

Product Specification

产品规格书

No.: 08REV.03

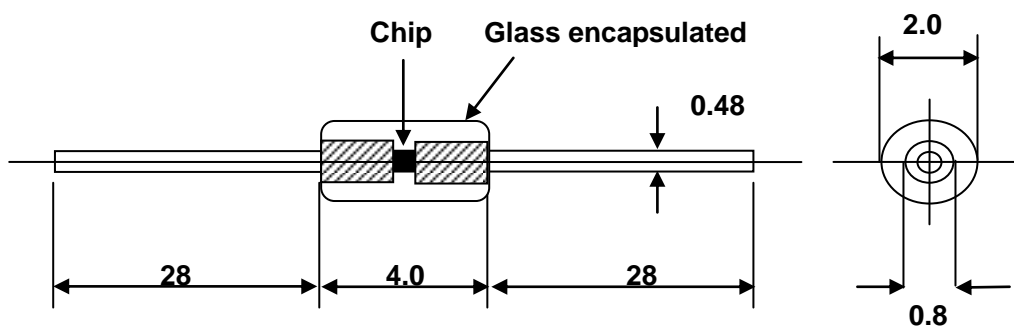
1、Scope

This specification deals with shape, dimensions, characteristics, inspection standard etc. 本说明包括产品外形尺寸、性能及出厂检验标准，产品型号、规格。

2、Specifications

MF58-104-3950-1%					
NTC	Resistance value		B value		
Thermistor	100KΩ	±1%	3950	±1%	B25/50

3、Shape and dimension 外形尺寸(Unit: mm)



4、Electrical characteristics 电性能

Product Specification

产品规格书

No.: 08REV.03

	Item 项目	Symbol 符号	Test Condition 测试条件	Min. 最小值	Nor. 正常值	Max. 最大值	Unit 单位
a	Resistance at 25 °C 25 °C 电阻值	R25	25±0.05 °C	99	100	101	kΩ
b	Bvalue B 值	B25/50	$B = \left(\frac{1}{T1} - \frac{1}{T2}\right) \ln \frac{RT1}{RT2}$	3910. 5	3950	3989 . 5	k
c	Insulation resistance 绝缘电阻	/	500VDC	100	/	/	MΩ
d	Thermal time constant 热时间常数	τ	in still air 静止空气中	/	/	20	sec
e	Thermal dissipation constant 热耗散系数	δ	in still air 静止空气中	2.0	/	/	mw/ °C
f	Operating temperature range 使用温度范围	/	/	-50	/	300	°C

5、Reliability 可靠性

	Item 项目	Specification 技术说明	Method of Examination 测试条件及方法
5.1	high Temp. storage 高温存放	*ΔR25/ R25≤±2%	After storage at 250°C for 1000hrs 250°C 环境中放置 1000 小时
5.2	Low Temp. storage 低温存放		After storage at -40°C for 1000hrs -40°C 环境中放置 1000 小时
5.3	High temperature and humidity 耐湿热		After storage at 60°C 95%RH for 1000hrs 60°C 95%RH 存放 1000 小时
5.4	Thermal shock 耐温度冲击	*ΔR25/ R25≤±2%	100 cycles of following sequence -40°C 10min.---5min. room temp. ---200°C 10min.---5 min. room temp. 经历如下温度循环 100 次 -40°C10 分钟---常温 5 分钟---200°C10 分钟 ---常温 5 分钟
5.5	Vibration 振动	* no visible damage 无损伤 *ΔR25/ R25≤±2%	After vibrate test , Frequence 10-500Hz 15min.max amplitude 1.5mm ,in X and Y directions

Product Specification

产品规格书

No.: 08REV.03

			振幅 1.5mm 频率 10Hz 到 500Hz 元件受振动试验 X、Y 方向各 15 分钟
5.6	Pulling 引线强度	* no visible damage 无损伤 * $\Delta R_{25}/R_{25} \leq \pm 2\%$	After applying a force of 9.8N in the axial direction of thermistor, and maintain the force for 60sec. 引线沿轴向施加 9.8N 拉力, 并持续 60 秒
5.7	Fall down 跌落	* no visible damage 无损伤 * $\Delta R_{25}/R_{25} \leq \pm 2\%$	After dropped freely onto wood floor from 1 meter height for 10 times 从 1 米高度自由落下 10 次在规定的木板上

6、Outgoing Inspection 出厂检验

6.1 The product shall be inspected at every delivery lot inspection items, sampling quantities and sampling acceptable standard are as follows. 产品批量出厂前必须进行如下项目抽检, 抽样数及标准如下

Inspection Item 检验项目	Sampling acceptable Standard 抽样合格标准	Remarks 备注
Resistance value 电阻值	N=20,Ac=0,Re=1	4(a)
B value B 值	N=10,Ac=0,Re=1	4(b)
Insulation Resistance 绝缘电阻	N=5,Ac=0,Re=1	4(c)
Shape & dimensions 外形尺寸	N=5,Ac=0,Re=1	3
Appearance 外观	N=5,Ac=0,Re=1	3

6.2 Inspection data 检验数据

Inspection data will be issued for pay upon request. 检验数据必须保留以备索取。

Product Specification

产品规格书

No.: 08REV.03

7、Packing 包装

Packing shall be done not to cause damage or soil during delivery 包装方式必须保证在运输过程中避免损伤及污染。

TEMPERATURE VS RESISTANCE TABLE

Resistance 100k Ohms at 25deg. C

B Value 3950K at 25/50 deg. C

Temp. (deg. C)	R (k Ohms)	Temp. (deg. C)	R (kOhms)	Temp. (deg. C)	R (kOhms)	Temp. (deg. C)	R (kOhms)
-20	975.8038	48	38.7539	116	4.1627	184	0.7975
-19	920.5962	49	37.2876	117	4.0484	185	0.7808
-18	868.8615	50	35.8842	118	3.9378	186	0.7646
-17	820.3603	51	34.5405	119	3.8306	187	0.7487
-16	774.8710	52	33.2538	120	3.7268	188	0.7332
-15	732.1889	53	32.0214	121	3.6263	189	0.7181
-14	692.1238	54	30.8408	122	3.5289	190	0.7034
-13	654.4999	55	29.7096	123	3.4345	191	0.6890
-12	619.1540	56	28.6253	124	3.3430	192	0.6749
-11	585.9346	57	27.5860	125	3.2543	193	0.6612
-10	554.7016	58	26.5895	126	3.1683	194	0.6479
-9	525.3245	59	25.6338	127	3.0850	195	0.6348
-8	497.6821	60	24.7171	128	3.0042	196	0.6221
-7	471.6621	61	23.8376	129	2.9258	197	0.6096
-6	447.1599	62	22.9937	130	2.8498	198	0.5975
-5	424.0781	63	22.1836	131	2.7761	199	0.5856
-4	402.3264	64	21.4061	132	2.7045	200	0.5740
-3	381.8204	65	20.6594	133	2.6352	201	0.5627
-2	362.4818	66	19.9424	134	2.5678	202	0.5517
-1	344.2375	67	19.2537	135	2.5025	203	0.5409
0	327.0195	68	18.5920	136	2.4391	204	0.5303
1	310.7640	69	17.9562	137	2.3775	205	0.5200
2	295.4121	70	17.3452	138	2.3178	206	0.5099
3	280.9084	71	16.7578	139	2.2598	207	0.5001
4	267.2014	72	16.1930	140	2.2034	208	0.4905
5	254.2428	73	15.6499	141	2.1487	209	0.4811
6	241.9877	74	15.1276	142	2.0956	210	0.4719
7	230.3940	75	14.6251	143	2.0440	211	0.4630
8	219.4224	76	14.1417	144	1.9939	212	0.4542
9	209.0361	77	13.6764	145	1.9452	213	0.4456
10	199.2007	78	13.2286	146	1.8978	214	0.4372
11	189.8841	79	12.7976	147	1.8518	215	0.4290
12	181.0559	80	12.3825	148	1.8071	216	0.4210

Product Specification

产品规格书

No.: 08REV.03

13	172.6881	81	11.9828	149	1.7637	217	0.4132
14	164.7540	82	11.5978	150	1.7215	218	0.4055
15	157.2290	83	11.2270	151	1.6804	219	0.3980
16	150.0898	84	10.8697	152	1.6405	220	0.3907
17	143.3144	85	10.5254	153	1.6017	221	0.3836
18	136.8825	86	10.1935	154	1.5640	222	0.3765
19	130.7749	87	9.8736	155	1.5273	223	0.3697
20	124.9734	88	9.5652	156	1.4915	224	0.3630
21	119.4612	89	9.2678	157	1.4568	225	0.3564
22	114.2223	90	8.9809	158	1.4230	226	0.3500
23	109.2417	91	8.7042	159	1.3901	227	0.3437
24	104.5053	92	8.4373	160	1.3582	228	0.3376
25	100.0000	93	8.1797	161	1.3270	229	0.3315
26	95.7132	94	7.9312	162	1.2967	230	0.3257
27	91.6333	95	7.6912	163	1.2672	231	0.3199
28	87.7492	96	7.4596	164	1.2385	232	0.3142
29	84.0505	97	7.2360	165	1.2106	233	0.3087
30	80.5274	98	7.0201	166	1.1833	234	0.3033
31	77.1707	99	6.8115	167	1.1568	235	0.2980
32	73.9717	100	6.6101	168	1.1310	236	0.2928
33	70.9222	101	6.4155	169	1.1059	237	0.2878
34	68.0144	102	6.2274	170	1.0814	238	0.2828
35	65.2411	103	6.0457	171	1.0576	239	0.2779
36	62.5954	104	5.8701	172	1.0343	240	0.2732
37	60.0707	105	5.7003	173	1.0117	241	0.2685
38	57.6610	106	5.5362	174	0.9896	242	0.2639
39	55.3604	107	5.3775	175	0.9681	243	0.2594
40	53.1635	108	5.2240	176	0.9472	244	0.2550
41	51.0651	109	5.0755	177	0.9268	245	0.2507
42	49.0602	110	4.9319	178	0.9069	246	0.2465
43	47.1443	111	4.7930	179	0.8875	247	0.2424
44	45.3130	112	4.6586	180	0.8686	248	0.2384
45	43.5621	113	4.5285	181	0.8501	249	0.2344
46	41.8878	114	4.4026	182	0.8321	250	0.2305
47	40.2862	115	4.2807	183	0.8146		