SRPASSIVES

NTCC-10K

1、Electrical Characteristics

	Item	Symbol	Test conditions	Unit	Specification
1.1	Zero Power Resistance at 25℃	R_{25}	Ta=25±0.1℃ Test Power≤0.1mW	KΩ	10±5%
1.2	B-value	$B_{25/50}$	$B=[(T_a\times T_b)/(T_b-T_a)]\times \ln(R_a/R_b)$	K	4050±10%
1.3	Thermal dissipation Coefficient	δ	In still air	mW/℃	about 4.5
1.4	Thermal time constant	τ	In still air	sec	about 20
1.5	Insulation resistance	/	1000V/DC 1min	MΩ	≥500
1.6	Operating temperature	/	/	℃	-30℃ ~ 125℃
1.7	Maximum rated power	Pmax	/	mW	450

2、Reliability

	Item	Test conditions and methods	Technical requirements
2.1	Terminal strength	Pull: wire diameter(mm) pulling force (N) 0.35<d≤0.5 5, 0.5<d≤0.8 10 time：10±1 sec	No obvious damage, R25 ΔR/R≤±3%
2.2	Solderability	temperature : 245±5℃ for 2-3sec	the coverage area should be more than 95%.
2.3	Welding heat resistant	Tin pan temperature : 260±5℃ , immersion depth is apart from the body resistance 6mm , time:5±1sec	R25 ΔR/R≤±3% ,
2.4	Steady humidity and heat	Temp：40℃±2℃ , humidity：93±2% , Time ：500hrs	R25 ΔR/R≤±3% ,
2.5	Rapid changes in temperature	-30℃30min→25℃5min→125℃30min→25℃5min , 5cycles	R25 ΔR/R≤±3%
2.6	High temperature storage	Temp : 125℃±5℃, Time :1000hrs	R25 ΔR/R≤±5%
2.7	Low temperature storage	Temp : -30℃, Time :1000hrs	R25 ΔR/R≤±5%

3、Matters need attention

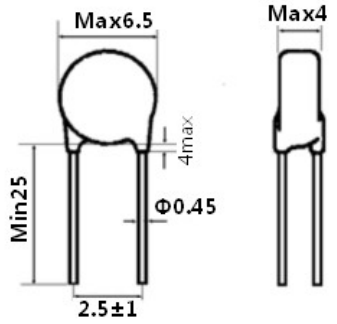
3.1 This product USES: Temperature measurement and control;
3.2 When the soldering iron welding, the welding place at least 2 mm space from coating layer and the welding temperature should be lower than 360 ℃, welding time < 3 ses
3.3 Storage temp：-10℃ ~ 40℃ ;storage humidity ：≤75% RH ;
3.4 Avoid air corrosion or sunlight
3.5 Remake sealed storage after package opening.

4. Certificate

4.1 Quality Control System Certification
ISO9001：2008（01112Q20216R4M）
4.2 Environment Management System Certification
ISO14001：2004（01113E20060R2M）
4.3 Environment Test Report
RoHS (ECL01G004670E)

4.4 CQC Safe Certification (CQC13001089724)
4.5 UL certificate (File # E240991)
4.6 TUV Certificate（R50245892）

5、Dimensions(mm)



Coating material	Wire material	Body color	Logo color
Epoxy resin	CP wire	Green	Black

6. Product model specification

MF11 103 J
① ② ③

① MF11：MF11 compensation NTC Thermistor

②103：Zero Power Resistance at 25℃is 10KΩ

③J：Resistance precision code F-±1% G-±2%
H-±3% J-±5%

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R25=10k Ω						B25/50=4050K					
T	R	T	R	T	R	T	R	T	R	T	R
-30	193.5	-4	41.904	22	11.46	48	3.797	74	1.451	100	0.6
-29	181.461	-3	39.704	23	10.948	49	3.651	75	1.402	101	0.6
-28	170.268	-2	37.633	24	10.461	50	3.511	76	1.354	102	0.582
-27	159.85	-1	35.681	25	10	51	3.377	77	1.309	103	0.564
-26	150.146	0	33.8	26	9.561	52	3.248	78	1.265	104	0.548
-25	141.1	1	32.108	27	9.144	53	3.126	79	1.222	105	0.531
-24	132.659	2	30.474	28	8.747	54	3.008	80	1.181	106	0.516
-23	124.779	3	28.932	29	8.37	55	2.896	81	1.142	107	0.5
-22	117.418	4	27.477	30	8.011	56	2.788	82	1.104	108	0.486
-21	110.537	5	26.104	31	7.67	57	2.684	83	1.068	109	0.472
-20	104.101	6	24.807	32	7.345	58	2.585	84	1.033	110	0.458
-19	98.079	7	23.583	33	7.036	59	2.49	85	1	111	0.445
-18	92.44	8	22.426	34	6.741	60	2.4	86	0.967	112	0.432
-17	87.159	9	21.333	35	6.461	61	2.312	87	0.936	113	0.419
-16	82.21	10	20.3	36	6.193	62	2.229	88	0.906	114	0.407
-15	77.571	11	19.322	37	5.938	63	2.148	89	0.877	115	0.396
-14	73.219	12	18.398	38	5.695	64	2.071	90	0.849	116	0.385
-13	69.137	13	17.523	39	5.464	65	1.997	91	0.822	117	0.374
-12	65.305	14	16.695	40	5.242	66	1.927	92	0.796	118	0.364
-11	61.707	15	15.912	41	5.031	67	1.858	93	0.771	119	0.353
-10	58.328	16	15.169	42	4.83	68	1.793	94	0.747	120	0.344
-9	55.153	17	14.466	43	4.638	69	1.73	95	0.723	121	0.334
-8	52.169	18	13.799	44	4.454	70	1.67	96	0.701	122	0.325
-7	49.363	19	13.167	45	4.279	71	1.612	97	0.679	123	0.316
-6	46.724	20	12.568	46	4.111	72	1.556	98	0.658	124	0.308
-5	44.241	21	11.999	47	3.951	73	1.503	99	0.638	125	0.3