MATERIAL TYPE: 1

AVAILABLE PRODUCTS: DK, NK

Data for material type : 1

Temp Range (°C)	Ratio	Beta
0 to 50	9.07	3892
0 to 70	18.64	3917
25 to 50	2.78	3937
25 to 85	9.35	3977
25 to 100	14.75	3992
25 to 125	29.39	4013
37.8 to 104.4	9.75	4014

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 155	-1.4195756E+01	4.4074785E+03	-5.1658730E+03	-1.4017368E+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
0.01644 to 33.36	3.3539438E-03	2.5646095E-04	2.5158166E-06	1.0503069E-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.

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-40	33.36	-6.60	2.67
-35	24.11	-6.39	2.42
-30	17.61	-6.18	2.17
-25	12.99	-5.98	1.94
-20	9.681	-5.79	1.72
-15	7.281	-5.61	1.50
-10	5.525	-5.43	1.29
-5	4.229	-5.26	1.09
0	3.264	-5.10	0.89
5	2.539	-4.95	0.70
10	1.990	-4.80	0.52
15	1.571	-4.66	0.34
20	1.249	-4.52	0.17
25	1.0000	-4.39	0.00
30	0.8056	-4.26	0.16
35	0.6530	-4.14	0.32
40	0.5325	-4.02	0.47
45	0.4367	-3.91	0.62
50	0.3601	-3.80	0.77
55	0.2985	-3.70	0.91
60	0.2487	-3.60	1.05
65	0.2082	-3.51	1.18
70	0.1751	-3.41	1.32
75	0.1480	-3.33	1.44
80	0.1256	-3.24	1.57
85	0.1070	-3.16	1.69
90	0.09155	-3.08	1.81
95	0.07864	-3.00	1.93
100	0.06781	-2.93	2.04
105	0.05868	-2.86	2.15
110	0.05095	-2.79	2.26
115	0.04439	-2.72	2.36
120	0.03881	-2.66	2.47
125	0.03403	-2.60	2.57
130	0.02993	-2.54	2.67
135	0.02640	-2.48	2.76
140	0.02336	-2.42	2.86
145	0.02072	-2.37	2.95
150	0.01843	-2.32	3.04
155	0.01644	-2.27	3.13

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