

Interchangeable NTC Thermistor

WECC's interchangeable NTC Thermistors offers easy interchangeability over a large temperature range (usually 0 - 70 °C). Interchangeable NTC Thermistors offer very stable and accurate temperature sensing for applications such as temperature compensation, and temperature measurement and control.

Applications:

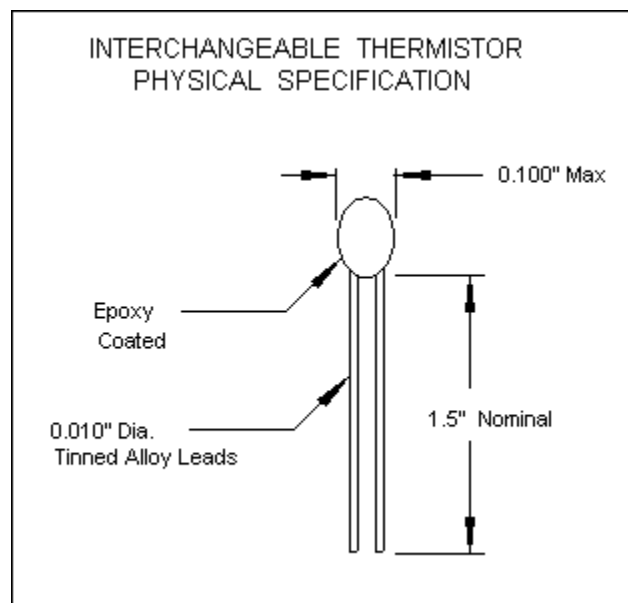
- Temperature Sensing
- Temperature Measurement and Control

Features

- Curve Matched
- High Quality
- Low Cost
- Small Size
- Epoxy Encapsulated

Specifications

- Dissipation Constant: 2 mW/°C
- Time Constant: 10 Seconds



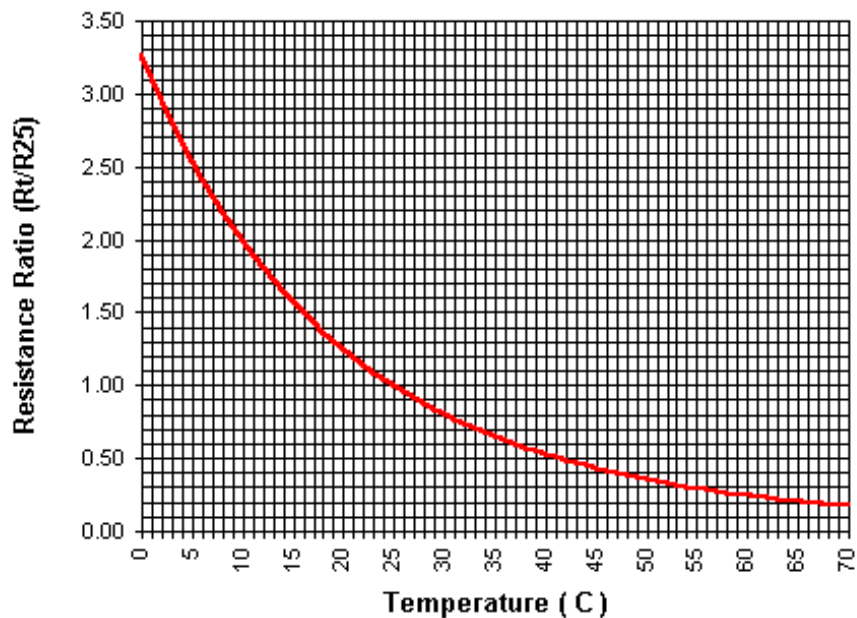
Resistance @ 25 °C (Ohms)	Temperature Tolerance From 0°C to 70°			Curve Type (see table below)
	± 0.2 °C	± 0.5 °C	± 1.0 °C	
	Part Number	Part Number	Part Number	
2,252	WNC2502	WNC2503	WNC2504	H
3,000	WNC3002	WNC3003	WNC3004	H
4,000	WNC4002	WNC4003	WNC4004	H
5,000	WNC5002	WNC5003	WNC5004	H
6,000	WNC6002	WNC6003	WNC6004	H
7,000	WNC7002	WNC7003	WNC7004	H
8,000	WNC8002	WNC8003	WNC8004	H
9,000	WNC9002	WNC9003	WNC9004	H
10,000	WNC1012	WNC1013	WNC1014	H
20,000	WNC2012	WNC2013	WNC2014	H
30,000	WNC3012	WNC3013	WNC3014	H

Terminology:

Dissipation Constant - The amount of power through self-heating necessary to raise the thermistor body 1°C. (Units in Mw/°C)

Time Constant - The time, in seconds, required for a thermistor dissipating negligible power to change 63% of the total difference between its initial and final body temperature when subjected to a change in temperature.

**Interchangeable Thermistor Curve (Curve "H")
Resistance Ratio - Temperature**



INTERCHANGEABLE THERMISTOR DATA

Curve "H" (0-70 in 1°C increments)

Resistance Ratio vs Temperature

Temperature		Resistance Ratio (R/R25)	Temperature		Resistance Ratio (R/R25)
°C	°F		°C	°F	
0	32	3.2657	36	97	0.6268
1	34	3.1036	37	99	0.6016
2	36	2.9505	38	100	0.5776
3	37	2.8058	39	102	0.5546
4	39	2.6690	40	104	0.5327
5	41	2.5396	41	106	0.5117
6	43	2.4174	42	108	0.4918
7	45	2.3018	43	109	0.4726
8	46	2.1922	44	111	0.4543
9	48	2.0886	45	113	0.4369
10	50	1.9904	46	115	0.4201
11	52	1.8974	47	117	0.4041
12	54	1.8093	48	118	0.3889

13	55	1.7258	49	120	0.3742
14	57	1.6465	50	122	0.3602
15	59	1.5715	51	124	0.3467
16	61	1.5003	52	126	0.3340
17	63	1.4327	53	127	0.3217
18	64	1.3684	54	129	0.3099
19	66	1.3074	55	131	0.2986
20	68	1.2495	56	133	0.2878
21	70	1.1944	57	135	0.2774
22	72	1.1421	58	136	0.2675
23	73	1.0923	59	138	0.2580
24	75	1.0451	60	140	0.2488
25	77	1.0000	61	142	0.2400
26	79	0.9573	62	144	0.2316
27	81	0.9166	63	145	0.2235
28	82	0.8778	64	147	0.2157
29	84	0.8409	65	149	0.2083
30	86	0.8057	66	151	0.2011
31	88	0.7722	67	153	0.1941
32	90	0.7403	68	154	0.1876
33	91	0.7099	69	156	0.1813
34	93	0.6809	70	158	0.1752
35	95	0.6532			

INTERCHANGEABLE THERMISTOR DATA

Curve "H" (5°C Increments)

Resistance Ratio vs Temperature

Temperature		Resistance Ratio (R/R25)	Temperature		Resistance Ratio (R/R25)
°C	°F		°C	°F	
-50	-58	67.260	55	131	0.2987
-45	-49	47.337	60	140	0.2488
-40	-40	33.727	65	149	0.2084
-35	-31	24.312	70	158	0.1753
-30	-22	17.721	75	167	0.1482

-25	-13	13.054	80	176	0.1257
-20	-4	9.714	85	185	0.1072
-15	5	7.299	90	194	0.09174
-10	14	5.535	95	203	0.07882
-5	23	4.234	100	212	0.06798
0	32	3.266	105	221	0.05884
5	41	2.540	110	230	0.05110
10	50	1.990	115	239	0.04454
15	59	1.571	120	248	0.03894
20	68	1.249	125	257	0.03416
25	77	1.000	130	266	0.03005
30	86	0.8055	135	275	0.02652
35	95	0.6531	140	284	0.02347
40	104	0.5325	145	293	0.02082
45	113	0.4368	150	302	0.01853
50	122	0.3602			