Compensation NTC Thermistor

RND components

Features

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Applications

- [illegible]
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PART NUMBER

Example: RND 155MF11-682J

RND 155MF11	682	J
Type	Zero Power Resistance @ 25 ℃ 682 = 6.8 kΩ	Tolerance F = ± 1% G = ± 2% H = ± 3% J = ±5 %

Electrical Characteristics

	Item	Symbol	Test conditions	Unit	Specification
1.1	Zero Power Resistance at 25℃	R25	Ta=25±0.1℃ Test Power≤0.1mW	kΩ	6.8±5%
1.2	B-value	B25/50	B=[(Ta×Tb)/(Tb-Ta)]×ln(Ra/Rb)	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

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 6 mm, time 5±1 sec	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 ， 5 cycles	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%

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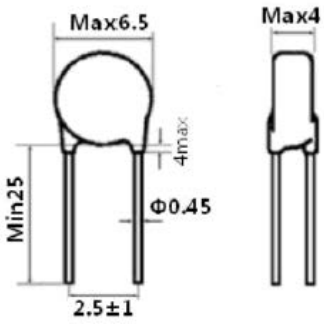
Caution

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 sec.
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

Certificate

4.1 Quality Control System Certification
ISO9001：2008（01115Q20270R5M）
ISOTS16949：2009(0192416)
4.2 Environment Management System Certification
ISO14001：2004（01113E20060R2M）
4.3 Environment Test Report RoHS
4.4 CQC Safe Certification（CQC13001089724) 4.5 TUV Certificate（R50245892）

Dimensions



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

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R&T Table

R25=6.8KΩ				B25/50=4050K							
T	R	T	R	T	R	T	R	T	R	T	R
-30	131.58	-4	28.495	22	7.792	48	2.582	74	0.987	100	0.408
-29	123.394	-3	26.999	23	7.444	49	2.482	75	0.953	101	0.408
-28	115.782	-2	25.59	24	7.114	50	2.387	76	0.921	102	0.396
-27	108.698	-1	24.263	25	6.8	51	2.296	77	0.89	103	0.384
-26	102.099	0	22.984	26	6.501	52	2.209	78	0.86	104	0.372
-25	95.948	1	21.833	27	6.218	53	2.125	79	0.831	105	0.361
-24	90.208	2	20.722	28	5.948	54	2.045	80	0.803	106	0.35
-23	84.85	3	19.673	29	5.692	55	1.969	81	0.777	107	0.34
-22	79.844	4	18.684	30	5.448	56	1.895	82	0.751	108	0.33
-21	75.165	5	17.75	31	5.216	57	1.825	83	0.726	109	0.32
-20	70.789	6	16.869	32	4.995	58	1.758	84	0.702	110	0.311
-19	66.693	7	16.036	33	4.784	59	1.693	85	0.68	111	0.302
-18	62.859	8	15.25	34	4.584	60	1.632	86	0.657	112	0.293
-17	59.268	9	14.506	35	4.393	61	1.572	87	0.636	113	0.285
-16	55.903	10	13.803	36	4.211	62	1.515	88	0.616	114	0.277
-15	52.748	11	13.139	37	4.038	63	1.461	89	0.596	115	0.269
-14	49.789	12	12.51	38	3.873	64	1.408	90	0.577	116	0.261
-13	47.013	13	11.916	39	3.715	65	1.358	91	0.559	117	0.254
-12	44.407	14	11.353	40	3.565	66	1.31	92	0.541	118	0.247
-11	41.961	15	10.82	41	3.421	67	1.264	93	0.524	119	0.24
-10	39.663	16	10.315	42	3.284	68	1.219	94	0.508	120	0.234
-9	37.504	17	9.837	43	3.153	69	1.176	95	0.492	121	0.227
-8	35.475	18	9.383	44	3.029	70	1.135	96	0.476	122	0.221
-7	33.567	19	8.953	45	2.909	71	1.096	97	0.462	123	0.215
-6	31.772	20	8.546	46	2.795	72	1.058	98	0.448	124	0.209
-5	30.084	21	8.159	47	2.686	73	1.022	99	0.434	125	0.204

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