



MATERIAL TYPE: 4

AVAILABLE PRODUCTS: DK, NK

Data for material type : 4

Temp Range (°C)	Ratio	Beta
0 to 50	6.53	3313
0 to 70	12.20	3349
25 to 50	2.40	3377
25 to 85	6.89	3435
25 to 100	10.27	3456
25 to 125	18.85	3486
37.8 to 104.4	7.23	3488

Temperature (°C)	Rt/R25 nominal	Temp Coef (%/°C)	β Deviation† (±%)
-40	18.40	-5.31	2.96
-35	14.16	-5.17	2.69
-30	10.97	-5.04	2.42
-25	8.555	-4.90	2.17
-20	6.717	-4.77	1.92
-15	5.308	-4.64	1.68
-10	4.222	-4.52	1.45
-5	3.378	-4.40	1.22
0	2.720	-4.28	1.01
5	2.202	-4.16	0.79
10	1.793	-4.05	0.59
15	1.468	-3.95	0.38
20	1.209	-3.84	0.19
25	1.0000	-3.74	0.00
30	0.8315	-3.64	0.18
35	0.6947	-3.55	0.36
40	0.5831	-3.46	0.54
45	0.4916	-3.37	0.71
50	0.4163	-3.28	0.88
55	0.3540	-3.20	1.04
60	0.3023	-3.12	1.20
65	0.2591	-3.04	1.36
70	0.2230	-2.97	1.51
75	0.1926	-2.90	1.66
80	0.1669	-2.83	1.81
85	0.1451	-2.76	1.95
90	0.1266	-2.69	2.09
95	0.1109	-2.63	2.22
100	0.09734	-2.57	2.36
105	0.08573	-2.51	2.49
110	0.07573	-2.45	2.61

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 110	-1.2771668E+01	4.0802300E+03	-1.8329200E+04	-1.8745900E+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
0.07573 to 18.40	3.3538695E-03	3.0071720E-04	5.8075623E-06	3.9579292E-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.