Compensation NTC Thermistor

RND components

Features

- I λ∃K ΰŜăΰλyƎ LJNŜÔλăλ2Y
- {ΰŜI·Řè ƨLJŜNI·ΰλyƎ Ŧ2N f2yƎ ΰλYˆŜ
- wŜŦf2ø ă2fŘŜNλyƎ LJ2ăăλōfŜ
- {K2Nΰ NŜăLJ2yãŜ ΰλYˆŜ

Applications

- ¢ŜYˆLJŜNI·ΰdzNŜ YˆŜI·ădzNŜYˆŜyΰ
- . I·ΰΰŜNề ÖKI·NƎŜNă
- ¢ŜYˆLJŜNI·ΰdzNŜ ăŜyãλyƎƩ LJNƨΰŜÔΰλ2Y I·yŘ Õƨ2YˆLJŜyãI·ΰλ2Yˆλ Yˆλ yŘdzăΰNλI·fŁ ΰŜfŜÕƨ2Yˆ I·yŘ Õ2yãdzYˆŜN I·LJLJfλÖI·ΰλ2yã
- LyNdzăK ÖdzNNŜyΰ fλYˆλΰλyƎƩ Ŝ℗Ǝ℗ λYˆăøλΰÖKπYˆ2ŘŜ LJ2øŜN ădzLJLJfλŜăƩ ă2Ŧΰnăΰ I·Nΰΰ Yˆ2ΰƨNă

PART NUMBER

Example: RND 155MF11-472J

RND 155MF11	472	J
Type	Zero Power Resistance @ 25 ℃ 472 = 4.7 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	4.7±5%
1.2	B-value	B25/50	B=[(Ta×Tb)/(Tb-Ta)]×ln(Ra/Rb)	K	3950±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→1 25℃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%

Compensation NTC Thermistor

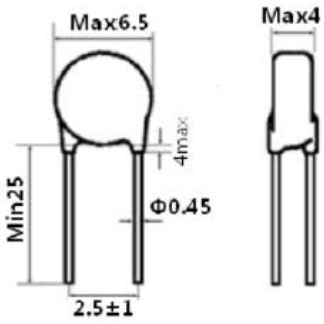
Caution

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

Compensation NTC Thermistor

RND components

R&T Table

R25=4.7KΩ				B25/50=3950K							
T	R	T	R	T	R	T	R	T	R	T	R
-30	85.728	-4	18.953	22	5.366	48	1.831	74	0.729	100	0.329
-29	80.529	-3	17.979	23	5.132	49	1.762	75	0.705	101	0.329
-28	75.667	-2	17.061	24	4.911	50	1.696	76	0.683	102	0.321
-27	71.118	-1	16.196	25	4.7	51	1.633	77	0.662	103	0.312
-26	66.864	0	15.463	26	4.499	52	1.573	78	0.641	104	0.304
-25	62.886	1	14.612	27	4.308	53	1.516	79	0.621	105	0.297
-24	59.164	2	13.886	28	4.126	54	1.46	80	0.602	106	0.289
-23	55.682	3	13.201	29	3.952	55	1.408	81	0.584	107	0.282
-22	52.425	4	12.554	30	3.787	56	1.357	82	0.566	108	0.275
-21	49.376	5	11.943	31	3.63	57	1.308	83	0.549	109	0.269
-20	46.523	6	11.366	32	3.48	58	1.262	84	0.532	110	0.262
-19	43.852	7	10.82	33	3.337	59	1.217	85	0.517	111	0.256
-18	41.35	8	10.303	34	3.201	60	1.175	86	0.501	112	0.25
-17	39.007	9	9.815	35	3.071	61	1.133	87	0.487	113	0.244
-16	36.812	10	9.353	36	2.947	62	1.094	88	0.472	114	0.238
-15	34.754	11	8.915	37	2.829	63	1.056	89	0.459	115	0.233
-14	32.824	12	8.5	38	2.716	64	1.02	90	0.446	116	0.228
-13	31.014	13	8.107	39	2.608	65	0.985	91	0.433	117	0.223
-12	29.316	14	7.735	40	2.505	66	0.952	92	0.421	118	0.218
-11	27.722	15	7.382	41	2.407	67	0.92	93	0.409	119	0.213
-10	26.225	16	7.047	42	2.313	68	0.889	94	0.398	120	0.208
-9	24.819	17	6.729	43	2.223	69	0.86	95	0.387	121	0.204
-8	23.497	18	6.428	44	2.138	70	0.831	96	0.376	122	0.2
-7	22.255	19	6.142	45	2.056	71	0.804	97	0.366	123	0.195
-6	21.087	20	5.87	46	1.977	72	0.778	98	0.356	124	0.191
-5	19.988	21	5.611	47	1.902	73	0.753	99	0.347	125	0.188

RND is a trademark of Distrelec

Compensation NTC Thermistor