



1. Physical Dimensions and Product Markings

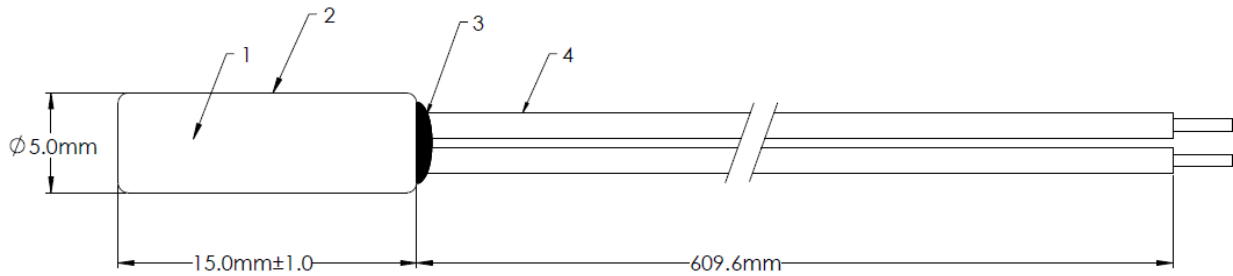


Figure 1 - Dimensions and Markings

2. Product Material

Table 1 - Material Properties

No	Component	Material Description
1	Thermistor	NTC
2	Shell	Aluminum
3	Packaging Adhesive	Epoxy potting
4	Lead wire	UL2651 24AWG VW-1 & FT1 105°C 300V Black Twin

3. Product Performance Specifications

- Temperature Range: -20°C to 70°C
- Nominal Resistance Value: R25 = 9.88kΩ ±3%
- Beta Value: (25/50°C) 3954K ±4%
- Max Power Rating: 10mW (at 25°C)
- Dissipation Factor: 2.1mW/°C
- Thermal Response Constant: Less than 10s in stirred water from 25°C to 75°C
- Dielectric tests: 1500VAC/3s in water.
- Meets IP67



4. Resistance – Temperature Characteristic Curve

- Resistance at 25°C (Nominal Value): $R_{25} = 9.88k\Omega$
- Beta Value: $(25/50^{\circ}C) 3954K \pm 4\%$

Table 2 - R-T Table

T (°C)	R _{min} (kΩ)	R _{nom} (kΩ)	R _{max} (kΩ)	T (°C)	R _{min} (kΩ)	R _{nom} (kΩ)	R _{max} (kΩ)
-40	286.4	306.0	326.2	-9	48.79	51.24	53.74
-39	269.3	287.5	306.3	-8	46.30	48.60	50.95
-38	253.2	270.2	287.8	-7	43.95	46.11	48.31
-37	238.2	254.1	270.4	-6	41.74	43.76	45.82
-36	224.2	239.0	254.2	-5	39.64	41.54	43.48
-35	211.0	224.8	239.0	-4	37.66	39.44	41.26
-34	198.7	211.6	224.9	-3	35.79	37.46	39.17
-33	187.2	199.2	211.6	-2	34.02	35.59	37.19
-32	176.4	187.6	199.1	-1	32.35	33.83	35.33
-31	166.2	176.7	187.5	0	30.77	32.16	33.57
-30	156.7	166.5	176.6	1	29.28	30.58	31.90
-29	147.8	156.9	166.3	2	27.86	29.08	30.33
-28	139.4	148.0	156.8	3	26.52	27.67	28.84
-27	131.6	139.6	147.8	4	25.25	26.33	27.43
-26	124.2	131.7	139.3	5	24.05	25.06	26.09
-25	117.3	124.3	131.4	6	22.91	23.87	24.83
-24	110.8	117.3	124.0	7	21.83	22.73	23.64
-23	104.7	110.8	117.0	8	20.81	21.65	22.51
-22	98.93	104.6	110.5	9	19.84	20.64	21.44
-21	93.53	98.88	104.4	10	18.92	19.67	20.42
-20	88.45	93.45	98.59	11	18.05	18.75	19.46
-19	83.67	88.36	93.16	12	17.23	17.88	18.55
-18	79.17	83.56	88.06	13	16.44	17.06	17.69
-17	74.94	79.05	83.26	14	15.70	16.28	16.87
-16	70.95	74.80	78.74	15	14.99	15.54	16.09
-15	67.20	70.80	74.50	16	14.32	14.83	15.35
-14	63.66	67.04	70.50	17	13.68	14.16	14.65
-13	60.33	63.50	66.74	18	13.07	13.53	13.99
-12	57.19	60.15	63.19	19	12.50	12.93	13.36
-11	54.22	57.01	59.85	20	11.95	12.35	12.76
-10	51.43	54.04	56.71	21	11.43	11.81	12.19



T (°C)	R _{min} (kΩ)	R _{nom} (kΩ)	R _{max} (kΩ)
22	10.93	11.29	11.65
23	10.46	10.80	11.13
24	10.01	10.33	10.64
25	9.491	9.883	10.18
26	9.172	9.459	9.746
27	8.778	9.055	9.334
28	8.402	8.671	8.940
29	8.045	8.305	8.566
30	7.704	7.956	8.209
31	7.380	7.624	7.869
32	7.071	7.307	7.545
33	6.777	7.006	7.236
34	6.496	6.718	6.941
35	6.228	6.443	6.660
36	5.973	6.182	6.391
37	5.730	5.932	6.135
38	5.498	5.694	5.891
39	5.276	5.466	5.657
40	5.065	5.249	5.434
41	4.863	5.041	5.221
42	4.670	4.843	5.018
43	4.486	4.654	4.824
44	4.310	4.473	4.638
45	4.142	4.300	4.460
46	3.982	4.135	4.290

T (°C)	R _{min} (kΩ)	R _{nom} (kΩ)	R _{max} (kΩ)
47	3.828	3.977	4.127
48	3.681	3.826	3.972
49	3.541	3.681	3.823
50	3.406	3.542	3.680
51	3.278	3.410	3.544
52	3.155	3.283	3.413
53	3.037	3.162	3.288
54	2.924	3.046	3.168
55	2.816	2.934	3.054
56	2.713	2.827	2.944
57	2.614	2.725	2.838
58	2.519	2.627	2.737
59	2.428	2.533	2.640
60	2.341	2.443	2.547
61	2.257	2.357	2.458
62	2.177	2.274	2.372
63	2.100	2.194	2.290
64	2.026	2.118	2.211
65	1.956	2.044	2.135
66	1.888	1.974	2.062
67	1.822	1.907	1.992
68	1.760	1.842	1.925
69	1.700	1.779	1.861
70	1.642	1.719	1.799