29	8.5156	8.6144	8.7136
-9	40.0212	40.9999	41.9983	30	8.2055	8.3038	8.4024
-8	38.2594	39.1772	40.1130	31	7.9084	8.0061	8.1042
-7	36.5849	37.4456	38.3227	32	7.6238	7.7208	7.8182
-6	34.9930	35.8001	36.6222	33	7.3511	7.4472	7.5439
-5	33.4790	34.2360	35.0065	34	7.0896	7.1849	7.2808

-4	32.0389	32.7487	33.4709	35	6.8389	6.9333	7.0283
-3	30.6685	31.3342	32.0110	36	6.5984	6.6919	6.7860
-2	29.3642	29.9883	30.6227	37	6.3677	6.4601	6.5533
T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)	T(°C)	RMin(KΩ)	RNor(KΩ)	RMax(KΩ)
38	6.1463	6.2378	6.3299	72	2.0610	2.1144	2.1690
39	5.9338	6.0242	6.1154	73	2.0016	2.0541	2.1078
40	5.7299	5.8192	5.9093	74	1.9443	1.9958	2.0485
41	5.5341	5.6223	5.7113	75	1.8889	1.9395	1.9913
42	5.3461	5.4331	5.5210	76	1.8352	1.8850	1.9359
43	5.1654	5.2513	5.3381	77	1.7834	1.8323	1.8823
44	4.9918	5.0766	5.1622	78	1.7334	1.7813	1.8305
45	4.8250	4.9086	4.9930	79	1.6849	1.7320	1.7803
46	4.6647	4.7470	4.8303	80	1.6380	1.6843	1.7317
47	4.5106	4.5917	4.6739	81	1.5926	1.6381	1.6847
48	4.3623	4.4423	4.5233	82	1.5488	1.5935	1.6392
49	4.2198	4.2985	4.3783	83	1.5063	1.5501	1.5951
50	4.0826	4.1601	4.2387	84	1.4653	1.5083	1.5525
51	3.9506	4.0270	4.1044	85	1.4254	1.4677	1.5111
52	3.8236	3.8988	3.9750	86	1.3869	1.4285	1.4711
53	3.7013	3.7753	3.8504	87	1.3497	1.3905	1.4324
54	3.5836	3.6564	3.7303	88	1.3136	1.3536	1.3948
55	3.4702	3.5419	3.6146	89	1.2786	1.3179	1.3584
56	3.3611	3.4315	3.5031	90	1.2447	1.2833	1.3230
57	3.2559	3.3251	3.3956	91	1.2118	1.2498	1.2888
58	3.1544	3.2226	3.2919	92	1.1800	1.2173	1.2556
59	3.0568	3.1238	3.1919	93	1.1492	1.1858	1.2234
60	2.9626	3.0285	3.0955	94	1.1193	1.1553	1.1923
61	2.8719	2.9366	3.0026	95	1.0903	1.1257	1.1620
62	2.7842	2.8479	2.9127	96	1.0623	1.0970	1.1327
63	2.6999	2.7625	2.8262	97	1.0350	1.0691	1.1042
64	2.6184	2.6799	2.7426	98	1.0086	1.0421	1.0766
65	2.5398	2.6003	2.6619	99	0.9830	1.0159	1.0498
66	2.4640	2.5234	2.5840	100	0.9580	0.9904	1.0237
67	2.3908	2.4492	2.5087	101	0.9339	0.9657	0.9984
68	2.3202	2.3775	2.4360	102	0.9105	0.9417	0.9738
69	2.2520	2.3083	2.3658	103	0.8878	0.9185	0.9501
70	2.1861	2.2414	2.2980	104	0.8658	0.8959	0.9270
71	2.1226	2.1769	2.2325	105	0.8443	0.8739	0.9044