



MATERIAL TYPE: 2A

AVAILABLE PRODUCTS: DK, NK

Data for material type : 2A

Temp Range (°C)	Ratio	Beta
0 to 50	7.43	3541
0 to 70	14.34	3566
25 to 50	2.54	3585
25 to 85	7.67	3627
25 to 100	11.65	3642
25 to 125	21.90	3664
37.8 to 104.4	8.00	3665

Temperature (°C)	Rt/R25 nominal	Temp Coef (%/°C)	β Deviation† (±%)
-40	24.09	-5.98	3.23
-35	17.96	-5.78	2.93
-30	13.51	-5.60	2.64
-25	10.259	-5.42	2.36
-20	7.858	-5.25	2.08
-15	6.069	-5.08	1.82
-10	4.725	-4.93	1.57
-5	3.708	-4.78	1.32
0	2.931	-4.63	1.08
5	2.333	-4.49	0.85
10	1.870	-4.36	0.63
15	1.508	-4.23	0.41
20	1.224	-4.11	0.20
25	1.0000	-3.99	0.00
30	0.8214	-3.88	0.20
35	0.6785	-3.77	0.39
40	0.5634	-3.67	0.58
45	0.4702	-3.56	0.76
50	0.3944	-3.47	0.93
55	0.3324	-3.38	1.11
60	0.2814	-3.29	1.28
65	0.2393	-3.20	1.44
70	0.2043	-3.12	1.60
75	0.1752	-3.04	1.76
80	0.1508	-2.96	1.91
85	0.1303	-2.89	2.06
90	0.1130	-2.81	2.20
95	0.0983	-2.75	2.35
100	0.08585	-2.68	2.49
105	0.07521	-2.62	2.62
110	0.06610	-2.55	2.75
115	0.05826	-2.49	2.88
120	0.05151	-2.44	3.01
125	0.04567	-2.38	3.13

To calculate Rt/R25 at temperatures other than those listed in the table, use the following equation:

$$\ln(Rt/R25) = A + B / T + C / T^2 + D / T^3$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-40 to 125	-1.3144882E+01	4.1715547E+03	-3.9958195E+04	-1.0523900E+07

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:

$$1/T = a + b(\ln Rt/R25) + c(\ln Rt/R25)^2 + d(\ln Rt/R25)^3$$

Rt/R25 range	A	B	C	D
0.04567 to 24.09	3.3539576E-03	2.8181841E-04	3.3203039E-06	1.4542183E-07

†The deviation resulting from the tolerance on the material constant, Beta. The deviation must be added to the resistance tolerance of the part as specified at 25°C.