



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



Material Type 2 – Available Products: DK, NK

Data for material type: 2

Temp Range (°C)	Ratio	Beta
0 to 50	7.08	3455
0 to 70	13.45	3480
25 to 50	2.48	3499
25 to 85	7.31	3540
25 to 100	10.99	3555
25 to 125	20.36	3578
37.8 to 104.4	7.61	3578

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	-1.3016325E+01	4.2452100E+03	-9.2520800E+04	-4.8070300E+06
125 to 300	-1.5528425E+01	7.4458500E+03	-1.4535400E+06	1.8832200E+08

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
0.002575 to 0.04911	3.3201780E-03	2.6017755E-04	-4.7773906E-06	-6.8688143E-07
0.04911 to 22.43	3.3539786E-03	2.8882034E-04	3.4321068E-06	1.1519565E-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	22.43	-5.86	3.16
-35	16.81	-5.67	2.86
-30	12.73	-5.48	2.58
-25	9.719	-5.30	2.30
-20	7.487	-5.13	2.03
-15	5.816	-4.97	1.78
-10	4.554	-4.81	1.53
-5	3.593	-4.67	1.29
0	2.856	-4.52	1.05
5	2.286	-4.39	0.83
10	1.842	-4.26	0.61
15	1.493	-4.13	0.40
20	1.218	-4.01	0.20
25	1.0000	-3.89	0.00
30	0.8253	-3.78	0.19
35	0.6849	-3.68	0.38
40	0.5713	-3.58	0.56
45	0.4789	-3.48	0.74
50	0.4034	-3.38	0.91
55	0.3414	-3.29	1.08
60	0.2902	-3.21	1.24
65	0.2477	-3.12	1.41
70	0.2123	-3.04	1.56
75	0.1827	-2.97	1.71
80	0.1578	-2.89	1.86
85	0.1368	-2.82	2.01
90	0.1190	-2.75	2.15
95	0.1039	-2.68	2.29
100	0.09102	-2.62	2.43
105	0.07998	-2.56	2.56
110	0.07049	-2.50	2.69
115	0.06231	-2.44	2.81
120	0.05524	-2.38	2.94
125	0.04911	-2.33	3.06
130	0.04379	-2.28	3.18
135	0.03912	-2.23	3.29
140	0.03504	-2.18	3.41
145	0.03146	-2.13	3.52
150	0.02831	-2.08	3.63
155	0.02554	-2.04	3.74
160	0.02309	-2.00	3.84
165	0.02092	-1.96	3.94
170	0.01899	-1.92	4.04
175	0.01727	-1.88	4.14
180	0.01574	-1.84	4.24
185	0.01436	-1.81	4.33
190	0.01313	-1.77	4.43
195	0.01203	-1.74	4.52
200	0.01104	-1.71	4.61
205	0.01014	-1.68	4.70
210	0.009331	-1.65	4.79
215	0.008599	-1.62	4.87
220	0.007935	-1.59	4.96
225	0.007333	-1.57	5.04
230	0.006785	-1.54	5.12
235	0.006286	-1.52	5.20
240	0.005831	-1.49	5.28
245	0.005415	-1.47	5.36
250	0.005035	-1.44	5.43
255	0.004687	-1.42	5.51
260	0.004367	-1.40	5.58
265	0.004074	-1.38	5.66
270	0.003805	-1.36	5.73
275	0.003556	-1.34	5.80
280	0.003328	-1.32	5.87
285	0.003117	-1.30	5.94
290	0.002922	-1.28	6.01
295	0.002742	-1.26	6.08
300	0.002575	-1.25	6.14



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

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.

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°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



Material Type 3 – Available Products: DK, NK

Data for material type: 3

Temp Range (°C)	Ratio	Beta
0 to 50	8.96	3871
0 to 70	18.37	3897
25 to 50	2.76	3916
25 to 85	9.25	3960
25 to 100	14.59	3976
25 to 125	29.08	4001
37.8 to 104.4	9.68	4001

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	-1.4611310E+01	4.8207686E+03	-1.3426246E+05	-1.2523230E+06
155 to 300	-1.2973645E+01	2.9153580E+03	6.0472359E+05	-9.6897361E+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
0.001415 to 0.01657	3.3620802E-03	2.6539518E-04	4.9923525E-06	3.2224557E-07
0.01657 to 33.00	3.3539908E-03	2.5788772E-04	2.5364809E-06	5.3216393E-08

†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	33.00	-6.62	3.56
-35	23.84	-6.40	3.22
-30	17.41	-6.18	2.90
-25	12.85	-5.97	2.59
-20	9.579	-5.78	2.29
-15	7.210	-5.59	2.00
-10	5.477	-5.41	1.72
-5	4.197	-5.24%	1.44
0	3.243	-5.08	1.18
5	2.526	-4.92	0.93
10	1.983	-4.77	0.69
15	1.567	-4.63	0.45
20	1.248	-4.49	0.22
25	1.0000	-4.36	0.00
30	0.8066	-4.24	0.22
35	0.6545	-4.12	0.42
40	0.5343	-4.00	0.63
45	0.4386	-3.89	0.83
50	0.3620	-3.79	1.02
55	0.3003	-3.68	1.21
60	0.2504	-3.59	1.39
65	0.2098	-3.49	1.57
70	0.1766	-3.40	1.75
75	0.1493	-3.32	1.92
80	0.1268	-3.23	2.09
85	0.1081	-3.15	2.25
90	0.09249	-3.07	2.41
95	0.07946	-3.00	2.56
100	0.06853	-2.93	2.72
105	0.05930	-2.86	2.87
110	0.05150	-2.79	3.01
115	0.04487	-2.72	3.15
120	0.03922	-2.66	3.29
125	0.03438	-2.60	3.43
130	0.03024	-2.54	3.56
135	0.02666	-2.49	3.69
140	0.02358	-2.43	3.82
145	0.02091	-2.38	3.94
150	0.01859	-2.33	4.07
155	0.01657	-2.28	4.19
160	0.01481	-2.22	4.30
165	0.01328	-2.17	4.42
170	0.01193	-2.12	4.53
175	0.01074	-2.07	4.64
180	0.009691	-2.03	4.75
185	0.008766	-1.99	4.85
190	0.007945	-1.94	4.95
195	0.007216	-1.90	5.06
200	0.006568	-1.86	5.15
205	0.005989	-1.83	5.25
210	0.005472	-1.79	5.35
215	0.005008	-1.75	5.44
220	0.004593	-1.72	5.53
225	0.004219	-1.68	5.62
230	0.003882	-1.65	5.71
235	0.003578	-1.61	5.79
240	0.003303	-1.58	5.88
245	0.003054	-1.55	5.96
250	0.002828	-1.52	6.04
255	0.002623	-1.49	6.12
260	0.002436	-1.46	6.20
265	0.002266	-1.44	6.28
270	0.002110	-1.41	6.35
275	0.001968	-1.38	6.43
280	0.001838	-1.36	6.50
285	0.001718	-1.33	6.57
290	0.001608	-1.31	6.64
295	0.001508	-1.28	6.71
300	0.001415	-1.26	6.78



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

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.

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°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



Material Type 5 – Available Products: DK, NK

Data for material type: 5

Temp Range (°C)	Ratio	Beta
0 to 50	7.96	3661
0 to 70	15.67	3685
25 to 50	2.61	3702
25 to 85	8.18	3740
25 to 100	12.56	3754
25 to 125	24.02	3774
37.8 to 104.4	8.51	3775

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	-1.3459139E+01	4.2576300E+03	-4.3269000E+04	-8.8593700E+06

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
0.04163 to 27.31	3.3539752E-03	2.7259688E-04	2.7187321E-06	1.0381632E-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	27.31	-6.25	3.36
-35	20.08	-6.04	3.05
-30	14.92	-5.84	2.74
-25	11.20	-5.65	2.45
-20	8.484	-5.46	2.16
-15	6.485	-5.29	1.89
-10	4.999	-5.12	1.62
-5	3.886	-4.96	1.37
0	3.045	-4.80	1.12
5	2.403	-4.66	0.88
10	1.911	-4.52	0.65
15	1.530	-4.38	0.43
20	1.233	-4.25	0.21
25	1.0000	-4.13	0.00
30	0.8160	-4.01	0.20
35	0.6698	-3.89	0.40
40	0.5528	-3.78	0.59
45	0.4587	-3.68	0.78
50	0.3827	-3.58	0.97
55	0.3208	-3.48	1.14
60	0.2702	-3.39	1.32
65	0.2286	-3.30	1.49
70	0.1943	-3.21	1.65
75	0.1658	-3.13	1.81
80	0.1421	-3.05	1.97
85	0.1223	-2.97	2.12
90	0.10560	-2.89	2.27
95	0.09154	-2.82	2.42
100	0.07962	-2.75	2.56
105	0.06950	-2.69	2.70
110	0.06086	-2.62	2.84
115	0.05346	-2.56	2.97
120	0.04711	-2.50	3.10
125	0.04163	-2.44	3.23



Material Type 5A – Available Products: DK, NK

Data for material type: 5A

Temp Range (°C)	Ratio	Beta
0 to 50	7.87	3642
0 to 70	15.48	3668
25 to 50	2.60	3687
25 to 85	8.13	3730
25 to 100	12.49	3746
25 to 125	23.92	3769
37.8 to 104.4	8.49	3770

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	-1.3663771E+01	4.4301300E+03	-8.5890300E+04	-6.0624600E+06

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
0.04180 to 26.55	3.3539760E-03	2.7401815E-04	3.0585096E-06	1.0270969E-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	26.55	-6.18	3.33
-35	19.59	-5.97	3.02
-30	14.61	-5.78	2.72
-25	10.99	-5.59	2.43
-20	8.350	-5.41	2.14
-15	6.398	-5.24	1.87
-10	4.944	-5.08	1.61
-5	3.851	-4.92	1.36
0	3.023	-4.77	1.11
5	2.390	-4.62	0.88
10	1.904	-4.49	0.65
15	1.526	-4.35	0.42
20	1.232	-4.23	0.21
25	1.000	-4.11	0.00
30	0.8168	-3.99	0.20
35	0.6710	-3.88	0.40
40	0.5543	-3.77	0.59
45	0.4603	-3.67	0.78
50	0.3842	-3.57	0.96
55	0.3222	-3.47	1.14
60	0.2715	-3.38	1.31
65	0.2298	-3.29	1.48
70	0.1953	-3.21	1.65
75	0.1667	-3.12	1.81
80	0.1429	-3.05	1.96
85	0.1230	-2.97	2.12
90	0.10620	-2.90	2.27
95	0.09204	-2.83	2.41
100	0.08005	-2.76	2.56
105	0.06986	-2.69	2.70
110	0.06116	-2.63	2.83
115	0.05371	-2.57	2.97
120	0.04732	-2.51	3.10
125	0.04180	-2.45	3.23



Material Type F – Available Products: HM, C100, EC95, DC95, MC65, MF65, SC30, SC50

Data for material type: F

Temp Range (°C)	Ratio	Beta
0 to 50	9.08	3895
0 to 70	18.64	3917
25 to 50	2.78	3933
25 to 85	9.30	3969
25 to 100	14.64	3981
25 to 125	29.05	3999
37.8 to 104.4	9.67	4000

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4122478E+01	4.4136033E+03	-2.9034189E+04	-9.3875035E+06
0 to 50	-1.4141963E+01	4.4307830E+03	-3.4078983E+04	-8.8941929E+06
50 to 100	-1.4202172E+01	4.4975256E+03	-5.8421357E+04	-5.9658796E+06
100 to 150	-1.6154078E+01	6.8483992E+03	-1.0004049E+06	1.1961431E+08

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
68.600 to 3.274	3.3538646E-03	2.5654090E-04	1.9243889E-06	1.0969244E-07
3.274 to 0.36036	3.3540154E-03	2.5627725E-04	2.0829210E-06	7.3003206E-08
0.36036 to 0.06831	3.3539264E-03	2.5609446E-04	1.9621987E-06	4.6045930E-08
0.06831 to 0.01872	3.3368620E-03	2.4057263E-04	-2.6687093E-06	-4.0719355E-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† (±%)
-50	68.60	7.21%	2.30%
-45	48.16	6.96%	2.68%
-40	34.23	6.71%	2.87%
-35	24.62	6.48%	2.92%
-30	17.91	6.26%	2.86%
-25	13.17	6.05%	2.71%
-20	9.782	5.85%	2.50%
-15	7.339	5.66%	2.25%
-10	5.558	5.47%	1.97%
-5	4.247	5.30%	1.68%
0	3.274	5.13%	1.37%
5	2.544	4.97%	1.07%
10	1.992	4.81%	0.78%
15	1.572	4.67%	0.50%
20	1.250	4.53%	0.24%
25	1.000	4.39%	0.00%
30	0.8056	4.26%	0.21%
35	0.6530	4.14%	0.40%
40	0.5326	4.02%	0.56%
45	0.4369	3.91%	0.69%
50	0.3604	3.80%	0.80%
55	0.2989	3.69%	0.87%
60	0.2491	3.59%	0.92%
65	0.2087	3.49%	0.93%
70	0.1756	3.40%	0.92%
75	0.1485	3.31%	0.88%
80	0.1261	3.23%	0.81%
85	0.1075	3.14%	0.72%
90	0.09209	3.06%	0.59%
95	0.07916	2.99%	0.45%
100	0.06831	2.91%	0.28%
105	0.05916	2.85%	0.08%
110	0.05141	2.77%	0.12%
115	0.04483	2.70%	0.36%
120	0.03922	2.64%	0.61%
125	0.03442	2.57%	0.87%
130	0.03030	2.51%	1.16%
135	0.02675	2.47%	1.46%
140	0.02369	2.41%	1.82%
145	0.02103	2.35%	2.14%
150	0.01872	2.35%	2.46%



Material Type G – Available Products: HM, C100, EC95, DC95, MC65, MF65, SC30, SC50

Data for material type: G

Temp Range (°C)	Ratio	Beta
0 to 50	10.48	4147
0 to 70	22.65	4178
25 to 50	2.97	4201
25 to 85	10.91	4252
25 to 100	17.80	4271
25 to 125	37.37	4298
37.8 to 104.4	11.46	4299

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.5617550E+01	5.0690086E+03	-9.6895494E+04	-7.7906095E+06
0 to 50	-1.5573783E+01	5.0310600E+03	-8.5956133E+04	-8.8392667E+06
50 to 100	-1.5358271E+01	4.7986321E+03	-3.1012401E+03	-1.8614924E+07
100 to 150	-1.8012530E+01	7.9402031E+03	-1.2428041E+06	1.4445457E+08

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
85.730 to 3.5223	3.3537950E-03	2.4096581E-04	2.2453225E-06	1.1817106E-07
3.5223 to 0.33620	3.3540142E-03	2.4060636E-04	2.4402986E-06	8.0075806E-08
0.33620 to 0.05619	3.3541651E-03	2.4087966E-04	2.5742490E-06	8.8745970E-08
0.05619 to 0.01381	3.3357228E-03	2.2502940E-04	-1.9459544E-06	-3.4181652E-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 (°C (%/°C))	β Deviation† (±%)
-50	85.73	7.50%	3.48%
-45	59.31	7.25%	3.27%
-40	41.54	7.01%	3.03%
-35	29.43	6.78%	2.77%
-30	21.09	6.56%	2.50%
-25	15.28	6.35%	2.23%
-20	11.18	6.15%	1.96%
-15	8.261	5.96%	1.70%
-10	6.162	5.77%	1.44%
-5	4.639	5.60%	1.19
0	3.522	5.43%	0.95%
5	2.697	5.26%	0.73%
10	2.081	5.11%	0.53%
15	1.618	4.96%	0.34%
20	1.268	4.82%	0.16%
25	1.000	4.68%	0.00%
30	0.7942	4.55%	0.14%
35	0.6348	4.42%	0.26%
40	0.5106	4.30%	0.37%
45	0.4131	4.18%	0.46%
50	0.3362	4.07%	0.54%
55	0.2751	3.96%	0.60%
60	0.2263	3.86%	0.65%
65	0.1871	3.75%	0.68%
70	0.1555	3.66%	0.70%
75	0.1298	3.56%	0.71%
80	0.1089	3.48%	0.71%
85	0.09170	3.39%	0.69%
90	0.07757	3.31%	0.66%
95	0.06589	3.23%	0.62%
100	0.05619	3.15%	0.57%
105	0.04810	3.07%	0.50
110	0.04133	3.00%	0.41%
115	0.03563	2.92%	0.36%
120	0.03083	2.87%	0.26%
125	0.02676	2.80%	0.15%
130	0.02330	2.73%	0.09%
135	0.02036	2.68%	0.05%
140	0.01784	2.61%	0.17%
145	0.01567	2.55%	0.26%
150	0.01381	2.50%	0.43%



Material Type H – Available Products: HM, C100, EC95, DC95, MC65, MF65, SC30, SC50

Data for material type: H

Temp Range (°C)	Ratio	Beta
0 to 50	8.69	3816
0 to 70	17.75	3852
25 to 50	2.73	3877
25 to 85	9.13	3936
25 to 100	14.41	3958
25 to 125	28.81	3989
37.8 to 104.4	9.62	3990

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4877165E+01	4.9899384E+03	-1.4886502E+05	-4.8905610E+06
0 to 50	-1.4892875E+01	5.0042401E+03	-1.5318397E-05	-4.4577270E+06
50 to 100	-1.4680625E+01	4.7866806E+03	-7.8859743E+04	-1.2919163E+07
100 to 150	-1.6799636E+01	7.2755476E+03	-1.0536149E+06	1.1435743E+08

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
57.661 to 3.1765	3.3537282E-03	2.6186869E-04	3.2237070E-06	1.9199620E-07
3.1765 to 0.36565	3.3540145E-03	2.6135248E-04	3.5412623E-06	1.1814488E-07
0.36565 to 0.06940	3.3541139E-03	2.6152656E-04	3.6169780E-06	1.1867801E-07
0.06940 to 0.01867	3.3401179E-03	2.4828650E-04	-5.5159237E-07	-3.2074988E-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 (°C) (%/°C)	β Deviation† (±%)
-50	57.66	6.76%	2.67%
-45	41.36	6.54%	2.43%
-40	29.98	6.34%	2.20%
-35	21.95	6.14%	1.98%
-30	16.23	5.95%	1.77%
-25	12.11	5.77%	1.57%
-20	9.114	5.60%	1.39%
-15	6.920	5.43%	1.21%
-10	5.297	5.27%	1.04%
-5	4.086	5.11%	0.87%
0	3.176	4.97%	0.71%
5	2.487	4.82%	0.56%
10	1.961	4.69%	0.41%
15	1.557	4.55%	0.27%
20	1.244	4.43%	0.13%
25	1.000	4.31%	0.00%
30	0.8088	4.19%	0.13%
35	0.6578	4.08%	0.26%
40	0.5381	3.97%	0.38%
45	0.4424	3.86%	0.50%
50	0.3657	3.76%	0.62%
55	0.3037	3.66%	0.74%
60	0.2534	3.57%	0.85%
65	0.2125	3.48%	0.96%
70	0.1789	3.40%	1.07%
75	0.1513	3.31%	1.18%
80	0.1285	3.23%	1.28%
85	0.1095	3.15%	1.39%
90	0.09373	3.08%	1.48%
95	0.08051	3.01%	1.58%
100	0.06940	2.94%	1.67%
105	0.06003	2.87%	1.77%
110	0.05210	2.80%	1.86%
115	0.04536	2.73%	1.96%
120	0.03962	2.68%	2.04%
125	0.03471	2.62%	2.13%
130	0.03049	2.56%	2.23%
135	0.02687	2.51%	2.31%
140	0.02374	2.46%	2.36%
145	0.02103	2.40%	2.47%
150	0.01867	2.36%	2.57%



Material Type 10KY – Available Products: HM, C100, EC95, DC95, MC65, MF65, SC30, SC50

Data for material type: 10KY

Temp Range (°C)	Ratio	Beta
0 to 50	7.59	3579
0 to 70	14.84	3612
25 to 50	2.57	3636
25 to 85	7.95	3690
25 to 100	12.19	3709
25 to 125	23.33	3739
37.8 to 104.4	8.34	3740

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.3840984E+01	4.5845963E+03	-1.1258348E+05	-7.1382240E+06
0 to 50	-1.3867840E+01	4.6083853E+03	-1.1959264E+05	-6.4512578E+06
50 to 100	-1.3894006E+01	4.6436036E+03	-1.3429922E+05	-4.4935401E+06
100 to 150	-1.3828359E+01	4.5620098E+03	-1.0095714E+05	-8.9851252E+06

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
44.730 to 2.956	3.3536689E-03	2.7933771E-04	3.5641256E-06	2.6369733E-07
2.956 to 0.38929	3.3540153E-03	2.7867185E-04	4.0006637E-06	1.5575628E-07
0.38929 to 0.08203	3.3538757E-03	2.7837770E-04	3.7947689E-06	1.0160299E-07
0.08203 to 0.02400	3.3541198E-03	2.7860879E-04	3.8520527E-06	1.0306448E-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 (°C) (%/°C)	β Deviation† (±%)
-50	44.73	6.32%	3.96%
-45	32.78	6.13%	3.63%
-40	24.25	5.94%	3.31%
-35	18.11	5.75%	3.00%
-30	13.64	5.58%	2.70%
-25	10.37	5.41%	2.42%
-20	7.944	5.25%	2.14%
-15	6.136	5.09%	1.87%
-10	4.775	4.94%	1.61%
-5	3.744	4.80%	1.36%
0	2.956	4.66%	1.12%
5	2.350	4.52%	0.88%
10	1.881	4.40%	0.65%
15	1.515	4.27%	0.43%
20	1.227	4.15%	0.21%
25	1.000	4.04%	0.00%
30	0.8195	3.93%	0.21%
35	0.6752	3.82%	0.41%
40	0.5592	3.72%	0.61%
45	0.4655	3.62%	0.80%
50	0.3893	3.53%	0.99%
55	0.3271	3.44%	1.17%
60	0.2761	3.35%	1.34%
65	0.2340	3.26%	1.52%
70	0.1992	3.18%	1.69%
75	0.1702	3.10%	1.86%
80	0.1461	3.03%	2.03%
85	0.1258	2.95%	2.19%
90	0.1087	2.88%	2.34%
95	0.09427	2.81%	2.48%
100	0.08203	2.75%	2.63%
105	0.07161	2.69%	2.78%
110	0.06271	2.62%	2.93%
115	0.05508	2.57%	3.09%
120	0.04853	2.50%	3.21%
125	0.04287	2.45%	3.36%
130	0.03798	2.40%	3.48%
135	0.03374	2.34%	3.62%
140	0.03004	2.30%	3.76%
145	0.02682	2.24%	3.88%
150	0.02400	2.21%	4.00%



Material Type 100KY – Available Products: HM, C100, EC95, DC95, MC65, MF65, SC30, SC50

Data for material type: 100KY

Temp Range (°C)	Ratio	Beta
0 to 50	7.58	3575
0 to 70	14.84	3612
25 to 50	2.57	3638
25 to 85	7.99	3699
25 to 100	12.28	3721
25 to 125	23.62	3754
37.8 to 104.4	8.41	3754

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4044448E+01	4.7001715E+03	-1.2636484E+05	-7.9103521E+06
0 to 50	-1.4026370E+01	4.6842464E+03	-1.2170541E+05	-8.3633160E+06
50 to 100	-1.3965333E+01	4.6197708E+03	-9.9168456E+04	-1.0972932E+07
100 to 150	-1.3136699E+01	3.6234709E+03	2.9878543E+05	-6.3797413E+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
43.330 to 2.9478	3.3535329E-03	2.7982182E-04	3.8772244E-06	3.3764988E-07
2.9478 to 0.38903	3.3540152E-03	2.7889212E-04	4.4765815E-06	1.9707813E-07
0.38903 to 0.08141	3.3539964E-03	2.7883927E-04	4.3989492E-06	1.5093212E-07
0.08141 to 0.02359	3.3599545E-03	2.8470193E-04	6.2646630E-06	3.4054853E-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 °C (%/°C)	β Deviation† (±%)
-50	43.33	6.21%	4.47%
-45	31.91	6.03%	4.07%
-40	23.72	5.85%	3.69%
-35	17.78	5.68%	3.33%
-30	13.44	5.52%	2.99%
-25	10.24	5.36%	2.66%
-20	7.868	5.20%	2.35%
-15	6.090	5.05%	2.05%
-10	4.748	4.91%	1.76%
-5	3.729	4.77%	1.49%
0	2.948	4.64%	1.22%
5	2.346	4.51%	0.96%
10	1.879	4.38%	0.71%
15	1.514	4.26%	0.47%
20	1.227	4.15%	0.23%
25	1.000	4.04%	0.00%
30	0.8196	3.93%	0.22%
35	0.6752	3.82%	0.44%
40	0.5592	3.72%	0.65%
45	0.4653	3.63%	0.86%
50	0.3890	3.54%	1.06%
55	0.3268	3.45%	1.26%
60	0.2756	3.36%	1.45%
65	0.2335	3.28%	1.64%
70	0.1986	3.20%	1.83%
75	0.1697	3.12%	2.01%
80	0.1454	3.04%	2.19%
85	0.1251	2.97%	2.37%
90	0.1081	2.90%	2.54%
95	0.09364	2.83%	2.70%
100	0.08141	2.77%	2.86%
105	0.07100	2.70%	3.04%
110	0.06212	2.65%	3.19%
115	0.05451	2.58%	3.36%
120	0.04798	2.53%	3.50%
125	0.04234	2.48%	3.66%
130	0.03748	2.41%	3.79%
135	0.03325	2.36%	3.97%
140	0.02958	2.32%	4.12%
145	0.02638	2.27%	4.25%
150	0.02359	2.23%	4.37%



Material Type GC1 – Available Products: GC32

Data for material type: A

Temp Range (°C)	Ratio	Beta
0 to 50	5.05	2859
0 to 70	8.56	2876
25 to 50	2.12	2891
25 to 85	5.15	2916
25 to 100	7.18	2924
25 to 125	11.85	2935
37.8 to 104.4	5.30	2938

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-9.8528489E+00	2.7339494E+03	1.4288865E+05	-2.4496609E+07
50 to 100	-9.9033569E+00	2.7888230E+03	1.2326242E+05	-2.2180106E+07
100 to 150	-9.3570614E+00	2.1481348E+03	3.7408361E+05	-5.4948498E+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
2.3851 to 0.4723	3.3540147E-03	3.4894984E-04	4.4207074E-06	4.8047296E-07
0.4723 to 0.13928	3.3539225E-03	3.4864841E-04	4.0739254E-06	3.3769525E-07
0.13928 to 0.05412	3.3591442E-03	3.5511790E-04	6.7381938E-06	7.0589355E-07

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
0	2.3851	3.75%
5	1.9833	3.64%
10	1.6583	3.53%
15	1.3939	3.42%
20	1.7777	3.32%
25	1.0000	3.22%
30	0.8531	3.13%
35	0.7312	3.04%
40	0.6294	2.96%
45	0.5441	2.87%
50	0.4723	2.79%
55	0.4116	2.71%
60	0.3600	2.64%
65	0.3161	2.57%
70	0.2785	2.50%
75	0.2462	2.43%
80	0.2184	2.37%
85	0.19428	2.31%
90	0.17338	2.25%
95	0.15518	2.19%
100	0.13928	2.14%
105	0.12536	2.08%
110	0.11312	2.03%
115	0.10234	1.98%
120	0.09281	1.93%
125	0.08437	1.88%
130	0.07687	1.84%
135	0.07019	1.80%
140	0.06423	1.75%
145	0.05890	1.71%
150	0.05412	1.68%

†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.



Material Type GC2 – Available Products: GC32

Data for material type: A

Temp Range (°C)	Ratio	Beta
0 to 50	5.80	3103
0 to 70	10.31	3124
25 to 50	2.26	3146
25 to 85		#num
25 to 100	8.54	3182
25 to 125	14.71	3192
37.8 to 104.4	6.14	3197

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.0002677E+01	2.2618145E+03	3.9046612E+05	-5.2371235E+07
50 to 100	-1.0018470E+01	2.2769273E+03	3.8569064E+05	-5.1873323E+07
100 to 150	-9.2460068E+00	1.3647156E+03	7.4460824E+05	-9.8921481E+07
150 to 200	-9.9508091E+00	2.1864826E+03	4.2612307E+05	-5.7896096E+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
2.5637 to 0.4421	3.3540142E-03	3.2116569E-04	4.5588151E-06	6.9704255E-07
0.4421 to 0.11707	3.3539551E-03	3.2094021E-04	4.2243164E-06	5.1596253E-07
0.11707 to 0.04209	3.3610052E-03	3.2911895E-04	7.3455937E-06	9.0795977E-07
0.04209 to 0.01882	3.3565718E-03	3.2303461E-04	4.7149540E-06	5.4432068E-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)
0	2.5637	4.04%
5	2.1006	3.93%
10	1.7309	3.82%
15	1.4340	3.71%
20	1.1944	3.61%
25	1.000	3.50%
30	0.8414	3.40%
35	0.7115	3.31%
40	0.6044	3.22%
45	0.5158	3.13%
50	0.4421	3.04%
55	0.3806	2.96%
60	0.3290	2.87%
65	0.2855	2.80%
70	0.2487	2.72%
75	0.2175	2.65%
80	0.19086	2.58%
85	0.16808	2.51%
90	0.14852	2.44%
95	0.13165	2.38%
100	0.11707	2.31%
105	0.10442	2.26%
110	0.09341	2.20%
115	0.08380	2.15%
120	0.07538	2.09%
125	0.06798	2.04%
130	0.06147	1.99%
135	0.05572	1.94%
140	0.05063	1.90%
145	0.04611	1.84%
150	0.04209	1.81%
155	0.03850	1.75%
160	0.03529	1.71%
165	0.03241	1.68%
170	0.02983	1.64%
175	0.02750	1.60%
180	0.02541	1.57%
185	0.02351	1.53%
190	0.02180	1.49%
195	0.02024	1.46%
200	0.01882	1.43%



Material Type GC3 – Available Products: GC32

Data for material type: A

Temp Range (°C)	Ratio	Beta
0 to 50	7.24	3494
0 to 70	13.87	3522
25 to 50	2.51	3546
25 to 85	7.51	3588
25 to 100	11.33	3601
25 to 125	21.10	3620
37.8 to 104.4	7.83	3624

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.2207744E+01	3.3437579E+03	2.1667458E+05	-3.8290811E+07
50 to 100	-1.1977372E+01	3.1050729E+03	2.9895994E+05	-4.7730431E+07
100 to 150	-1.1513677E+01	2.5226773E+03	5.4012165E+05	-8.0719257E+07
150 to 200	-1.5835957E+01	8.2073594E+03	-1.9551293E+06	2.8476095E+08
200 to 250	-2.5292509E+01	2.2843693E+04	-9.4622559E+06	1.5617899E+09

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
2.8833 to 0.3985	3.3540150E-03	2.8530773E-04	3.9383904E-06	3.6734699E-07
0.3985 to 0.08824	3.3541211E-03	2.8548790E-04	3.9611383E-06	3.1462189E-07
0.08824 to 0.02730	3.3589282E-03	2.9017072E-04	5.3841029E-06	4.4215354E-07
0.02730 to 0.01073	3.2431160E-03	2.0232491E-04	-1.6902412E-05	-1.4523799E-06
0.01073 to 0.00503	2.4075296E-03	-2.9734651E-04	-1.1563684E-04	-7.8872818E-06

†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)
0	2.8833	4.55%
5	2.3047	4.42%
10	1.8538	4.29%
15	1.5002	4.17%
20	1.2213	4.06%
25	1.0000	3.94%
30	0.8233	3.84%
35	0.6815	3.73%
40	0.5671	3.63%
45	0.4742	3.53%
50	0.3985	3.43%
55	0.3364	3.34%
60	0.2853	3.25%
65	0.2430	3.17%
70	0.2078	3.08%
75	0.17850	3.00%
80	0.15391	2.93%
85	0.13320	2.85%
90	0.11571	2.78%
95	0.10087	2.71%
100	0.08824	2.64%
105	0.07744	2.58%
110	0.06818	2.52%
115	0.06022	2.45%
120	0.05334	2.39%
125	0.04739	2.34%
130	0.04222	2.29%
135	0.03771	2.24%
140	0.03377	2.18%
145	0.03033	2.13%
150	0.02730	2.07%
155	0.02463	2.05%
160	0.02227	2.00%
165	0.02018	1.93%
170	0.01833	1.91%
175	0.01669	1.86%
180	0.01522	1.84%
185	0.01391	1.80%
190	0.01273	1.77%
195	0.01168	1.71%
200	0.01073	1.68%
205	0.00988	1.62%
210	0.00911	1.65%
215	0.00841	1.61%
220	0.00778	1.54%
225	0.00721	1.53%
230	0.00669	1.49%
235	0.00622	1.45%
240	0.00579	1.47%
245	0.00539	1.39%
250	0.00503	1.39%



Material Type GC4 – Available Products: GC32

Data for material type: F

Temp Range (°C)	Ratio	Beta
0 to 50	8.83	3844
0 to 70	17.95	3866
25 to 50	2.74	3883
25 to 85	9.04	3918
25 to 100	14.15	3930
25 to 125	27.82	3948
37.8 to 104.4	9.42	3949

To calculate Rt/R25 at temperatures other than those listed in the table, use the following equation:
 $Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$
 where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.3833230E+01	4.2501345E+03	6.3699567E+03	-1.3078224E+07
50 to 100	-1.3719632E+01	4.1310576E+03	4.7757218E+04	-1.7851363E+07
100 to 150	-1.3844485E+01	4.2640808E+03	1.6755449E+02	-1.2128083E+07
150 to 200	-1.2031268E+01	1.8136023E+03	1.1026432E+06	-1.7725232E+08
200 to 250	-3.8834716E+01	4.1376603E+04	-1.8360198E+07	3.0137245E+09

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
3.2224 to 0.3651	3.3540164E-03	2.5963902E-04	2.1959915E-06	9.7373390E-08
0.3651 to 0.07069	3.3540678E-03	2.5974313E-04	2.2488876E-06	9.6198155E-08
0.07069 to 0.01971	3.3534015E-03	2.5907955E-04	2.0007093E-06	6.1335033E-08
0.01971 to 0.00711	3.4061455E-03	2.9467285E-04	9.9638018E-06	6.5192936E-07
0.00711 to 0.00309	1.7981970E-03	-6.2063248E-04	-1.6361114E-04	-1.0315635E-05

†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 °C (%/°C)
0	3.2224	5.06%
5	2.5128	4.90%
10	1.9745	4.75%
15	1.5630	4.61%
20	1.2460	4.47%
25	1.0000	4.33%
30	0.8078	4.21%
35	0.6566	4.09%
40	0.5369	3.97%
45	0.4415	3.86%
50	0.3651	3.75%
55	0.3035	3.64%
60	0.2536	3.55%
65	0.2129	3.45%
70	0.17957	3.36%
75	0.15215	3.27%
80	0.12948	3.19%
85	0.11064	3.10%
90	0.09493	3.02%
95	0.08175	2.95%
100	0.07069	2.87%
105	0.06133	2.80%
110	0.05340	2.73%
115	0.04665	2.67%
120	0.04088	2.60%
125	0.03594	2.55%
130	0.03169	2.49%
135	0.02803	2.43%
140	0.02486	2.37%
145	0.02210	2.33%
150	0.01971	2.28%
155	0.01762	2.24%
160	0.01579	2.18%
165	0.01418	2.15%
170	0.01277	2.08%
175	0.01152	2.04%
180	0.01042	2.02%
185	0.00944	1.96%
190	0.00857	1.93%
195	0.00780	1.92%
200	0.00711	1.83%
205	0.00649	1.77%
210	0.00594	1.77%
215	0.00544	1.75%
220	0.00500	1.70%
225	0.00460	1.63%
230	0.00423	1.65%
235	0.00390	1.67%
240	0.00361	1.52%
245	0.00334	1.50%
250	0.00309	1.46%



Material Type GC5 – Available Products: GC32

Data for material type: H

Temp Range (°C)	Ratio	Beta
0 to 50	8.60	3799
0 to 70	17.52	3834
25 to 50	2.72	3860
25 to 85	9.03	3916
25 to 100	14.20	3936
25 to 125	28.22	3965
37.8 to 104.4	9.51	3967

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.4346562E+01	4.5444118E+03	-1.9845714E+04	-1.7816128E+07
50 to 100	-1.4431053E+01	4.6325430E+03	-5.0526624E+04	-1.4253564E+07
100 to 150	-1.5776218E+01	6.2312948E+03	-6.8269468E+05	6.8919829E+07
150 to 200	-1.6267741E+01	6.9947735E+03	-1.0587644E+06	1.2859129E+08
200 to 250	-8.8974389E+00	-3.4568607E+03	3.8934127E+06	-6.5541197E+08

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
3.1592 to 0.3673	3.3540152E-03	2.6246486E-04	3.6116391E-06	1.8591480E-07
0.3673 to 0.07040	3.3538722E-03	2.6217273E-04	3.3931364E-06	1.1698246E-07
0.07040 to 0.01919	3.3439862E-03	2.5265642E-04	3.7667244E-07	-1.9743623E-07
0.01919 to 0.00674	3.3274815E-03	2.4094404E-04	-2.1702310E-06	-3.5932291E-07
0.00674 to 0.00286	3.3675858E-03	4.2316222E-04	3.3783142E-05	2.0234288E-06

†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 °C (%/°C)
0	3.1592	4.94%
5	2.4769	4.80%
10	1.9554	4.66%
15	1.5539	4.53%
20	1.2427	4.41%
25	1.0000	4.29%
30	0.8095	4.17%
35	0.6590	4.06%
40	0.5395	3.95%
45	0.4440	3.85%
50	0.3673	3.75%
55	0.3053	3.65%
60	0.2550	3.55%
65	0.2140	3.46%
70	0.18035	3.38%
75	0.15267	3.29%
80	0.12977	3.21%
85	0.11074	3.13%
90	0.09487	3.06%
95	0.08158	2.99%
100	0.07040	2.91%
105	0.06097	2.84%
110	0.05298	2.78%
115	0.04618	2.72%
120	0.04039	2.65%
125	0.03543	2.60%
130	0.03117	2.54%
135	0.02750	2.47%
140	0.02433	2.43%
145	0.02158	2.36%
150	0.01919	2.32%
155	0.01711	2.25%
160	0.01530	2.22%
165	0.01370	2.15%
170	0.01231	2.15%
175	0.01107	2.08%
180	0.00999	2.05%
185	0.00903	2.00%
190	0.00818	1.96%
195	0.00742	1.95%
200	0.00674	1.85%
205	0.00614	1.87%
210	0.00561	1.88%
215	0.00512	1.76%
220	0.00469	1.71%
225	0.00430	1.74%
230	0.00395	1.65%
235	0.00364	1.65%
240	0.00335	1.64%
245	0.00309	1.62%
250	0.00286	1.57%



Material Type GC6 – Available Products: GC32

Data for material type: G

Temp Range (°C)	Ratio	Beta
0 to 50	10.27	4111
0 to 70	22.07	4143
25 to 50	2.95	4167
25 to 85	10.71	4220
25 to 100	17.42	4239
25 to 125	36.43	4268
37.8 to 104.4	11.29	4269

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
0 to 50	-1.5578832E+01	5.0854037E+03	-1.0638365E+05	-7.4458816E+06
50 to 100	-1.5692664E+01	5.2035423E+03	-1.4721196E+05	-2.7476620E+06
100 to 150	-1.7080176E+01	6.8860041E+03	-8.2497620E+05	8.7984945E+07
150 to 200	-2.0242647E+01	1.1444444E+04	-2.9908697E+06	4.2788047E+08
200 to 250	-1.0287680E+01	-2.3835325E+03	3.3924483E+06	-5.5118099E+08

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
3.4820 to 0.3392	3.3540155E-03	2.4268910E-04	2.5957372E-06	8.2001804E-08
0.3392 to 0.05739	3.3539077E-03	2.4248332E-04	2.4616395E-06	4.8678250E-08
0.05739 to 0.01422	3.3424110E-03	2.3262794E-04	-2.9780278E-07	-2.0267684E-07
0.01422 to 0.00463	3.2254228E-03	1.6334167E-04	-1.3665696E-05	-1.0360482E-06
0.00463 to 0.00184	3.5183500E-03	3.4063625E-04	2.1582350E-05	1.2713202E-06

†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 °C (%/°C)
0	3.4820	5.37%
5	2.6727	5.21%
10	2.0676	5.06%
15	1.6115	4.91%
20	1.2651	4.77%
25	1.0000	4.64%
30	0.796	4.51%
35	0.6372	4.38%
40	0.5134	4.26%
45	0.4161	4.15%
50	0.3392	4.03%
55	0.2780	3.93%
60	0.2290	3.83%
65	0.18959	3.73%
70	0.15774	3.63%
75	0.13186	3.54%
80	0.11072	3.45%
85	0.09337	3.37%
90	0.07907	3.28%
95	0.06723	3.20%
100	0.05739	3.13%
105	0.04918	3.06%
110	0.04229	2.98%
115	0.03649	2.92%
120	0.03160	2.85%
125	0.02745	2.79%
130	0.02393	2.72%
135	0.02092	2.65%
140	0.01834	2.59%
145	0.01612	2.54%
150	0.01422	2.50%
155	0.01257	2.43%
160	0.01114	2.38%
165	0.00990	2.32%
170	0.00882	2.32%
175	0.00788	2.28%
180	0.00705	2.20%
185	0.00633	2.13%
190	0.00569	2.11%
195	0.00512	2.05%
200	0.00463	2.05%
205	0.00418	2.03%
210	0.00379	1.98%
215	0.00344	1.89%
220	0.00313	1.92%
225	0.00285	1.93%
230	0.00261	1.72%
235	0.00238	1.89%
240	0.00218	1.83%
245	0.00200	1.75%
250	0.00184	1.63%



Material Type GC7 – Available Products: GC32

Data for material type: D

Temp Range (°C)	Ratio	Beta
0 to 50	10.87	4212
0 to 70	24.13	4263
25 to 50	3.05	4301
25 to 85	11.74	4384
25 to 100	19.60	4414
25 to 125	42.74	4458
37.8 to 104.4	12.59	4460

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.6741909E+01	5.5513250E+03	-1.0588629E+05	-1.81885859E+07
50 to 100	-1.7050001E+01	5.8676536E+03	-2.1401528E+05	-5.8802115E+06
100 to 150	-1.6039989E+01	4.7047377E+03	2.3419628E+05	-6.3683250E+07
150 to 200	-2.2470895E+01	1.3155863E+04	-3.46589377E+06	4.7733153E+08
200 to 250	-4.8205742E+00	-1.2429916E+04	8.9252827E+06	-1.5287060E+09

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
3.5606 to 0.3276	3.3540146E-03	2.3655682E-04	3.8388742E-06	1.8357418E-07
0.3276 to 0.05102	3.3537780E-03	2.3608306E-04	3.5021327E-06	9.2007662E-08
0.05102 to 0.01163	3.3586428E-03	2.3993827E-04	4.5371205E-06	1.8900053E-07
0.01163 to 0.00350	3.2421786E-03	1.6776961E-04	-1.0384811E-05	-8.4130789E-07
0.00350 to 0.00130	3.9996162E-03	5.4726596E-04	5.3362372E-05	2.7525336E-06

†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 ∅ (%/°C)
0	3.5606	5.43%
5	2.7249	5.28%
10	2.0999	5.15%
15	1.6292	5.01%
20	1.2724	4.88%
25	1.0000	4.76%
30	0.7908	4.64%
35	0.6291	4.52%
40	0.5033	4.41%
45	0.4050	4.30%
50	0.3276	4.19%
55	0.2664	4.09%
60	0.2177	3.99%
65	0.17879	3.89%
70	0.14754	3.80%
75	0.12230	3.71%
80	0.10184	3.62%
85	0.08516	3.53%
90	0.07151	3.45%
95	0.06029	3.38%
100	0.05102	3.30%
105	0.04335	3.23%
110	0.03696	3.15%
115	0.03163	3.08%
120	0.02716	3.02%
125	0.02340	2.95%
130	0.02022	2.89%
135	0.01753	2.82%
140	0.01524	2.79%
145	0.01330	2.71%
150	0.01163	2.62%
155	0.01020	2.60%
160	0.00897	2.51%
165	0.00791	2.47%
170	0.00699	2.50%
175	0.00620	2.42%
180	0.00550	2.27%
185	0.00490	2.24%
190	0.00437	2.29%
195	0.00391	2.30%
200	0.00350	2.14%
205	0.00315	2.06%
210	0.00283	2.12%
215	0.00255	2.16%
220	0.00231	1.95%
225	0.00209	1.91%
230	0.00189	1.85%
235	0.00172	1.74%
240	0.00156	1.92%
245	0.00143	1.75%
250	0.00130	1.54%



Material Type GC8 – Available Products: GC32

Data for material type: D

Temp Range (°C)	Ratio	Beta
0 to 50	12.26	4424
0 to 70	28.18	4471
25 to 50	3.22	4505
25 to 85	13.11	4580
25 to 100	22.34	4608
25 to 125	50.18	4648
37.8 to 104.4	14.02	4650

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.7230206E+01	5.6565194E+03	-1.0125171E+05	-1.5977209E+07
50 to 100	-1.7177771E+01	5.5993733E+03	-8.0740498E+04	-1.8407244E+07
100 to 150	-1.7992874E+01	6.5466303E+03	-4.4797395E+05	2.9080253E+07
150 to 200	-9.7777277E-01	-1.6072143E+04	9.5732999E+06	-1.4505923E+09
200 to 250	-1.4179005E+01	1.3323768E+03	1.9377447E+06	-3.3585322E+08

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
3.8085 to 0.3107	3.3540159E-03	2.2532012E-04	3.0064820E-06	1.2267409E-07
0.3107 to 0.04477	3.3539950E-03	2.2526330E-04	2.9353296E-06	9.0517601E-08
0.04477 to 0.00966	3.3494345E-03	2.2141644E-04	1.8447446E-06	-1.3998762E-08
0.00966 to 0.00280	3.6830592E-03	4.1574372E-04	3.9512211E-05	2.4175138E-06
0.00280 to 0.00101	3.4416720E-03	2.7085782E-04	1.0709567E-05	5.2234708E-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)
0	3.8085	5.73%
5	2.8716	5.57%
10	2.1819	5.42%
15	1.6703	5.27%
20	1.2879	5.13%
25	1.0000	5.00%
30	0.7817	4.86%
35	0.6150	4.74%
40	0.4869	4.61%
45	0.3878	4.50%
50	0.3107	4.38%
55	0.2503	4.27%
60	0.2028	4.16%
65	0.16512	4.06%
70	0.13514	3.96%
75	0.1115	3.86%
80	0.09185	3.77%
85	0.07625	3.68%
90	0.06358	3.59%
95	0.05324	3.50%
100	0.04477	3.43%
105	0.03779	3.35%
110	0.03203	3.28%
115	0.02725	3.19%
120	0.02326	3.14%
125	0.01993	3.06%
130	0.01713	2.98%
135	0.01478	2.94%
140	0.01279	2.85%
145	0.01110	2.79%
150	0.00966	2.74%
155	0.00844	2.73%
160	0.00739	2.57%
165	0.00648	2.62%
170	0.00571	2.54%
175	0.00504	2.48%
180	0.00446	2.47%
185	0.00395	2.40%
190	0.00351	2.27%
195	0.00313	2.40%
200	0.00280	2.14%
205	0.00250	2.19%
210	0.00224	2.22%
215	0.00202	1.98%
220	0.00182	2.20%
225	0.00164	2.13%
230	0.00148	2.03%
235	0.00134	1.87%
240	0.00122	1.64%
245	0.00111	1.80%
250	0.00101	1.98%



Material Type A1 – Available Products: Glass Beads

Data for bead curve: A1

Temp Range (°C)	Ratio	Beta
0 to 50	5.18	2903
0 to 70	8.99	2941
25 to 50	2.14	2934
25 to 85	5.38	2994
25 to 100	7.47	2983
25 to 125	11.80	2930
37.8 to 104.4	5.49	3002

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
-80	139.70	-6.45
-75	101.60	-6.28
-70	74.52	-6.11
-65	55.15	-5.93
-60	41.19	-5.75
-55	31.04	-5.57
-50	23.61	-5.38
-45	18.12	-5.21
-40	14.03	-5.03
-35	10.95	-4.86
-30	8.625	-4.70
-25	6.848	-4.54
-20	5.479	-4.38
-15	4.418	-4.23
-10	3.589	-4.09
-5	2.935	-3.95
0	2.418	-3.81
5	2.004	-3.70
10	1.672	-3.58
15	1.403	-3.46
20	1.185	-3.36
25	1.000	-3.26
30	0.8572	-3.17
35	0.7338	-3.09

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
40	0.6295	-3.01
45	0.5414	-2.94
50	0.4671	-2.87
55	0.4044	-2.80
60	0.3515	-2.74
65	0.3068	-2.68
70	0.2689	-2.62
75	0.2367	-2.51
80	0.2093	-2.42
85	0.1859	-2.32
90	0.1659	-2.23
95	0.1487	-2.14
100	0.1339	-2.05
105	0.1212	-1.96
110	0.1101	-1.87
115	0.1005	-1.79
120	0.09208	-1.70
125	0.08475	-1.62
130	0.07832	-1.54
135	0.07267	-1.46
140	0.06769	-1.38
145	0.06330	-1.31
150	0.05940	-1.23
155	0.05595	-1.16
160	0.05288	-1.10



Material Type A2 – Available Products: Glass Beads

Data for bead curve: A2

Temp Range (°C)	Ratio	Beta
0 to 50	5.34	2959
0 to 70	9.21	2973
25 to 50	2.17	2990
25 to 85	5.41	3004
25 to 100	7.57	3003
25 to 125	12.48	2997
37.8 to 104.4	5.51	3008

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
-80	152.50	-6.75
-75	109.50	-6.51
-70	79.51	-6.28
-65	58.40	-6.06
-60	43.36	-5.85
-55	32.54	-5.64
-50	24.66	-5.44
-45	18.87	-5.26
-40	14.58	-5.08
-35	11.36	-4.90
-30	8.926	-4.74
-25	7.071	-4.58
-20	5.645	-4.43
-15	4.540	-4.29
-10	3.677	-4.15
-5	2.998	-4.02
0	2.460	-3.89
5	2.032	-3.76
10	1.688	-3.65
15	1.410	-3.54
20	1.184	-3.44
25	1.000	-3.34
30	0.8494	-3.24
35	0.7239	-3.14

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
40	0.6197	-3.05
45	0.5329	-2.96
50	0.4603	-2.88
55	0.3993	-2.80
60	0.3479	-2.72
65	0.3042	-2.64
70	0.2671	-2.57
75	0.2355	-2.50
80	0.2083	-2.41
85	0.1849	-2.34
90	0.1648	-2.28
95	0.1473	-2.21
100	0.1321	-2.15
105	0.1188	-2.09
110	0.1072	-2.03
115	0.09700	-1.97
120	0.08802	-1.92
125	0.08010	-1.86
130	0.07308	-1.81
135	0.06684	-1.76
140	0.06129	-1.71
145	0.05633	-1.66
150	0.05189	-1.62
155	0.04791	-1.57
160	0.04433	-1.53



Material Type A3 – Available Products: Glass Beads

Data for bead curve: A3

Temp Range (°C)	Ratio	Beta
0 to 50	5.66	3060
0 to 70	9.95	3077
25 to 50	2.23	3093
25 to 85	5.76	3117
25 to 100	8.22	3124
25 to 125	14.01	3133
37.8 to 104.4	5.93	3138

Temperature (°C)	Rt/R25 nominal	Temp Coef $_{\infty}$ (%/°C)
-80	175.30	-6.94
-75	125.10	-6.70
-70	90.27	-6.48
-65	65.87	-6.26
-60	48.58	-6.05
-55	36.19	-5.84
-50	27.24	-5.64
-45	20.70	-5.45
-40	15.87	-5.27
-35	12.28	-5.09
-30	9.580	-4.93
-25	7.536	-4.76
-20	5.974	-4.61
-15	4.772	-4.46
-10	3.839	-4.32
-5	3.110	-4.18
0	2.536	-4.01
5	2.081	-3.89
10	1.718	-3.77
15	1.427	-3.66
20	1.192	-3.55
25	1.000	-3.45
30	0.8440	-3.35
35	0.7155	-3.25

Temperature (°C)	Rt/R25 nominal	Temp Coef $_{\infty}$ (%/°C)
40	0.6094	-3.16
45	0.5215	-3.07
50	0.4482	-2.98
55	0.3869	-2.90
60	0.3353	-2.82
65	0.2917	-2.74
70	0.2548	-2.67
75	0.2234	-2.60
80	0.1965	-2.53
85	0.1735	-2.46
90	0.1536	-2.40
95	0.1365	-2.33
100	0.1217	-2.27
105	0.1088	-2.22
110	0.09750	-2.16
115	0.08764	-2.10
120	0.07900	-2.05
125	0.07139	-2.00
130	0.06467	-1.95
135	0.05873	-1.90
140	0.05345	-1.86
145	0.04876	-1.81
150	0.04458	-1.77
155	0.04085	-1.73
160	0.03750	-1.69



Material Type A4 – Available Products: Glass Beads

Data for bead curve: A4

Temp Range (°C)	Ratio	Beta
0 to 50	6.36	3266
0 to 70	11.65	3288
25 to 50	2.36	3306
25 to 85	6.52	3338
25 to 100	9.54	3346
25 to 125	16.94	3359
37.8 to 104.4	6.74	3363

Temperature (°C)	Rt/R25 nominal	Temp Coef $_{\infty}$ (%/°C)
-80	232.40	-7.01
-75	164.40	-6.83
-70	117.40	-6.64
-65	84.64	-6.45
-60	61.59	-6.26
-55	45.25	-6.07
-50	33.55	-5.89
-45	25.11	-5.70
-40	18.97	-5.53
-35	14.45	-5.35
-30	11.10	-5.18
-25	8.604	-5.02
-20	6.721	-4.86
-15	5.291	-4.71
-10	4.197	-4.56
-5	3.353	-4.42
0	2.698	-4.28
5	2.185	-4.15
10	1.781	-4.03
15	1.461	-3.91
20	1.206	-3.79
25	1.000	-3.68
30	0.8344	-3.58
35	0.6994	-3.48

Temperature (°C)	Rt/R25 nominal	Temp Coef $_{\infty}$ (%/°C)
40	0.5892	-3.38
45	0.4987	-3.28
50	0.4241	-3.19
55	0.3623	-3.11
60	0.3108	-3.02
65	0.2677	-2.94
70	0.2316	-2.86
75	0.2011	-2.79
80	0.1753	-2.71
85	0.1533	-2.64
90	0.1346	-2.57
95	0.1185	-2.51
100	0.1048	-2.44
105	0.09285	-2.38
110	0.08256	-2.32
115	0.07362	-2.26
120	0.06583	-2.21
125	0.05903	-2.16
130	0.05307	-2.10
135	0.04784	-2.05
140	0.04323	-2.00
145	0.03915	-1.96
150	0.03555	-1.91
155	0.03234	-1.87
160	0.02949	-1.82



Material Type A5 – Available Products: Glass Beads

Data for bead curve: A5

Temp Range (°C)	Ratio	Beta
0 to 50	7.04	3445
0 to 70	13.33	3468
25 to 50	2.47	3485
25 to 85	7.23	3521
25 to 100	10.82	3532
25 to 125	19.86	3548
37.8 to 104.4	7.50	3552

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
-60	76.05	-6.60
-55	54.97	-6.39
-50	40.15	-6.18
-45	29.62	-5.99
-40	22.06	-5.79
-35	16.59	-5.61
-30	12.59	-5.43
-25	9.632	-5.26
-20	7.433	-5.10
-15	5.783	-4.94
-10	4.534	-4.79
-5	3.581	-4.65
0	2.849	-4.51
5	2.282	-4.37
10	1.840	-4.24
15	1.493	-4.12
20	1.218	-4.00
25	1.000	-3.88
30	0.8262	-3.77
35	0.6860	-3.67
40	0.5725	-3.56
45	0.4802	-3.46
50	0.4048	-3.37
55	0.3428	-3.28
60	0.2917	-3.19
65	0.2492	-3.10
70	0.2138	-3.02
75	0.1842	-2.94
80	0.1593	-2.87
85	0.1383	-2.79
90	0.1205	-2.72
95	0.1054	-2.65

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
100	0.09245	-2.58
105	0.08138	-2.52
110	0.07186	-2.46
115	0.06364	-2.40
120	0.05654	-2.34
125	0.05036	-2.28
130	0.04487	-2.23
135	0.04023	-2.16
140	0.03619	-2.10
145	0.03264	-2.04
150	0.02953	-1.98
155	0.02680	-1.92
160	0.02438	-1.87
165	0.02224	-1.82
170	0.02033	-1.76
175	0.01864	-1.72
180	0.01713	-1.67
185	0.01577	-1.62
190	0.01456	-1.58
195	0.01347	-1.54
200	0.01248	-1.50
205	0.01159	-1.46
210	0.01079	-1.42
215	0.01006	-1.38
220	0.009395	-1.35
225	0.008790	-1.31
230	0.008239	-1.28
235	0.007735	-1.25
240	0.007274	-1.22
245	0.006850	-1.19
250	0.006462	-1.16
255	0.006104	-1.13
260	0.005774	-1.10



Material Type A6 – Available Products: Glass Beads

Data for bead curve: A6

Temp Range (°C)	Ratio	Beta
0 to 50	7.44	3542
0 to 70	14.37	3569
25 to 50	2.54	3588
25 to 85	7.70	3632
25 to 100	11.70	3649
25 to 125	22.06	3672
37.8 to 104.4	8.04	3674

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
-60	87.56	-6.91
-55	62.37	-6.66
-50	44.97	-6.43
-45	32.79	-6.21
-40	24.16	-6.00
-35	17.99	-5.80
-30	13.53	-5.61
-25	10.27	-5.43
-20	7.863	-5.25
-15	6.072	-5.09
-10	4.728	-4.93
-5	3.709	-4.78
0	2.932	-4.63
5	2.334	-4.49
10	1.870	-4.36
15	1.509	-4.23
20	1.224	-4.11
25	1.000	-3.99
30	0.8215	-3.88
35	0.6785	-3.77
40	0.5633	-3.67
45	0.4701	-3.57
50	0.3942	-3.47
55	0.3321	-3.38
60	0.2811	-3.29
65	0.2390	-3.21
70	0.2040	-3.12
75	0.1748	-3.05
80	0.1504	-2.97
85	0.1299	-2.90
90	0.1126	-2.82
95	0.09794	-2.76

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
100	0.08547	-2.69
105	0.07484	-2.63
110	0.06573	-2.56
115	0.05791	-2.50
120	0.05117	-2.45
125	0.04534	-2.39
130	0.04029	-2.33
135	0.03589	-2.28
140	0.03209	-2.23
145	0.02872	-2.19
150	0.02577	-2.14
155	0.02318	-2.10
160	0.02090	-2.05
165	0.01887	-2.01
170	0.01708	-1.97
175	0.01550	-1.93
180	0.01409	-1.89
185	0.01283	-1.85
190	0.01171	-1.81
195	0.01071	-1.77
200	0.009811	-1.74
205	0.009004	-1.70
210	0.008278	-1.67
215	0.007624	-1.63
220	0.007033	-1.60
225	0.006499	-1.57
230	0.006014	-1.53
235	0.005575	-1.50
240	0.005175	-1.47
245	0.004811	-1.44
250	0.004479	-1.41
255	0.004176	-1.39
260	0.003899	-1.36



Material Type A7 – Available Products: Glass Beads

Data for bead curve: A7

Temp Range (°C)	Ratio	Beta
0 to 50	7.58	3577
0 to 70	14.75	3604
25 to 50	2.56	3623
25 to 85	7.85	3667
25 to 100	11.98	3684
25 to 125	22.73	3708
37.8 to 104.4	8.20	3709

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	91.62	-6.97
-55	65.05	-6.73
-50	46.74	-6.49
-45	33.97	-6.27
-40	24.96	-6.06
-35	18.53	-5.86
-30	13.89	-5.67
-25	10.51	-5.48
-20	8.025	-5.31
-15	6.181	-5.14
-10	4.800	-4.98
-5	3.757	-4.83
0	2.962	-4.68
5	2.353	-4.54
10	1.881	-4.40
15	1.515	-4.27
20	1.227	-4.15
25	1.000	-4.03
30	0.8197	-3.92
35	0.6757	-3.81
40	0.5600	-3.70
45	0.4665	-3.60
50	0.3906	-3.51
55	0.3285	-3.41
60	0.2776	-3.32
65	0.2356	-3.24
70	0.2008	-3.15
75	0.1719	-3.07
80	0.1477	-3.00
85	0.1274	-2.92
90	0.1102	-2.85
95	0.09575	-2.78

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.08346	-2.72
105	0.07298	-2.65
110	0.06402	-2.59
115	0.05633	-2.53
120	0.04971	-2.47
125	0.04400	-2.42
130	0.03905	-2.36
135	0.03475	-2.31
140	0.03100	-2.26
145	0.02772	-2.21
150	0.02485	-2.16
155	0.02233	-2.12
160	0.02011	-2.07
165	0.01815	-2.03
170	0.01642	-1.98
175	0.01489	-1.94
180	0.01353	-1.90
185	0.01231	-1.86
190	0.01123	-1.82
195	0.01027	-1.78
200	0.009401	-1.74
205	0.008624	-1.71
210	0.007925	-1.67
215	0.007295	-1.64
220	0.006727	-1.60
225	0.006214	-1.57
230	0.005749	-1.54
235	0.005326	-1.51
240	0.004943	-1.48
245	0.004594	-1.45
250	0.004275	-1.42
255	0.003985	-1.39
260	0.003719	-1.37



Material Type B8 – Available Products: Glass Beads

Data for bead curve: B8

Temp Range (°C)	Ratio	Beta
0 to 50	9.12	3901
0 to 70	18.75	3925
25 to 50	2.78	3944
25 to 85	9.37	3983
25 to 100	14.78	3995
25 to 125	29.43	4015
37.8 to 104.4	9.76	4016

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	143.20	-7.72
-55	98.02	-7.44
-50	68.03	-7.17
-45	47.83	-6.92
-40	34.04	-6.68
-35	24.52	-6.45
-30	17.86	-6.23
-25	13.14	-6.03
-20	9.772	-5.83
-15	7.337	-5.64
-10	5.559	-5.46
-5	4.250	-5.29
0	3.276	-5.12
5	2.546	-4.96
10	1.994	-4.81
15	1.573	-4.67
20	1.250	-4.53
25	1.000	-4.40
30	0.8051	-4.27
35	0.6524	-4.15
40	0.5318	-4.03
45	0.4360	-3.92
50	0.3594	-3.81
55	0.2979	-3.70
60	0.2481	-3.60
65	0.2077	-3.51
70	0.1747	-3.42
75	0.1476	-3.33
80	0.1253	-3.24
85	0.1067	-3.16
90	0.09134	-3.08
95	0.07846	-3.00

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.06766	-2.93
105	0.05856	-2.85
110	0.05085	-2.79
115	0.04432	-2.72
120	0.03875	-2.65
125	0.03398	-2.59
130	0.02990	-2.53
135	0.02638	-2.47
140	0.02334	-2.42
145	0.02071	-2.36
150	0.01843	-2.31
155	0.01644	-2.26
160	0.01470	-2.21
165	0.01318	-2.16
170	0.01184	-2.12
175	0.01066	-2.07
180	0.009623	-2.03
185	0.008703	-1.99
190	0.007888	-1.95
195	0.007164	-1.91
200	0.006519	-1.87
205	0.005943	-1.83
210	0.005428	-1.80
215	0.004966	-1.76
220	0.004552	-1.73
225	0.004179	-1.69
230	0.003843	-1.66
235	0.003539	-1.63
240	0.003265	-1.60
245	0.003016	-1.57
250	0.002791	-1.54
255	0.002586	-1.51
260	0.002399	-1.49



Material Type B9 – Available Products: Glass Beads

Data for bead curve: B9

Temp Range (°C)	Ratio	Beta
0 to 50	9.36	3947
0 to 70	19.43	3972
25 to 50	2.82	3990
25 to 85	9.63	4032
25 to 100	15.30	4047
25 to 125	30.80	4069
37.8 to 104.4	10.06	4069

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
-60	151.10	-7.79
-55	103.10	-7.51
-50	71.27	-7.25
-45	49.94	-6.99
-40	35.42	-6.75
-35	25.42	-6.52
-30	18.45	-6.30
-25	13.53	-6.09
-20	10.03	-5.89
-15	7.507	-5.70
-10	5.671	-5.52
-5	4.322	-5.35
0	3.322	-5.18
5	2.574	-5.02
10	2.010	-4.87
15	1.582	-4.72
20	1.253	-4.58
25	1.000	-4.45
30	0.8033	-4.32
35	0.6493	-4.20
40	0.5280	-4.08
45	0.4318	-3.96
50	0.3551	-3.86
55	0.2936	-3.75
60	0.2440	-3.65
65	0.2038	-3.55
70	0.1710	-3.46
75	0.1442	-3.37
80	0.1221	-3.28
85	0.1038	-3.20
90	0.08862	-3.12
95	0.07596	-3.04

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
100	0.06535	-2.97
105	0.05644	-2.90
110	0.04891	-2.83
115	0.04253	-2.76
120	0.03710	-2.70
125	0.03247	-2.64
130	0.02851	-2.58
135	0.02509	-2.52
140	0.02216	-2.46
145	0.01962	-2.41
150	0.01742	-2.35
155	0.01551	-2.30
160	0.01384	-2.25
165	0.01238	-2.20
170	0.01111	-2.15
175	0.009986	-2.11
180	0.008998	-2.06
185	0.008126	-2.02
190	0.007354	-1.98
195	0.006669	-1.93
200	0.006060	-1.89
205	0.005518	-1.86
210	0.005034	-1.82
215	0.004600	-1.78
220	0.004212	-1.75
225	0.003864	-1.71
230	0.003550	-1.68
235	0.003267	-1.64
240	0.003011	-1.61
245	0.002780	-1.58
250	0.002571	-1.55
255	0.002381	-1.52
260	0.002208	-1.49



Material Type B10 – Available Products: Glass Beads

Data for bead curve: B10

Temp Range (°C)	Ratio	Beta
0 to 50	9.60	3992
0 to 70	20.14	4021
25 to 50	2.85	4040
25 to 85	9.94	4087
25 to 100	15.89	4102
25 to 125	32.29	4125
37.8 to 104.4	10.40	4128

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	157.10	-7.82
-55	107.00	-7.54
-50	73.88	-7.28
-45	51.66	-7.03
-40	36.57	-6.79
-35	26.19	-6.56
-30	18.97	-6.35
-25	13.88	-6.14
-20	10.26	-5.94
-15	7.663	-5.75
-10	5.774	-5.57
-5	4.390	-5.40
0	3.364	-5.23
5	2.600	-5.07
10	2.027	-4.92
15	1.591	-4.77
20	1.258	-4.63
25	1.000	-4.50
30	0.8017	-4.37
35	0.6462	-4.25
40	0.5240	-4.13
45	0.4274	-4.02
50	0.3505	-3.91
55	0.2890	-3.80
60	0.2396	-3.70
65	0.1996	-3.60
70	0.1670	-3.51
75	0.1405	-3.42
80	0.1186	-3.33
85	0.1006	-3.25
90	0.08572	-3.17
95	0.07331	-3.09

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.06294	-3.01
105	0.05424	-2.94
110	0.04691	-2.87
115	0.04071	-2.80
120	0.03545	-2.74
125	0.03097	-2.67
130	0.02714	-2.61
135	0.02386	-2.55
140	0.02104	-2.49
145	0.01860	-2.43
150	0.01649	-2.38
155	0.01466	-2.33
160	0.01307	-2.28
165	0.01167	-2.23
170	0.01046	-2.18
175	0.009387	-2.13
180	0.008447	-2.09
185	0.007617	-2.05
190	0.006884	-2.00
195	0.006234	-1.96
200	0.005657	-1.92
205	0.005144	-1.88
210	0.004686	-1.85
215	0.004276	-1.81
220	0.003910	-1.78
225	0.003581	-1.74
230	0.003285	-1.71
235	0.003019	-1.68
240	0.002779	-1.64
245	0.002561	-1.61
250	0.002365	-1.58
255	0.002186	-1.55
260	0.002024	-1.53



Material Type B11 – Available Products: Glass Beads

Data for bead curve: B11

Temp Range (°C)	Ratio	Beta
0 to 50	10.11	4084
0 to 70	21.63	4116
25 to 50	2.93	4142
25 to 85	10.23	4139
25 to 100	17.13	4214
25 to 125	35.68	4243
37.8 to 104.4	11.10	4243

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	165.90	-7.56
-55	114.10	-7.39
-50	79.22	-7.21
-45	55.52	-7.02
-40	39.27	-6.83
-35	28.05	-6.64
-30	20.23	-6.45
-25	14.73	-6.26
-20	10.82	-6.07
-15	8.029	-5.88
-10	6.010	-5.70
-5	4.538	-5.53
0	3.452	-5.36
5	2.654	-5.19
10	2.056	-5.03
15	1.605	-4.88
20	1.262	-4.73
25	1.000	-4.61
30	0.7963	-4.48
35	0.6387	-4.35
40	0.5153	-4.23
45	0.4183	-4.12
50	0.3414	-4.01
55	0.2801	-3.90
60	0.2311	-3.80
65	0.1916	-3.70
70	0.1596	-3.61
75	0.1335	-3.52
80	0.1122	-3.43
85	0.09774	-3.35
90	0.08031	-3.26
95	0.06835	-3.19

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.05839	-3.11
105	0.05008	-3.04
110	0.04309	-2.97
115	0.03722	-2.90
120	0.03225	-2.83
125	0.02803	-2.77
130	0.02445	-2.71
135	0.02138	-2.65
140	0.01876	-2.59
145	0.01650	-2.53
150	0.01456	-2.48
155	0.01287	-2.43
160	0.01142	-2.38
165	0.01015	-2.33
170	0.009044	-2.28
175	0.008078	-2.24
180	0.007232	-2.19
185	0.006489	-2.15
190	0.005835	-2.11
195	0.005258	-2.06
200	0.004747	-2.02
205	0.004294	-1.99
210	0.003892	-1.95
215	0.003534	-1.91
220	0.003215	-1.88
225	0.002930	-1.84
230	0.002675	-1.81
235	0.002446	-1.77
240	0.002240	-1.74
245	0.002055	-1.71
250	0.001887	-1.68
255	0.001737	-1.65
260	0.001600	-1.62



Material Type B12 – Available Products: Glass Beads

Data for bead curve: B12

Temp Range (°C)	Ratio	Beta
0 to 50	10.43	4140
0 to 70	22.63	4177
25 to 50	2.97	4201
25 to 85	10.97	4263
25 to 100	17.98	4286
25 to 125	38.05	4320
37.8 to 104.4	11.60	4321

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
-60	176.20	-7.87
-55	119.70	-7.61
-50	82.32	-7.37
-45	57.30	-7.13
-40	40.34	-6.90
-35	28.72	-6.69
-30	20.67	-6.48
-25	15.03	-6.28
-20	11.03	-6.09
-15	8.175	-5.90
-10	6.114	-5.72
-5	4.612	-5.56
0	3.508	-5.39
5	2.689	-5.24
10	2.078	-5.09
15	1.617	-4.94
20	1.268	-4.80
25	1.000	-4.67
30	0.7946	-4.54
35	0.6352	-4.42
40	0.5109	-4.30
45	0.4133	-4.18
50	0.3362	-4.07
55	0.2749	-3.97
60	0.2260	-3.87
65	0.1868	-3.77
70	0.1550	-3.67
75	0.1293	-3.58
80	0.1083	-3.50
85	0.09115	-3.41
90	0.07701	-3.33
95	0.06533	-3.25

Temperature (°C)	Rt/R25 nominal	Temp Coef \propto (%/°C)
100	0.05563	-3.18
105	0.04755	-3.10
110	0.04079	-3.03
115	0.03511	-2.96
120	0.03033	-2.90
125	0.02628	-2.83
130	0.02284	-2.77
135	0.01992	-2.71
140	0.01742	-2.65
145	0.01528	-2.60
150	0.01344	-2.54
155	0.01185	-2.49
160	0.01048	-2.44
165	0.009286	-2.39
170	0.008251	-2.34
175	0.007349	-2.29
180	0.006561	-2.25
185	0.005870	-2.20
190	0.005264	-2.16
195	0.004730	-2.12
200	0.004259	-2.08
205	0.003843	-2.04
210	0.003474	-2.00
215	0.003146	-1.96
220	0.002855	-1.93
225	0.002595	-1.89
230	0.002363	-1.86
235	0.002155	-1.82
240	0.001969	-1.79
245	0.001802	-1.76
250	0.001651	-1.73
255	0.001516	-1.70
260	0.001393	-1.67



Material Type B13 – Available Products: Glass Beads

Data for bead curve: B13

Temp Range (°C)	Ratio	Beta
0 to 50	11.44	4303
0 to 70	25.71	4347
25 to 50	3.11	4377
25 to 85	12.20	4451
25 to 100	20.48	4479
25 to 125	45.05	4520
37.8 to 104.4	12.99	4520

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
-60	202.00	-7.93
-55	136.70	-7.70
-50	93.51	-7.47
-45	64.71	-7.26
-40	45.26	-7.04
-35	31.99	-6.84
-30	22.84	-6.64
-25	16.47	-6.45
-20	11.99	-6.26
-15	8.806	-6.08
-10	6.526	-5.91
-5	4.848	-5.74
0	3.676	-5.58
5	2.792	-5.42
10	2.137	-5.27
15	1.647	-5.13
20	1.279	-4.99
25	1.000	-4.85
30	0.7872	-4.72
35	0.6235	-4.60
40	0.4969	-4.48
45	0.3984	-4.36
50	0.3212	-4.25
55	0.2603	-4.15
60	0.2122	-4.04
65	0.1738	-3.94
70	0.1430	-3.85
75	0.1183	-3.75
80	0.09826	-3.66
85	0.08199	-3.58
90	0.06870	-3.49
95	0.05781	-3.41

Temperature (°C)	Rt/R25 nominal	Temp Coef ∞ (%/°C)
100	0.04883	-3.34
105	0.04141	-3.26
110	0.03525	-3.19
115	0.03011	-3.12
120	0.02581	-3.05
125	0.02220	-2.98
130	0.01915	-2.92
135	0.01658	-2.86
140	0.01440	-2.80
145	0.01254	-2.74
150	0.01095	-2.68
155	0.009588	-2.63
160	0.008420	-2.57
165	0.007413	-2.52
170	0.006543	-2.47
175	0.005790	-2.42
180	0.005136	-2.38
185	0.004566	-2.33
190	0.004068	-2.29
195	0.003633	-2.24
200	0.003251	-2.20
205	0.002915	-2.16
210	0.002620	-2.12
215	0.002359	-2.08
220	0.002128	-2.04
225	0.001923	-2.01
230	0.001741	-1.97
235	0.001579	-1.94
240	0.001434	-1.90
245	0.001305	-1.87
250	0.001190	-1.84
255	0.001086	-1.81
260	0.0009931	-1.78



Material Type B14 – Available Products: Glass Beads

Data for bead curve: B14

Temp Range (°C)	Ratio	Beta
0 to 50	11.88	4369
0 to 70	27.05	4416
25 to 50	3.17	4447
25 to 85	12.72	4526
25 to 100	21.55	4555
25 to 125	48.10	4598
37.8 to 104.4	13.58	4598

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	212.50	-7.94
-55	143.70	-7.72
-50	98.20	-7.51
-45	67.83	-7.30
-40	47.34	-7.09
-35	33.37	-6.89
-30	23.76	-6.70
-25	17.08	-6.51
-20	12.39	-6.33
-15	9.072	-6.15
-10	6.700	-5.98
-5	4.989	-5.81
0	3.746	-5.65
5	2.835	-5.50
10	2.161	-5.35
15	1.661	-5.21
20	1.284	-5.07
25	1.000	-4.93
30	0.7844	-4.80
35	0.6190	-4.67
40	0.4915	-4.55
45	0.3926	-4.44
50	0.3154	-4.32
55	0.2547	-4.21
60	0.2069	-4.11
65	0.1689	-4.01
70	0.1385	-3.91
75	0.1142	-3.82
80	0.09453	-3.73
85	0.07863	-3.64
90	0.06568	-3.56
95	0.05509	-3.48

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.04640	-3.40
105	0.03923	-3.32
110	0.03329	-3.25
115	0.02836	-3.17
120	0.02424	-3.10
125	0.02079	-3.04
130	0.01789	-2.97
135	0.01545	-2.91
140	0.01338	-2.85
145	0.01162	-2.79
150	0.01012	-2.73
155	0.008844	-2.67
160	0.007748	-2.62
165	0.006806	-2.57
170	0.005994	-2.52
175	0.005293	-2.47
180	0.004685	-2.42
185	0.004156	-2.37
190	0.003696	-2.33
195	0.003294	-2.28
200	0.002942	-2.24
205	0.002633	-2.20
210	0.002362	-2.16
215	0.002123	-2.12
220	0.001911	-2.08
225	0.001724	-2.04
230	0.001559	-2.00
235	0.001411	-1.97
240	0.001280	-1.93
245	0.001163	-1.90
250	0.001059	-1.87
255	0.0009649	-1.83
260	0.0008810	-1.80



Material Type B15 – Available Products: Glass Beads

Data for bead curve: B15

Temp Range (°C)	Ratio	Beta
0 to 50	13.19	4553
0 to 70	31.08	4602
25 to 50	3.33	4634
25 to 85	14.16	4717
25 to 100	24.52	4746
25 to 125	56.53	4790
37.8 to 104.4	15.15	4791

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	223.10	-7.26
-55	155.20	-7.25
-50	108.10	-7.20
-45	75.55	-7.12
-40	53.04	-7.03
-35	37.44	-6.91
-30	26.58	-6.78
-25	19.00	-6.64
-20	13.80	-6.50
-15	9.924	-6.35
-10	7.252	-6.20
-5	5.340	-6.04
0	3.963	-5.89
5	2.964	-5.73
10	2.233	-5.58
15	1.696	-5.43
20	1.297	-5.28
25	1.000	-5.13
30	0.7756	-5.00
35	0.6066	-4.87
40	0.4771	-4.74
45	0.3775	-4.62
50	0.3005	-4.51
55	0.2405	-4.39
60	0.1936	-4.28
65	0.1567	-4.18
70	0.1275	-4.08
75	0.1042	-3.98
80	0.08559	-3.88
85	0.07064	-3.79
90	0.05857	-3.70
95	0.04877	-3.62

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.04079	-3.54
105	0.03425	-3.46
110	0.02887	-3.38
115	0.02443	-3.30
120	0.02075	-3.23
125	0.01769	-3.15
130	0.01514	-3.08
135	0.01299	-3.01
140	0.01120	-2.95
145	0.009680	-2.88
150	0.008394	-2.82
155	0.007300	-2.76
160	0.006367	-2.71
165	0.005568	-2.65
170	0.004883	-2.60
175	0.004292	-2.55
180	0.003783	-2.50
185	0.003342	-2.46
190	0.002959	-2.41
195	0.002626	-2.37
200	0.002335	-2.33
205	0.002081	-2.28
210	0.001858	-2.24
215	0.001662	-2.21
220	0.001490	-2.17
225	0.001338	-2.13
230	0.001204	-2.10
235	0.001085	-2.06
240	0.0009796	-2.03
245	0.0008858	-2.00
250	0.0008023	-1.97
255	0.0007278	-1.93
260	0.0006612	-1.90



Material Type D16 – Available Products: Glass Beads

Data for bead curve: D16

Temp Range (°C)	Ratio	Beta
0 to 50	15.60	4850
0 to 70	39.12	4910
25 to 50	3.62	4953
25 to 85	17.08	5051
25 to 100	30.82	5085
25 to 125	75.64	5135
37.8 to 104.4	18.46	5139

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
-60	349.50	-8.64
-55	228.40	-8.39
-50	151.10	-8.14
-45	101.20	-7.91
-40	68.51	-7.69
-35	46.89	-7.48
-30	32.43	-7.27
-25	22.65	-7.08
-20	15.97	-6.89
-15	11.37	-6.71
-10	8.161	-6.54
-5	5.910	-6.37
0	4.315	-6.21
5	3.175	-6.06
10	2.355	-5.91
15	1.759	-5.77
20	1.323	-5.63
25	1.000	-5.47
30	0.7638	-5.34
35	0.5868	-5.20
40	0.4537	-5.07
45	0.3531	-4.95
50	0.2766	-4.83
55	0.2179	-4.71
60	0.1727	-4.59
65	0.1376	-4.48
70	0.1103	-4.38
75	0.08884	-4.27
80	0.07193	-4.17
85	0.05854	-4.07
90	0.04786	-3.98
95	0.03932	-3.89

Temperature (°C)	Rt/R25 nominal	Temp Coef α (%/°C)
100	0.03245	-3.80
105	0.02689	-3.71
110	0.02238	-3.63
115	0.01871	-3.55
120	0.01570	-3.47
125	0.01322	-3.39
130	0.01118	-3.32
135	0.009485	-3.25
140	0.008077	-3.18
145	0.006901	-3.11
150	0.005916	-3.05
155	0.005088	-2.98
160	0.004390	-2.92
165	0.003799	-2.86
170	0.003297	-2.80
175	0.002870	-2.75
180	0.002505	-2.69
185	0.002193	-2.64
190	0.001924	-2.59
195	0.001693	-2.53
200	0.001494	-2.48
205	0.001321	-2.44
210	0.001171	-2.39
215	0.001040	-2.34
220	0.0009259	-2.30
225	0.0008263	-2.26
230	0.0007389	-2.21
235	0.0006621	-2.17
240	0.0005946	-2.13
245	0.0005349	-2.09
250	0.0004822	-2.06
255	0.0004355	-2.02
260	0.0003940	-1.98



Material Type GE5.5 – Available Products: GE, MELF

Data for material type: GE5.5

Temp Range (°C)	Ratio	Beta
0 to 50	5.37	2967
0 to 70	9.19	2971
25 to 50	2.17	2979
25 to 85	5.34	2983
25 to 100	7.49	2986
25 to 125	12.35	2984
37.8 to 104.4	5.46	2989

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.1222542 x 10 ⁰¹	3.7896291 x 10 ⁰³	-1.6267252 x 10 ⁰⁵	8.9034766 x 10 ⁰⁶
0 to 50	-1.0682861 x 10 ⁰¹	3.4873093 x 10 ⁰³	-1.1567816 x 10 ⁰⁵	7.6246263 x 10 ⁰⁶
50 to 100	-1.0539673 x 10 ⁰¹	3.4190765 x 10 ⁰³	-1.1160480 x 10 ⁰⁵	8.6016776 x 10 ⁰⁶
100 to 150	-1.0081978 x 10 ⁰¹	3.0613742 x 10 ⁰³	-2.4629546 x 10 ⁰⁴	2.1728332 x 10 ⁰⁶
150 to 200	-1.0081978 x 10 ⁰¹	3.0613742 x 10 ⁰³	-2.4629546 x 10 ⁰⁴	2.1728332 x 10 ⁰⁶
200 to 250	-1.0081978 x 10 ⁰¹	3.0613742 x 10 ⁰³	-2.4629546 x 10 ⁰⁴	2.1728332 x 10 ⁰⁶

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
26.96 to 2.479	3.3560946 x 10 ⁻⁰³	3.3338591 x 10 ⁻⁰⁴	2.7947541 x 10 ⁻⁰⁶	-9.5822613 x 10 ⁻⁰⁸
2.479 to 0.4616	3.3540165 x 10 ⁻⁰³	3.3685300 x 10 ⁻⁰⁴	1.4876179 x 10 ⁻⁰⁶	-8.5351720 x 10 ⁻⁰⁸
0.4616 to 0.13360	3.3550285 x 10 ⁻⁰³	3.3778114 x 10 ⁻⁰⁴	9.8662130 x 10 ⁻⁰⁷	-9.6022703 x 10 ⁻⁰⁸
0.13360 to 0.05202	3.3571072 x 10 ⁻⁰³	3.3676684 x 10 ⁻⁰⁴	1.0858728 x 10 ⁻⁰⁷	-2.7023120 x 10 ⁻⁰⁸
0.05202 to 0.02469	3.3571192 x 10 ⁻⁰³	3.3677902 x 10 ⁻⁰⁴	1.1271804 x 10 ⁻⁰⁷	-2.6554538 x 10 ⁻⁰⁸
0.024692 to 0.013501	3.3571411 x 10 ⁻⁰³	3.3679682 x 10 ⁻⁰⁴	1.1754009 x 10 ⁻⁰⁷	-2.6118522 x 10 ⁻⁰⁸

†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† (±%)
-50	26.960000	5.76	9.0884113
-45	20.330000	5.53	8.3705682
-40	15.510000	5.31	7.667348
-35	11.960000	5.10	6.9784088
-30	9.308000	4.91	6.3034055
-25	7.315000	4.73	5.6419919
-20	5.800000	4.56	4.9938233
-15	4.636000	4.40	4.3585578
-10	3.736000	4.25	3.7358579
5	3.032000	4.10	3.1253911
0	2.479000	3.95	2.5268315
5	2.042000	3.82	2.0180686
10	1.693000	3.69	1.5105609
15	1.412000	3.57	1.0047782
20	1.185000	3.45	0.5011357
25	1.000000	3.34	0
30	0.848400	3.24	0.498306
35	0.723500	3.14	0.9934986
40	0.620000	3.04	1.4853295
45	0.533800	2.95	1.9735818
50	0.461600	2.85	2.4580673
55	0.401100	2.77	2.8530379
60	0.350000	2.69	3.2371737
65	0.306600	2.61	3.6109631
70	0.269600	2.54	3.9748649
75	0.237900	2.47	4.3293099
80	0.210600	2.40	4.6747037
85	0.187100	2.34	5.0114283
90	0.166700	2.28	5.3398437
95	0.149000	2.22	5.6602895
100	0.133600	2.14	5.9730866
105	0.120200	2.08	6.2733438
110	0.108500	2.03	6.576806
115	0.098150	1.98	6.883088
120	0.089030	1.93	7.1918309
125	0.080950	1.88	7.5027004
130	0.073780	1.83	7.8153851
135	0.067390	1.79	8.1295951
140	0.061690	1.75	8.4450606
145	0.056590	1.70	8.7615301
1	0.052020	1.67	9.0787699
155	0.047910	1.63	9.3965624
160	0.044210	1.59	9.7147051
165	0.040870	1.55	10.03301
170	0.037850	1.52	10.351302
175	0.035110	1.49	10.669418
180	0.032620	1.45	10.987208
185	0.030360	1.42	11.304531
190	0.028300	1.39	11.621258
195	0.026410	1.36	11.937268
200	0.024690	1.33	12.252448
205	0.023110	1.31	12.566697
210	0.021670	1.28	12.879917
215	0.020340	1.25	13.192022
220	0.019110	1.23	13.502928
225	0.017990	1.20	13.812562
230	0.016940	1.18	14.120853
235	0.015980	1.16	14.427738
240	0.015090	1.14	14.733158
245	0.014270	1.11	15.037061
250	0.013500	1.09	15.339396



Material Type GE7.3 – Available Products: GE, MELF

Data for material type: GE7.3

Temp Range (°C)	Ratio	Beta
0 to 50	7.15	3472
0 to 70	13.44	3479
25 to 50	2.48	3494
25 to 85	7.14	3499
25 to 100	10.60	3502
25 to 125	19.13	3503
37.8 to 104.4	7.32	3507

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4961670 x 10 ⁰¹	5.6052448 x 10 ⁰³	-4.1976020 x 10 ⁰⁵	2.2974533 x 10 ⁰⁷
0 to 50	-1.2958587 x 10 ⁰¹	4.4068212 x 10 ⁰³	-2.0792709 x 10 ⁰⁵	1.3704976 x 10 ⁰⁷
50 to 100	-1.2250702 x 10 ⁰¹	3.9177127 x 10 ⁰³	-1.0687214 x 10 ⁰⁵	8.2369193 x 10 ⁰⁶
100 to 150	-1.2003351 x 10 ⁰¹	3.7197567 x 10 ⁰³	-5.5544250 x 10 ⁰⁵	3.7956506 x 10 ⁰⁶
150 to 200	-1.2272998 x 10 ⁰¹	4.0221209 x 10 ⁰³	-1.6497594 x 10 ⁰⁴	1.6392066 x 10 ⁰⁷
200 to 250	-1.2350866 x 10 ⁰¹	4.1483349 x 10 ⁰³	-2.2521035 x 10 ⁰⁵	2.4884474 x 10 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
44.48 to 2.888	3.3589077 x 10 ⁻⁰³	2.8029644 x 10 ⁻⁰⁴	4.4154017 x 10 ⁻⁰⁶	-9.0246658 x 10 ⁻⁰⁸
2.888 to 0.4039	3.3540167 x 10 ⁻⁰³	2.8780642 x 10 ⁻⁰⁴	1.6669227 x 10 ⁻⁰⁶	-7.5159604 x 10 ⁻⁰⁸
0.4039 to 0.09436	3.3546230 x 10 ⁻⁰³	2.8746895 x 10 ⁻⁰⁴	5.7980849 x 10 ⁻⁰⁷	-4.9797346 x 10 ⁻⁰⁸
0.09436 to 0.03103	3.3565901 x 10 ⁻⁰³	2.8778814 x 10 ⁻⁰⁴	4.2802395 x 10 ⁻⁰⁷	-2.1842564 x 10 ⁻⁰⁸
0.03103 to 0.01285	3.3602535 x 10 ⁻⁰³	2.8871387 x 10 ⁻⁰⁴	1.3854322 x 10 ⁻⁰⁷	-9.4492269 x 10 ⁻⁰⁸
0.012850 to 0.006280	3.3648829 x 10 ⁻⁰³	2.8885881 x 10 ⁻⁰⁴	-2.5931176 x 10 ⁻⁰⁷	-1.3743436 x 10 ⁻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 °C (%/°C)	β Deviation† (±%)
-50	44.480000	6.48	11.629556
-45	32.360000	6.25	10.823331
-40	23.820000	6.02	10.012822
-35	17.720000	5.81	9.1997632
-30	13.320000	5.61	8.3856792
-25	10.110000	5.43	7.5719067
-20	7.740000	5.25	6.7596174
-15	5.978000	5.08	5.9498372
-10	4.655000	4.93	5.1434621
5	3.653000	4.78	4.3412737
0	2.888000	4.61	3.5439517
5	2.303000	4.45	2.6687962
10	1.850000	4.31	1.883588
15	1.497000	4.17	1.1812041
20	1.220000	4.03	0.5552562
25	1.000000	3.91	0
30	0.825000	3.79	0.489742
35	0.684500	3.68	0.9186477
40	0.571200	3.57	1.2909527
45	0.479100	3.46	1.6105007
50	0.403900	3.35	1.880787
55	0.342600	3.25	2.2091604
60	0.291900	3.15	2.5298446
65	0.249900	3.06	2.8431518
70	0.214900	2.98	3.1493772
75	0.185600	2.89	3.448799
80	0.160900	2.82	3.7416806
85	0.140000	2.74	4.0282711
90	0.122300	2.67	4.3088064
95	0.107300	2.60	4.5835099
100	0.094360	2.52	4.8525938
105	0.083340	2.45	5.0450769
110	0.073840	2.39	5.2479514
115	0.065620	2.33	5.4605304
120	0.058490	2.27	5.6821659
125	0.052290	2.22	5.9122467
130	0.046870	2.16	6.1501963
135	0.042120	2.11	6.3954706
140	0.037950	2.06	6.6475562
145	0.034270	2.01	6.9059686
150	0.031030	1.96	7.1702505
155	0.028160	1.92	7.4399704
160	0.025610	1.88	7.7147208
165	0.023340	1.84	7.9941171
170	0.021310	1.80	8.2777962
175	0.019500	1.76	8.5654152
180	0.017880	1.72	8.8566505
185	0.016420	1.68	9.1511963
190	0.015100	1.65	9.448764
195	0.013920	1.62	9.7490812
200	0.012850	1.58	10.05189
205	0.011880	1.55	10.356949
210	0.011010	1.51	10.664026
215	0.010210	1.49	10.972907
220	0.009490	1.46	11.283386
225	0.008830	1.43	11.59527
230	0.008227	1.40	11.908376
235	0.007675	1.38	12.222533
240	0.007170	1.35	12.537578
245	0.006706	1.33	12.853357
250	0.006280	1.30	13.169726



Material Type GE7.6 – Available Products: GE, MELF

Data for material type: GE7.6

Temp Range (°C)	Ratio	Beta
0 to 50	7.24	3495
0 to 70	13.78	3512
25 to 50	2.50	3527
25 to 85	7.36	3553
25 to 100	11.03	3561
25 to 125	20.27	3572
37.8 to 104.4	7.61	3575

To calculate Rt/R25 at temperatures other than those listed in the

table, use the following equation:

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4808866 x 10 ⁰¹	5.5005622 x 10 ⁰³	-3.9789925 x 10 ⁰⁵	2.1778028 x 10 ⁰⁷
0 to 50	-1.3743404 x 10 ⁰¹	4.9347578 x 10 ⁰³	-3.2043951 x 10 ⁰⁵	2.1120941 x 10 ⁰⁷
50 to 100	-1.2841790 x 10 ⁰¹	4.2851329 x 10 ⁰³	-1.8293670 x 10 ⁰⁵	1.4099417 x 10 ⁰⁷
100 to 150	-1.2982582 x 10 ⁰¹	4.4499666 x 10 ⁰³	-2.4496327 x 10 ⁰⁵	2.1608270 x 10 ⁰⁷
150 to 200	-1.2726158 x 10 ⁰¹	4.2388773 x 10 ⁰³	-1.9667018 x 10 ⁰⁵	1.9541217 x 10 ⁰⁷
200 to 250	-1.1385003 x 10 ⁰¹	2.6800995 x 10 ⁰³	3.6781581 x 10 ⁰⁵	-4.0641573 x 10 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
45.15 to 2.899	3.3581963 x 10 ⁻⁰³	2.8017724 x 10 ⁻⁰⁴	4.1706248 x 10 ⁻⁰⁶	-8.9121336 x 10 ⁻⁰⁸
2.899 to 0.4004	3.3540170 x 10 ⁻⁰³	2.8587501 x 10 ⁻⁰⁴	2.5158173 x 10 ⁻⁰⁶	-9.7581585 x 10 ⁻⁰⁸
0.4004 to 0.09067	3.3527087 x 10 ⁻⁰³	2.8300136 x 10 ⁻⁰⁴	9.6031839 x 10 ⁻⁰⁷	-7.2982951 x 10 ⁻⁰⁸
0.09067 to 0.02875	3.3536212 x 10 ⁻⁰³	2.8313422 x 10 ⁻⁰⁴	7.8401378 x 10 ⁻⁰⁷	-1.0352094 x 10 ⁻⁰⁷
0.02875 to 0.01155	3.3500951 x 10 ⁻⁰³	2.7991807 x 10 ⁻⁰⁴	1.8222962 x 10 ⁻⁰⁷	-9.6630038 x 10 ⁻⁰⁸
0.011547 to 0.005506	3.3030157 x 10 ⁻⁰³	2.6765632 x 10 ⁻⁰⁴	1.4372971 x 10 ⁻⁰⁶	2.7055457 x 10 ⁻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 °C (%/°C)	β Deviation† (±%)
-50	45.150000	6.52	11.629556
-45	32.790000	6.28	10.823331
-40	24.100000	6.05	10.012822
-35	17.900000	5.84	9.1997632
-30	13.437000	5.64	8.3856792
-25	10.185000	5.45	7.5719067
-20	7.792000	5.27	6.7596174
-15	6.013000	5.10	5.9498372
-10	4.679000	4.94	5.1434621
5	3.669000	4.79	4.3412737
0	2.899000	4.61	3.5439517
5	2.311000	4.46	2.6687962
10	1.856000	4.32	1.883588
15	1.500000	4.18	1.1812041
20	1.221000	4.06	0.5552562
25	1.000000	3.94	0
30	0.823800	3.82	0.489742
35	0.682500	3.71	0.9186477
40	0.568400	3.60	1.2909527
45	0.475900	3.50	1.6105007
50	0.400400	3.41	1.880787
55	0.338500	3.31	2.2091604
60	0.287600	3.22	2.5298446
65	0.245400	3.13	2.8431518
70	0.210400	3.04	3.1493772
75	0.181100	2.96	3.448799
80	0.156500	2.88	3.7416806
85	0.135800	2.80	4.0282711
90	0.118300	2.73	4.3088064
95	0.103400	2.66	4.5835099
100	0.090700	2.59	4.8525938
105	0.079800	2.52	5.0450769
110	0.070400	2.46	5.2479514
115	0.062380	2.40	5.4605304
120	0.055400	2.34	5.6821659
125	0.049350	2.29	5.9122467
130	0.044070	2.24	6.1501963
135	0.039460	2.18	6.3954706
140	0.035420	2.14	6.6475562
145	0.031870	2.09	6.9059686
150	0.028750	2.03	7.1702505
155	0.026000	1.99	7.4399704
160	0.023570	1.94	7.7147208
165	0.021410	1.90	7.9941171
170	0.019490	1.86	8.2777962
175	0.017780	1.82	8.5654152
180	0.016250	1.78	8.85666505
185	0.014880	1.74	9.1511963
190	0.013650	1.71	9.448764
195	0.012540	1.67	9.7490812
200	0.011550	1.65	10.05189
205	0.010640	1.61	10.356949
210	0.009830	1.58	10.664026
215	0.009090	1.54	10.972907
220	0.008420	1.51	11.283386
225	0.007820	1.48	11.59527
230	0.007270	1.45	11.908376
235	0.006760	1.42	12.222533
240	0.006310	1.39	12.537578
245	0.005890	1.36	12.853357
250	0.005510	1.33	13.169726



Material Type GE9.7A – Available Products: GE, MELF

Data for material type: GE9.7A

Temp Range (°C)	Ratio	Beta
0 to 50	9.21	3920
0 to 70	18.95	3939
25 to 50	2.80	3962
25 to 85	9.42	3992
25 to 100	14.90	4007
25 to 125	29.77	4028
37.8 to 104.4	9.85	4028

To calculate Rt/R25 at temperatures other than those listed in the

table, use the following equation:

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.6165371 x 10 ⁰¹	5.9362293 x 10 ⁰³	-4.0817384 x 10 ⁰⁵	2.2340382 x 10 ⁰⁷
0 to 50	-1.5702076 x 10 ⁰¹	5.7388897 x 10 ⁰³	-4.0470744 x 10 ⁰⁵	2.6675244 x 10 ⁰⁷
50 to 100	-1.5663130 x 10 ⁰¹	5.8288379 x 10 ⁰³	-4.6657347 x 10 ⁰⁵	3.5960053 x 10 ⁰⁷
100 to 150	-1.4266732 x 10 ⁰¹	4.6187186 x 10 ⁰³	-1.4813199 x 10 ⁰⁵	1.3078043 x 10 ⁰⁷
150 to 200	-1.4550747 x 10 ⁰¹	4.9366426 x 10 ⁰³	-2.6255040 x 10 ⁰⁵	2.6087099 x 10 ⁰⁷
200 to 250	-1.4179190 x 10 ⁰¹	4.5332228 x 10 ⁰³	-1.3010052 x 10 ⁰⁵	1.4375374 x 10 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
70.12 to 3.296	3.3551634 x 10 ⁻⁰³	2.5278858 x 10 ⁻⁰⁴	3.1357674 x 10 ⁻⁰⁶	-6.3869192 x 10 ⁻⁰⁸
3.296 to 0.3577	3.3540171 x 10 ⁻⁰³	2.5481996 x 10 ⁻⁰⁴	2.2498019 x 10 ⁻⁰⁶	-7.3403319 x 10 ⁻⁰⁸
0.3577 to 0.06712	3.3553474 x 10 ⁻⁰³	2.5572696 x 10 ⁻⁰⁴	1.8558626 x 10 ⁻⁰⁶	-9.0217663 x 10 ⁻⁰⁸
0.06712 to 0.01820	3.3414054 x 10 ⁻⁰³	2.4597295 x 10 ⁻⁰⁴	2.8798952 x 10 ⁻⁰⁷	-4.1229589 x 10 ⁻⁰⁸
0.01820 to 0.00645	3.3454862 x 10 ⁻⁰³	2.4717648 x 10 ⁻⁰⁴	1.9792859 x 10 ⁻⁰⁷	-7.5230688 x 10 ⁻⁰⁸
0.006450 to 0.002770	3.3292757 x 10 ⁻⁰³	2.4151501 x 10 ⁻⁰⁴	-1.2953699 x 10 ⁻⁰⁷	-4.3947028 x 10 ⁻⁰⁸

†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 °C (%/°C)	β Deviation† (±%)
-50	70.120000	7.28	8.9621801
-45	49.070000	7.01	8.1762247
-40	34.790000	6.75	7.4133024
-35	24.980000	6.51	6.6722521
-30	18.150000	6.28	5.9519946
-25	13.330000	6.07	5.2515254
-20	9.894000	5.86	4.569908
-15	7.415000	5.67	3.9062679
-10	5.610000	5.49	3.2597878
5	4.282000	5.32	2.6297022
0	3.296000	5.16	2.0152938
5	2.557000	4.99	1.5746264
10	2.000000	4.84	1.1539316
15	1.576000	4.69	0.7519946
20	1.251000	4.55	0.3676955
25	1.000000	4.42	0
30	0.804500	4.29	0.3520485
35	0.651300	4.17	0.689336
40	0.530400	4.05	1.102684
45	0.434400	3.94	1.3228556
50	0.357700	3.81	1.6205602
55	0.296500	3.70	1.9330747
60	0.247000	3.60	2.227981
65	0.206800	3.51	2.50692746
70	0.173900	3.42	2.7688805
75	0.146900	3.33	3.0166591
80	0.124600	3.25	3.250412
85	0.106100	3.17	3.4708866
90	0.090800	3.09	3.6787806
95	0.077900	3.02	3.874746
100	0.067120	2.95	4.0593929
105	0.058030	2.87	4.1527077
110	0.050350	2.80	4.2475235
115	0.043850	2.73	4.3437222
120	0.038320	2.67	4.4411935
125	0.033590	2.60	4.5398341
130	0.029540	2.54	4.6395467
135	0.026060	2.48	4.7402407
140	0.023060	2.42	4.8418306
145	0.020460	2.36	4.9442364
150	0.018200	2.31	5.0473829
155	0.016240	2.26	5.1511996
160	0.014520	2.21	5.2556204
165	0.013020	2.16	5.3605828
170	0.011700	2.11	5.4660285
175	0.010540	2.07	5.5719024
180	0.009510	2.03	5.678153
185	0.008610	1.98	5.7847317
190	0.007800	1.94	5.8915928
195	0.007090	1.90	5.9986934
200	0.006450	1.87	6.1059931
205	0.005880	1.83	6.2134539
210	0.005370	1.79	6.3210402
215	0.004920	1.75	6.4287182
220	0.004508	1.72	6.5364565
225	0.004140	1.69	6.6442253
230	0.003808	1.65	6.7519966
235	0.003509	1.62	6.8597442
240	0.003238	1.59	6.9674432
245	0.002993	1.56	7.0750705
250	0.002770	1.53	7.1826042



Material Type GE9.7B – Available Products: GE, MELF

Data for material type: GE9.7B

Temp Range (°C)	Ratio	Beta
0 to 50	8.79	3837
0 to 70	18.00	3871
25 to 50	2.75	3894
25 to 85	9.21	3952
25 to 100	14.57	3974
25 to 125	29.23	4007
37.8 to 104.4	9.74	4008

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7718174 x 10 ⁰¹	6.9923532 x 10 ⁰³	-6.2682835 x 10 ⁰⁵	3.4307893 x 10 ⁰⁷
0 to 50	-1.6391831 x 10 ⁰¹	6.3460312 x 10 ⁰³	-5.5838575 x 10 ⁰⁵	3.6804552 x 10 ⁰⁷
50 to 100	-1.6267345 x 10 ⁰¹	6.3651593 x 10 ⁰³	-6.0889839 x 10 ⁰⁵	4.6929412 x 10 ⁰⁷
100 to 150	-1.5586597 x 10 ⁰¹	5.8374988 x 10 ⁰³	-4.9895349 x 10 ⁰⁵	4.4005223 x 10 ⁰⁷
150 to 200	-1.4360600 x 10 ⁰¹	4.5701737 x 10 ⁰³	-1.0221320 x 10 ⁰⁵	1.0155939 x 10 ⁰⁷
200 to 250	-1.4556600 x 10 ⁰¹	5.1897766 x 10 ⁰³	-3.1375858 x 10 ⁰⁵	3.4668554 x 10 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
61.32 to 3.199	3.3600620 x 10 ⁻⁰³	2.5313332 x 10 ⁻⁰⁴	4.9240651 x 10 ⁻⁰⁶	-5.9119386 x 10 ⁻⁰⁸
3.199 to 0.3641	3.3540176 x 10 ⁻⁰³	2.6025088 x 10 ⁻⁰⁴	3.3044941 x 10 ⁻⁰⁶	-8.6084408 x 10 ⁻⁰⁸
0.3641 to 0.06862	3.3534734 x 10 ⁻⁰³	2.5986369 x 10 ⁻⁰⁴	2.5490046 x 10 ⁻⁰⁶	-1.0052993 x 10 ⁻⁰⁷
0.06862 to 0.01837	3.3446840 x 10 ⁻⁰³	2.5229699 x 10 ⁻⁰⁴	1.2806632 x 10 ⁻⁰⁶	-1.0221063 x 10 ⁻⁰⁷
0.01837 to 0.00633	3.3065226 x 10 ⁻⁰³	2.3663693 x 10 ⁻⁰⁴	4.3893009 x 10 ⁻⁰⁸	-2.9026088 x 10 ⁻⁰⁸
0.006331 to 0.002630	3.3021333 x 10 ⁻⁰³	2.3643631 x 10 ⁻⁰⁴	-9.6846436 x 10 ⁻⁰⁸	-2.9026089 x 10 ⁻⁰⁸

†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† (±%)
-50	61.320000	6.91	8.9621801
-45	43.660000	6.68	8.1762247
-40	31.450000	6.46	7.4133024
-35	22.890000	6.25	6.6722521
-30	16.835000	6.05	5.9519946
-25	12.498000	5.87	5.2515254
-20	9.363000	5.69	4.5699008
-15	7.074000	5.52	3.9062679
-10	5.389000	5.37	3.2597878
5	4.137000	5.21	2.6297022
0	3.199000	5.01	2.0152938
5	2.500000	4.86	1.5746264
10	1.968000	4.71	1.1539316
15	1.560000	4.58	0.7519946
20	1.245000	4.45	0.3676955
25	1.000000	4.32	0
30	0.808000	4.21	0.3520485
35	0.656700	4.09	0.689336
40	0.536700	3.98	1.012684
45	0.440900	3.88	1.3228556
50	0.364100	3.78	1.6205602
55	0.302200	3.68	1.9330747
60	0.252000	3.59	2.227981
65	0.211100	3.49	2.5062746
70	0.177700	3.41	2.7688805
75	0.150200	3.32	3.0166591
80	0.127400	3.24	3.250412
85	0.108600	3.17	3.4708866
90	0.092800	3.09	3.6787806
95	0.079700	3.02	3.874746
100	0.068600	2.95	4.0593929
105	0.059300	2.88	4.1527077
110	0.051400	2.82	4.2475235
115	0.044750	2.75	4.3437222
120	0.039070	2.69	4.4411935
125	0.034210	2.63	4.5398341
130	0.030040	2.57	4.6395467
135	0.026460	2.51	4.7402407
140	0.023370	2.46	4.8418306
145	0.020690	2.41	4.9442364
150	0.018370	2.38	5.0473829
155	0.016330	2.32	5.1511996
160	0.014560	2.27	5.2556204
165	0.013010	2.22	5.3605828
170	0.011660	2.17	5.4660285
175	0.010470	2.12	5.5719024
180	0.009430	2.08	5.678153
185	0.008510	2.03	5.7847317
190	0.007690	1.99	5.8915928
195	0.006970	1.95	5.9986934
200	0.006330	1.93	6.1059931
205	0.005750	1.90	6.2134539
210	0.005240	1.86	6.3210402
215	0.004780	1.82	6.4287182
220	0.004370	1.79	6.5364565
225	0.004000	1.75	6.6442253
230	0.003660	1.72	6.7519966
235	0.003360	1.69	6.8597442
240	0.003090	1.66	6.9674432
245	0.002850	1.63	7.0750705
250	0.002630	1.60	7.1826042



Material Type GE9.8 – Available Products: GE, MELF

Data for material type: GE9.8

Temp Range (°C)	Ratio	Beta
0 to 50	8.87	3853
0 to 70	18.27	3890
25 to 50	2.76	3919
25 to 85	9.33	3974
25 to 100	14.73	3991
25 to 125	29.69	4025
37.8 to 104.4	9.82	4024

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7216050 x 10 ⁰¹	6.6521646 x 10 ⁰³	-5.5720733 x 10 ⁰⁵	3.0497360 x 10 ⁰⁷
0 to 50	-1.6989044 x 10 ⁰¹	6.7481462 x 10 ⁰³	-6.4414735 x 10 ⁰⁵	4.2457306 x 10 ⁰⁷
50 to 100	-1.5240237 x 10 ⁰¹	5.4851612 x 10 ⁰³	-3.7721668 x 10 ⁰⁵	2.9073089 x 10 ⁰⁷
100 to 150	-1.5085926 x 10 ⁰¹	5.3190919 x 10 ⁰³	-3.3894888 x 10 ⁰⁵	2.9899445 x 10 ⁰⁷
150 to 200	-1.4862806 x 10 ⁰¹	5.1171612 x 10 ⁰³	-2.9116173 x 10 ⁰⁵	2.8929930 x 10 ⁰⁷
200 to 250	-1.5659947 x 10 ⁰¹	6.0539638 x 10 ⁰³	-6.4556941 x 10 ⁰⁵	7.1331780 x 10 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
63.37 to 3.208	3.3598762 x 10 ⁻⁰³	2.5331093 x 10 ⁻⁰⁴	4.3624975 x 10 ⁻⁰⁶	-6.5218367 x 10 ⁻⁰⁸
3.208 to 0.3617	3.3540180 x 10 ⁻⁰³	2.5906474 x 10 ⁻⁰⁴	3.7590571 x 10 ⁻⁰⁶	-8.3564087 x 10 ⁻⁰⁸
0.3617 to 0.06787	3.3513696 x 10 ⁻⁰³	2.5412290 x 10 ⁻⁰⁴	1.4640197 x 10 ⁻⁰⁶	-7.9966960 x 10 ⁻⁰⁸
0.06787 to 0.01806	3.3371935 x 10 ⁻⁰³	2.4694595 x 10 ⁻⁰⁴	7.6080734 x 10 ⁻⁰⁷	-7.7811267 x 10 ⁻⁰⁸
0.01806 to 0.00625	3.3267162 x 10 ⁻⁰³	2.4219874 x 10 ⁻⁰⁴	2.3930960 x 10 ⁻⁰⁷	-7.5096557 x 10 ⁻⁰⁸
0.006250 to 0.002610	3.3440574 x 10 ⁻⁰³	2.4766783 x 10 ⁻⁰⁴	3.0055101 x 10 ⁻⁰⁷	-1.4270547 x 10 ⁻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† (±%)
-50	63.370000	7.02	8.9621801
-45	44.890000	6.78	8.1762247
-40	32.180000	6.54	7.4133024
-35	23.330000	6.32	6.6722521
-30	17.100000	6.12	5.9519946
-25	12.650000	5.92	5.2515254
-20	9.455000	5.74	4.5699008
-15	7.128000	5.57	3.9062679
-10	5.419000	5.40	3.2597878
5	4.154000	5.24	2.6297022
0	3.208000	5.01	2.0152938
5	2.507000	4.86	1.5746264
10	1.972000	4.72	1.1539316
15	1.563000	4.59	0.7519946
20	1.246000	4.46	0.3676955
25	1.000000	4.34	0
30	0.807200	4.23	0.3520485
35	0.655200	4.12	0.689336
40	0.534800	4.01	1.012684
45	0.438700	3.91	1.3228556
50	0.361700	3.82	1.6205602
55	0.299700	3.71	1.9330747
60	0.249500	3.61	2.227981
65	0.208800	3.51	2.5062746
70	0.175600	3.42	2.7688805
75	0.148300	3.33	3.0166591
80	0.125800	3.25	3.250412
85	0.107200	3.16	3.4708866
90	0.091700	3.09	3.6787806
95	0.078700	3.01	3.874746
100	0.067870	2.98	4.0593929
105	0.058590	2.91	4.1527077
110	0.050760	2.83	4.2475235
115	0.044130	2.77	4.3437222
120	0.038490	2.70	4.4411935
125	0.033680	2.64	4.5398341
130	0.029560	2.58	4.6395467
135	0.026030	2.52	4.7402407
140	0.022980	2.46	4.8418306
145	0.020340	2.41	4.9442364
150	0.018060	2.36	5.0473829
155	0.016070	2.31	5.1511996
160	0.014340	2.26	5.2556204
165	0.012820	2.21	5.3605828
170	0.011500	2.16	5.4660285
175	0.010330	2.12	5.5719024
180	0.009300	2.07	5.678153
185	0.008400	2.03	5.7847317
190	0.007590	1.99	5.8915928
195	0.006880	1.95	5.9986934
200	0.006250	1.91	6.1059931
205	0.005690	1.88	6.2134539
210	0.005180	1.84	6.3210402
215	0.004730	1.81	6.4287182
220	0.004324	1.77	6.5364565
225	0.003960	1.74	6.6442253
230	0.003632	1.71	6.7519966
235	0.003337	1.68	6.8597442
240	0.003070	1.65	6.9674432
245	0.002829	1.62	7.0750705
250	0.002610	1.60	7.1826042



Material Type GE10.1 – Available Products: GE, MELF

Data for material type: GE10.1

Temp Range (°C)	Ratio	Beta
0 to 50	10.60	4167
0 to 70	22.26	4155
25 to 50	2.90	4107
25 to 85	10.02	4102
25 to 100	15.75	4090
25 to 125	30.75	4067
37.8 to 104.4	10.09	4071

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-1.8099366 x 10 ⁰¹	6.7546090 x 10 ⁰³	-4.9774603 x 10 ⁰⁵	2.7242893 x 10 ⁰⁷
0 to 50	-1.0276560 x 10 ⁰¹	1.5325218 x 10 ⁰³	5.8618539 x 10 ⁰⁵	-3.8636893 x 10 ⁰⁷
50 to 100	-1.1427015 x 10 ⁰¹	2.1905753 x 10 ⁰³	4.9128247 x 10 ⁰⁵	-3.7864442 x 10 ⁰⁷
100 to 150	-1.7619322 x 10 ⁰¹	7.9058002 x 10 ⁰³	-1.1532582 x 10 ⁰⁶	1.0174113 x 10 ⁰⁸
150 to 200	1.2041448 x 10 ⁰¹	-2.3326766 x 10 ⁰⁴	9.1495734 x 10 ⁰⁶	-9.0910478 x 10 ⁰⁸
200 to 250	1.5268134 x 10 ⁰¹	-2.7921159 x 10 ⁰⁴	1.1311282 x 10 ⁰⁷	-1.2498329 x 10 ⁰⁹

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
102.10 to 3.650	3.3578221 x 10 ⁻⁰³	2.3047341 x 10 ⁻⁰⁴	2.9092829 x 10 ⁻⁰⁶	-5.0003286 x 10 ⁻⁰⁸
3.650 to 0.3445	3.3540184 x 10 ⁻⁰³	2.4034212 x 10 ⁻⁰⁴	-2.7547800 x 10 ⁻⁰⁶	1.9018555 x 10 ⁻⁰⁷
0.3445 to 0.06348	3.3497682 x 10 ⁻⁰³	2.3786211 x 10 ⁻⁰⁴	-1.3448004 x 10 ⁻⁰⁶	1.8510207 x 10 ⁻⁰⁷
0.06348 to 0.01770	3.4244716 x 10 ⁻⁰³	2.8399022 x 10 ⁻⁰⁴	4.7506174 x 10 ⁻⁰⁶	-1.0789612 x 10 ⁻⁰⁷
0.01770 to 0.00663	4.6413414 x 10 ⁻⁰³	1.3134420 x 10 ⁻⁰³	2.8507812 x 10 ⁻⁰⁴	2.4659467 x 10 ⁻⁰⁵
0.006628 to 0.004075	5.8815861 x 10 ⁻⁰³	3.3005191 x 10 ⁻⁰²	6.4661877 x 10 ⁻⁰³	4.2660438 x 10 ⁻⁰⁴

†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† (±%)
-50	102.100000	7.91	12.052819
-45	69.290000	7.61	10.695609
-40	47.690000	7.34	9.4854727
-35	33.260000	7.08	8.408248
-30	23.485000	6.84	7.4515138
-25	16.780000	6.61	6.6043379
-20	12.124000	6.40	5.8570644
-15	8.852000	6.19	5.2011362
-10	6.528000	6.00	4.6289461
5	4.859000	5.81	4.1337107
0	3.650000	5.73	3.7093637
5	2.758000	5.49	2.8025821
10	2.107000	5.27	1.9849643
15	1.627000	5.07	1.2494473
20	1.270000	4.87	0.5896932
25	1.000000	4.68	0
30	0.794900	4.50	0.5247745
35	0.637300	4.34	0.9892783
40	0.515200	4.18	1.3977223
45	0.419700	4.02	1.7539293
50	0.344500	3.97	2.0613769
55	0.283500	3.84	2.3377924
60	0.234700	3.71	2.6110799
65	0.195600	3.59	2.8812781
70	0.164000	3.47	3.1484266
75	0.138200	3.36	3.4125566
80	0.117100	3.26	3.6737374
85	0.099800	3.16	3.9319824
90	0.085400	3.06	4.1873431
95	0.073500	2.97	4.4396616
100	0.063500	2.81	4.6895802
105	0.055200	2.76	4.7303414
110	0.048200	2.70	4.772122
115	0.042160	2.65	4.8148537
120	0.036980	2.60	4.8584721
125	0.032520	2.55	4.9029169
130	0.028660	2.50	4.9481314
135	0.025320	2.45	4.9940623
140	0.022430	2.41	5.0406594
145	0.019900	2.37	5.0878755
150	0.017700	2.61	5.1356708
155	0.015600	2.46	5.167135
160	0.013840	2.33	5.2053958
165	0.012360	2.19	5.250126
170	0.011110	2.07	5.3010141
175	0.010050	1.94	5.3577635
180	0.009150	1.83	5.4200911
185	0.008370	1.72	5.4877276
190	0.007700	1.61	5.560416
195	0.007130	1.50	5.6379113
200	0.006630	1.40	5.7199798
205	0.006190	1.31	5.7881447
210	0.005810	1.22	5.8530209
215	0.005480	1.13	5.9147331
220	0.005190	1.04	5.9734006
225	0.004940	0.96	6.029137
230	0.004720	0.88	6.0820508
235	0.004520	0.80	6.1322455
240	0.004350	0.73	6.1798202
245	0.004200	0.66	6.2248694
250	0.004080	0.59	6.2674835



Material Type GE12.3 – Available Products: GE, MELF

Data for material type: GE12.3

Temp Range (°C)	Ratio	Beta
0 to 50	10.63	4173
0 to 70	23.48	4226
25 to 50	3.06	4313
25 to 85	11.62	4365
25 to 100	19.19	4383
25 to 125	40.90	4405
37.8 to 104.4	12.30	4420

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-2.3739284 x 10 ⁰¹	1.0063902 x 10 ⁰⁴	-1.1065847 x 10 ⁰⁶	6.0566166 x 10 ⁰⁷
0 to 50	-2.2576405 x 10 ⁰¹	1.0282417 x 10 ⁰⁴	-1.3593124 x 10 ⁰⁶	8.9595561 x 10 ⁰⁷
50 to 100	-1.6859105 x 10 ⁰¹	6.1315790 x 10 ⁰³	-4.4353065 x 10 ⁰⁵	3.4184083 x 10 ⁰⁷
100 to 150	-1.6624902 x 10 ⁰¹	6.0107472 x 10 ⁰³	-4.4454280 x 10 ⁰⁵	3.9217830 x 10 ⁰⁷
150 to 200	-1.5823950 x 10 ⁰¹	5.1963248 x 10 ⁰³	-1.9588550 x 10 ⁰⁵	1.9562611 x 10 ⁰⁷
200 to 250	-1.5893384 x 10 ⁰¹	5.2947394 x 10 ⁰³	-2.4340232 x 10 ⁰⁵	2.6894584 x 10 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
98.31 to 3.473	3.3861050 x 10 ⁻⁰³	2.1425199 x 10 ⁻⁰⁴	5.2248202 x 10 ⁻⁰⁶	2.2636474 x 10 ⁻⁰⁸
3.473 to 0.3266	3.3540201 x 10 ⁻⁰³	2.3878984 x 10 ⁻⁰⁴	6.2072674 x 10 ⁻⁰⁶	2.9066504 x 10 ⁻⁰⁸
0.3266 to 0.05210	3.3525200 x 10 ⁻⁰³	2.3208887 x 10 ⁻⁰⁴	1.3137869 x 10 ⁻⁰⁶	-6.3186219 x 10 ⁻⁰⁸
0.05210 to 0.01246	3.3512772 x 10 ⁻⁰³	2.3028970 x 10 ⁻⁰⁴	8.2489729 x 10 ⁻⁰⁷	-7.0736668 x 10 ⁻⁰⁸
0.01246 to 0.00394	3.3261506 x 10 ⁻⁰³	2.2071239 x 10 ⁻⁰⁴	8.5864116 x 10 ⁻⁰⁸	3.9190616 x 10 ⁻⁰⁸
0.003941 to 0.001543	3.3240172 x 10 ⁻⁰³	2.1955719 x 10 ⁻⁰⁴	-1.2291957 x 10 ⁻⁰⁷	-5.1785129 x 10 ⁻⁰⁸

†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† (±%)
-50	98.308887	7.62	3.1042197
-45	67.530000	7.41	2.96487544
-40	46.870000	7.20	2.7798287
-35	32.860000	7.01	2.5987971
-30	23.260000	6.83	2.4068865
-25	16.600000	6.65	2.2052092
-20	11.960000	6.49	1.9947745
-15	8.679000	6.33	1.7764997
-10	6.349000	6.18	1.5512182
5	4.679000	6.03	1.3196888
0	3.473000	5.27	1.0826023
5	2.677000	5.15	0.8636029
10	2.075000	5.03	0.645768
15	1.618000	4.92	0.4291778
20	1.269000	4.81	0.2139018
25	1.000000	4.71	0
30	0.792000	4.61	0.212476
35	0.630400	4.52	0.4234823
40	0.504100	4.43	0.6329816
45	0.404900	4.34	0.8409428
50	0.326600	4.18	1.0473401
55	0.265700	4.07	1.2063993
60	0.217400	3.96	1.3691813
65	0.178900	3.85	1.5353617
70	0.147900	3.75	1.7046393
75	0.122900	3.66	1.876734
80	0.102600	3.56	2.0513859
85	0.086100	3.47	2.2283532
90	0.072500	3.39	2.4074109
95	0.061300	3.31	2.5883498
100	0.052100	3.21	2.7709752
105	0.044460	3.14	2.9436754
110	0.038080	3.06	3.1125927
115	0.032740	2.99	3.2778669
120	0.028240	2.92	3.4396304
125	0.024450	2.85	3.5980094
130	0.021240	2.79	3.7531238
135	0.018500	2.72	3.9050874
140	0.016170	2.66	4.0540088
145	0.014170	2.61	4.1999916
150	0.012460	2.57	4.3431342
155	0.010980	2.51	4.4835307
160	0.009700	2.45	4.6212709
165	0.008590	2.40	4.7564406
170	0.007630	2.35	4.8891216
175	0.006790	2.30	5.0193923
180	0.006060	2.25	5.1473276
185	0.005430	2.20	5.2729993
190	0.004870	2.15	5.396476
195	0.004370	2.11	5.5178236
200	0.003940	2.07	5.6371051
205	0.003560	2.03	5.7543811
210	0.003220	1.98	5.8697096
215	0.002920	1.95	5.9831463
220	0.002650	1.91	6.0947449
225	0.002411	1.87	6.2045566
230	0.002197	1.84	6.3126311
235	0.002006	1.80	6.4190158
240	0.001835	1.77	6.5237564
245	0.001681	1.73	6.6268971
250	0.001543	1.70	6.7284801



Material Type GE13.8 – Available Products: GE, MELF

Data for material type: GE13.8

Temp Range (°C)	Ratio	Beta
0 to 50	12.32	4433
0 to 70	28.28	4475
25 to 50	3.21	4495
25 to 85	13.01	4567
25 to 100	22.07	4590
25 to 125	49.35	4628
37.8 to 104.4	13.85	4629

To calculate Rt/R25 at temperatures other than those listed in the

table, use the following equation:

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

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-2.0002778 X 10 ⁰¹	7.9229687 X 10 ⁰³	-7.1456195 X 10 ⁰⁵	3.9109774 X 10 ⁰⁷
0 to 50	-1.8664289 X 10 ⁰¹	7.1354666 X 10 ⁰³	-6.0121836 X 10 ⁰⁵	3.9627752 X 10 ⁰⁷
50 to 100	-1.8095550 X 10 ⁰¹	6.7717935 X 10 ⁰³	-5.5214888 X 10 ⁰⁵	4.2555577 X 10 ⁰⁷
100 to 150	-1.7769778 X 10 ⁰¹	6.5199396 X 10 ⁰³	-5.1010720 X 10 ⁰⁵	4.5009720 X 10 ⁰⁷
150 to 200	-1.8484383 X 10 ⁰¹	7.3366133 X 10 ⁰³	-8.1203507 X 10 ⁰⁵	8.0684086 X 10 ⁰⁷
200 to 250	-2.0632006 X 10 ⁰¹	1.0098506 X 10 ⁰⁴	-1.9146315 X 10 ⁰⁶	2.1155599 X 10 ⁰⁸

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
106.93 to 3.838	3.3524799 X 10 ⁻⁰³	2.2418142 X 10 ⁻⁰⁴	3.9189675 X 10 ⁻⁰⁶	-4.0628387 X 10 ⁻⁰⁸
3.838 to 0.3115	3.3540175 X 10 ⁻⁰³	2.2523349 X 10 ⁻⁰⁴	2.3067055 X 10 ⁻⁰⁶	-5.5423595 X 10 ⁻⁰⁸
0.3115 to 0.04531	3.3515290 X 10 ⁻⁰³	2.2210032 X 10 ⁻⁰⁴	1.4446035 X 10 ⁻⁰⁶	-5.9746101 X 10 ⁻⁰⁸
0.04531 to 0.00989	3.3419987 X 10 ⁻⁰³	2.1708651 X 10 ⁻⁰⁴	8.1361630 X 10 ⁻⁰⁷	-6.1692679 X 10 ⁻⁰⁸
0.00989 to 0.00290	3.3515507 X 10 ⁻⁰³	2.2014409 X 10 ⁻⁰⁴	9.1101962 X 10 ⁻⁰⁷	-8.6974030 X 10 ⁻⁰⁸
0.002897 to 0.001063	3.4792744 X 10 ⁻⁰³	2.5815133 X 10 ⁻⁰⁴	3.7287422 X 10 ⁻⁰⁶	-7.7750262 X 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation † (±%)
-50	106.930000	7.78	8.1151896
-45	72.950000	7.52	8.3427408
-40	50.410000	7.27	8.3569317
-35	35.250000	7.04	8.1754076
-30	24.935000	6.82	7.8149318
-25	17.827000	6.61	7.2913589
-20	12.875000	6.41	6.6196256
-15	9.388000	6.23	5.8137552
-10	6.908000	6.05	4.8868734
5	5.128000	5.88	3.8512321
0	3.838000	5.80	2.7182389
5	2.885000	5.62	1.9469513
10	2.187000	5.45	1.2984029
15	1.672000	5.29	0.7631925
20	1.288000	5.14	0.03329074
25	1.000000	5.00	0
30	0.781700	4.86	0.2423182
35	0.615300	4.72	0.4001677
40	0.487400	4.60	0.4790792
45	0.388500	4.48	0.4840616
50	0.311500	4.38	0.4196609
55	0.250900	4.27	0.7749405
60	0.203300	4.15	1.1730984
65	0.165700	4.04	1.6110175
70	0.135700	3.94	2.085762
75	0.111700	3.84	2.5945681
80	0.092400	3.74	3.1348349
85	0.076800	3.65	3.7041158
90	0.064200	3.56	4.3001105
95	0.053800	3.48	4.9206586
100	0.045300	3.42	5.5637222
105	0.038300	3.33	5.932268
110	0.032500	3.25	6.284765
115	0.027640	3.18	6.6076926
120	0.023620	3.11	6.9072757
125	0.020260	3.03	7.1846988
130	0.017440	2.97	7.4410702
135	0.015060	2.90	7.6774288
140	0.013050	2.84	7.8947487
145	0.011340	2.78	8.0939446
150	0.009890	2.71	8.2758759
155	0.008650	2.65	8.4178805
160	0.007580	2.60	8.5433818
165	0.006670	2.55	8.653136
170	0.005880	2.50	8.7478554
175	0.005190	2.45	8.8282117
180	0.004600	2.40	8.8948389
185	0.004080	2.36	8.9483358
190	0.003630	2.31	8.9892685
195	0.003240	2.27	9.0181723
200	0.002900	2.16	9.0355539
205	0.002600	2.13	9.0399726
210	0.002340	2.10	9.0323862
215	0.002110	2.06	9.0132834
220	0.001910	2.03	8.9831279
225	0.001720	2.00	8.9423597
230	0.001560	1.97	8.8913964
235	0.001410	1.94	8.830635
240	0.001280	1.92	8.7604528
245	0.001170	1.89	8.6812086
250	0.001060	1.86	8.593244



Material Type GE14.5 – Available Products: GE, MELF

Data for material type: GE14.5

Temp Range (°C)	Ratio	Beta
0 to 50	12.76	4496
0 to 70	29.88	4549
25 to 50	3.28	4572
25 to 85	13.72	4661
25 to 100	23.54	4686
25 to 125	53.54	4725
37.8 to 104.4	14.68	4731

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-2.2177988 x 10 ⁰¹	9.1575573 x 10 ⁰³	-9.3191899 x 10 ⁰⁵	-1.3880345 x 10 ⁰⁷
0 to 50	-1.9805892 x 10 ⁰¹	7.8621859 x 10 ⁰³	-7.4910117 x 10 ⁰⁵	-5.2664526 x 10 ⁰⁷
50 to 100	-1.8339252 x 10 ⁰¹	6.7884079 x 10 ⁰³	-5.2852854 x 10 ⁰⁵	-5.3949863 x 10 ⁰⁷
100 to 150	-1.8977964 x 10 ⁰¹	7.4369478 x 10 ⁰³	-7.4948347 x 10 ⁰⁵	-6.9222727 x 10 ⁰⁷
150 to 200	-1.7925826 x 10 ⁰¹	6.4619012 x 10 ⁰³	-4.8243223 x 10 ⁰⁵	-5.9100648 x 10 ⁰⁷
200 to 250	-1.5768620 x 10 ⁰¹	3.8838275 x 10 ⁰³	4.6414982 x 10 ⁰⁵	8.7712773 x 10 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
113.88 to 3.897	3.3592719 x 10 ⁻⁰³	2.1564885 x 10 ⁻⁰⁴	4.5656157 x 10 ⁻⁰⁶	-1.3880345 x 10 ⁻⁰⁸
3.897 to 0.3053	3.3540179 x 10 ⁻⁰³	2.2204920 x 10 ⁻⁰⁴	2.7527009 x 10 ⁻⁰⁶	-5.2664526 x 10 ⁻⁰⁸
0.3053 to 0.04247	3.3496256 x 10 ⁻⁰³	2.1660258 x 10 ⁻⁰⁴	1.2808777 x 10 ⁻⁰⁶	-5.3949863 x 10 ⁻⁰⁸
0.04247 to 0.00895	3.3492548 x 10 ⁻⁰³	2.1663634 x 10 ⁻⁰⁴	1.2804732 x 10 ⁻⁰⁶	-6.9222727 x 10 ⁻⁰⁸
0.00895 to 0.00255	3.3289141 x 10 ⁻⁰³	2.0756436 x 10 ⁻⁰⁴	3.1913746 x 10 ⁻⁰⁷	-5.9100648 x 10 ⁻⁰⁸
0.002552 to 0.000906	3.2537031 x 10 ⁻⁰³	1.9118407 x 10 ⁻⁰⁴	5.6198639 x 10 ⁻⁰⁷	8.7712773 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	113.877970	7.791223	8.5856354
-45	77.620000	7.55	8.8263779
-40	53.530000	7.32	8.8413915
-35	37.330000	7.11	8.6493443
-30	26.300000	6.90	8.2679714
-25	18.720000	6.71	7.7140464
-20	13.440000	6.53	7.003372
-15	9.743000	6.36	6.1507845
-10	7.121000	6.19	5.1701704
5	5.247000	6.03	4.074492
0	3.897000	5.85	2.875818
5	2.922000	5.68	2.059818
10	2.209000	5.51	1.3736727
15	1.683000	5.36	0.8074356
20	1.293000	5.21	0.3522064
25	1.000000	5.07	0
30	0.779000	4.93	0.2563657
35	0.610700	4.80	0.4233659
40	0.481800	4.68	0.5068519
45	0.382400	4.56	0.5121232
50	0.305300	4.49	0.4439891
55	0.244700	4.37	0.8198646
60	0.197300	4.25	1.2411041
65	0.160000	4.14	1.7044098
70	0.130400	4.03	2.2066757
75	0.106900	3.93	2.7449778
80	0.088100	3.83	3.3165644
85	0.072900	3.73	3.9188472
90	0.060600	3.64	4.5493923
95	0.050600	3.56	5.2059121
100	0.042500	3.48	5.8862569
105	0.035770	3.40	6.2814138
110	0.030240	3.32	6.6490992
115	0.025660	3.25	6.9907472
120	0.021850	3.17	7.3076975
125	0.018680	3.11	7.6012031
130	0.016020	3.04	7.8724366
135	0.013780	2.97	8.1224971
140	0.011900	2.91	8.3524153
145	0.010300	2.85	8.5631588
150	0.008950	2.78	8.7556369
155	0.007800	2.72	8.9058736
160	0.006810	2.67	9.0386504
165	0.005970	2.61	9.1547671
170	0.005250	2.56	9.2549774
175	0.004620	2.50	9.3339992
180	0.004090	2.45	9.4104817
185	0.003620	2.40	9.46708
190	0.003210	2.35	9.5103856
195	0.002860	2.31	9.5409649
200	0.002550	2.30	9.5593541
205	0.002280	2.25	9.564029
210	0.002040	2.20	9.5660027
215	0.001830	2.16	9.5357926
220	0.001640	2.11	9.5038889
225	0.001479	2.07	9.4607573
230	0.001335	2.02	9.4068397
235	0.001208	1.98	9.3425559
240	0.001095	1.94	9.2683051
245	0.000995	1.90	9.184467
250	0.000906	1.86	9.091403



Material Type GE16.4 – Available Products: GE, MELF

Data for material type: GE16.4

Temp Range (°C)	Ratio	Beta
0 to 50	14.06	4667
0 to 70	33.91	4718
25 to 50	3.44	4767
25 to 85	15.24	4848
25 to 100	26.89	4883
25 to 125	63.89	4935
37.8 to 104.4	16.48	4935

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

where K = °C + 273.15

Temp Range (°C)	A	B	C	D
-50 to 0	-2.4386916 X 10 ⁻⁰¹	1.0406520 X 10 ⁻⁰⁴	-1.1481187 X 10 ⁻⁰⁶	6.2839425 X 10 ⁻⁰⁷
0 to 50	-2.1812140 X 10 ⁻⁰¹	9.0535061 X 10 ⁻⁰³	-9.7614333 X 10 ⁻⁰⁵	6.4339962 X 10 ⁻⁰⁷
50 to 100	-2.1050040 X 10 ⁻⁰¹	8.6953421 X 10 ⁻⁰³	-9.7293169 X 10 ⁻⁰⁵	7.4986423 X 10 ⁻⁰⁷
100 to 150	-1.9072207 X 10 ⁻⁰¹	6.9972595 X 10 ⁻⁰³	-5.3864319 X 10 ⁻⁰⁵	4.6610439 X 10 ⁻⁰⁷
150 to 200	-1.8593291 X 10 ⁻⁰¹	6.5348743 X 10 ⁻⁰³	-4.1635011 X 10 ⁻⁰⁵	4.1368691 X 10 ⁻⁰⁷
200 to 250	-2.0048246 X 10 ⁻⁰¹	8.2277925 X 10 ⁻⁰³	-1.0492243 X 10 ⁻⁰⁶	1.1593337 X 10 ⁻⁰⁸

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
127.27 to 4.082	3.3602873 X 10 ⁻⁰³	2.0677678 X 10 ⁻⁰⁴	4.9515026 X 10 ⁻⁰⁶	2.2791080 X 10 ⁻⁰⁸
4.082 to 0.2903	3.3540186 X 10 ⁻⁰³	2.1381885 X 10 ⁻⁰⁴	3.2012840 X 10 ⁻⁰⁶	-3.9653050 X 10 ⁻⁰⁸
0.2903 to 0.03719	3.3544364 X 10 ⁻⁰³	2.1305480 X 10 ⁻⁰⁴	2.2929765 X 10 ⁻⁰⁶	-5.3751262 X 10 ⁻⁰⁸
0.03719 to 0.00723	3.3351939 X 10 ⁻⁰³	2.0213147 X 10 ⁻⁰⁴	7.7506608 X 10 ⁻⁰⁷	-4.6268376 X 10 ⁻⁰⁸
0.00723 to 0.00193	3.3157243 X 10 ⁻⁰³	1.9530994 X 10 ⁻⁰⁴	2.0673313 X 10 ⁻⁰⁷	-4.3377130 X 10 ⁻⁰⁸
0.001928 to 0.000646	3.3433966 X 10 ⁻⁰³	2.0324077 X 10 ⁻⁰⁴	5.2478382 X 10 ⁻⁰⁷	-8.2170187 X 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	127.270000	7.84	9.6441383
-45	86.500000	7.62	9.9145615
-40	59.420000	7.41	9.9314261
-35	41.240000	7.21	9.7157018
-30	28.894000	7.02	9.2873103
-25	20.430000	6.85	8.6650932
-20	14.571000	6.68	7.8668014
-15	10.479000	6.52	6.9091003
-10	7.596000	6.36	5.8075887
5	5.548000	6.21	4.5768266
0	4.082000	6.02	3.2303709
5	3.033000	5.86	2.3137682
10	2.273000	5.70	1.5430296
15	1.716000	5.55	0.9069824
20	1.305000	5.40	0.3956291
25	1.000000	5.26	0
30	0.771300	5.13	0.2879724
35	0.598700	5.00	0.4755616
40	0.467600	4.88	0.5693405
45	0.367400	4.77	0.5752617
50	0.290300	4.62	0.4987275
55	0.231100	4.51	0.9209438
60	0.184900	4.40	1.3941169
65	0.148800	4.29	1.9145425
70	0.120400	4.19	2.4787316
75	0.097900	4.09	3.0833998
80	0.079900	4.00	3.7254559
85	0.065600	3.91	4.4019927
90	0.054100	3.82	5.1102763
95	0.044700	3.74	5.8477368
100	0.037200	3.67	6.6119598
105	0.031000	3.59	7.0558347
110	0.026000	3.50	7.4688512
115	0.021860	3.42	7.8526202
120	0.018460	3.34	8.2086465
125	0.015650	3.26	8.5383377
130	0.013320	3.19	8.8430111
135	0.011380	3.12	9.1239009
140	0.009750	3.05	9.3821651
145	0.008380	2.99	9.6188907
150	0.007230	2.94	9.835099
155	0.006250	2.87	10.003858
160	0.005430	2.81	10.153005
165	0.004720	2.75	10.283437
170	0.004120	2.69	10.396002
175	0.003610	2.64	10.491498
180	0.003170	2.58	10.570678
185	0.002790	2.53	10.634254
190	0.002460	2.48	10.682899
195	0.002170	2.43	10.717248
200	0.001930	2.39	10.737905
205	0.001710	2.34	10.743156
210	0.001530	2.30	10.73414
215	0.001360	2.26	10.711438
220	0.001220	2.22	10.675601
225	0.001090	2.18	10.627152
230	0.000980	2.15	10.566587
235	0.000880	2.11	10.494378
240	0.000790	2.07	10.410973
245	0.000710	2.04	10.316799
250	0.000650	2.01	10.212261



Material Type D4.1 – Available Products: UD

Data for material type: D4.1

Temp Range (°C)	Ratio	Beta
0 to 50	3.76	2336
0 to 70	5.92	2382
25 to 50	1.87	2412
25 to 85	4.05	2489
25 to 100	5.46	2518
25 to 125	8.65	2561
37.8 to 104.4	4.28	2561

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.3627884 x 10 ⁰¹	6.1924692 x 10 ⁰³	-7.7868359 x 10 ⁰⁵	4.2619313 x 10 ⁰⁷
0 to 50	-1.2539366 x 10 ⁰¹	5.6858472 x 10 ⁰³	-7.4534091 x 10 ⁰⁵	4.9127218 x 10 ⁰⁷
50 to 100	-1.2156863 x 10 ⁰¹	5.5365657 x 10 ⁰³	-7.6824846 x 10 ⁰⁵	5.9210944 x 10 ⁰⁷
100 to 150	-1.2578619 x 10 ⁰¹	6.0543284 x 10 ⁰³	-9.7442113 x 10 ⁰⁵	8.5964012 x 10 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
10.18 to 2.008	3.3584858 x 10 ⁻⁰³	4.1494281 x 10 ⁻⁰⁴	2.5907150 x 10 ⁻⁰⁵	1.6433853 X 10 ⁻⁰⁶
2.008 to 0.5347	3.3540200 x 10 ⁻⁰³	4.2661661 x 10 ⁻⁰⁴	1.9408413 x 10 ⁻⁰⁵	1.2586424 X 10 ⁻⁰⁷
0.5347 to 0.18318	3.3523304 x 10 ⁻⁰³	4.2075382 x 10 ⁻⁰⁴	1.4158206 x 10 ⁻⁰⁵	-1.8756492 X 10 ⁻⁰⁷
0.18318 to 0.07590	3.3542891 x 10 ⁻⁰³	4.2155447 x 10 ⁻⁰⁴	1.3985434 x 10 ⁻⁰⁵	-1.6682697 X 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	10.180000	3.58	19.740862
-45	8.528000	3.50	18.198347
-40	7.171000	3.43	16.680658
-35	6.051000	3.36	15.188756
-30	5.123000	3.30	13.723359
-25	4.351000	3.24	12.284972
-20	3.706000	3.18	10.873925
-15	3.167000	3.12	9.4903947
-10	2.713000	3.06	8.1344299
-5	2.331000	3.01	6.8059724
0	2.008000	2.95	5.5048725
5	1.736000	2.88	4.1192255
10	1.505000	2.82	2.8898441
15	1.309000	2.76	1.8018923
20	1.143000	2.70	0.8424019
25	1.000000	2.64	1.665E-14
30	0.877700	2.58	0.7353199
35	0.772500	2.53	1.3723886
40	0.681600	2.48	1.9190217
45	0.603000	2.43	2.3821556
50	0.534700	2.38	2.7679623
55	0.475400	2.33	3.242275
60	0.423800	2.28	3.7022064
65	0.378700	2.23	4.1484489
70	0.339200	2.18	4.58165
75	0.304500	2.14	5.0024166
80	0.273900	2.09	5.4113178
85	0.247000	2.05	5.8088877
90	0.223100	2.01	6.1956284
95	0.202000	1.97	6.5720121
100	0.183200	1.93	6.9384835
105	0.166500	1.89	7.2011942
110	0.151600	1.86	7.4766638
115	0.138300	1.82	7.7639345
120	0.126400	1.79	8.0621022
125	0.115600	1.76	8.3703144
130	0.106000	1.73	8.6877669
135	0.097290	1.70	9.0137015
140	0.089440	1.67	9.33474038
145	0.082340	1.64	9.6882006
150	0.075900	1.61	10.035458



Material Type C4.6 – Available Products: CL, NC

Data for material type: C4.6

Temp Range (°C)	Ratio	Beta
0 to 50	4.56	2680
0 to 70	7.43	2685
25 to 50	2.01	2685
25 to 85	4.52	2684
25 to 100	6.06	2672
25 to 125	9.42	2662
37.8 to 104.4	4.55	2669

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.1139060 x 10 ⁰¹	4.0662931 x 10 ⁰³	-2.7301690 x 10 ⁰⁵	1.4942902 x 10 ⁰⁷
0 to 50	-9.2729117 x 10 ⁰⁰	2.8818578 x 10 ⁰³	-4.4837217 x 10 ⁰⁵	2.9553291 x 10 ⁰⁶
50 to 100	-6.7972227 x 10 ⁰⁰	8.7308354 x 10 ⁰²	4.6607930 x 10 ⁰⁴	-3.5921967 x 10 ⁰⁷
100 to 150	-6.2311084 x 10 ⁰⁰	1.9859286 x 10 ⁰²	7.1069611 x 10 ⁰⁵	-6.2698034 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
19.01 to 2.274	3.3571156 x 10 ⁻⁰³	3.6481614 x 10 ⁻⁰⁴	6.2877897 x 10 ⁻⁰⁶	-1.8914059 x 10 ⁻⁰⁷
2.274 to 0.4982	3.3540164 x 10 ⁻⁰³	3.7301944 x 10 ⁻⁰⁴	7.8358971 x 10 ⁻⁰⁷	-5.4219833 x 10 ⁻⁰⁸
0.4982 to 0.16504	3.3474163 x 10 ⁻⁰³	3.5955951 x 10 ⁻⁰⁴	-4.1498486 x 10 ⁻⁰⁶	1.0774394 x 10 ⁻⁰⁶
0.16504 to 0.07279	3.3371095 x 10 ⁻⁰³	3.6095064 x 10 ⁻⁰⁴	2.1583585 x 10 ⁻⁰⁶	2.3876243 x 10 ⁻⁰⁶

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	19.010000	5.06	10.141194
-45	14.840000	4.87	9.2739508
-40	11.680000	4.69	8.4390717
-35	9.281000	4.52	7.6349492
-30	7.433000	4.36	6.8600744
-25	5.999000	4.21	6.11303
-20	4.877000	4.07	5.3924841
-15	3.992000	3.94	4.6971839
-10	3.290000	3.81	4.0259507
-5	2.727000	3.69	3.377674
0	2.274000	3.58	2.7513076
5	1.907000	3.46	2.2401127
10	1.609000	3.34	1.7081672
15	1.366000	3.23	1.1567408
20	1.166000	3.12	0.5869961
25	1.000000	3.02	0
30	0.862100	2.92	0.6032668
35	0.746800	2.83	1.2219013
40	0.649800	2.74	1.8550705
45	0.567800	2.66	2.5020049
50	0.498200	2.61	3.1619925
55	0.438300	2.52	3.5885937
60	0.387200	2.43	4.035608
65	0.343600	2.35	4.5550269
70	0.306100	2.27	5.0912796
75	0.273800	2.20	5.660746
80	0.245800	2.12	6.26919791
85	0.221400	2.06	6.8936455
90	0.200100	1.99	7.5545146
95	0.181400	1.93	8.2434492
100	0.165000	1.91	8.959397
105	0.150300	1.85	9.7898237
110	0.137200	1.79	10.59646
115	0.125600	1.73	11.379969
120	0.115400	1.68	12.140995
125	0.106200	1.63	12.880166
130	0.098010	1.58	13.598091
135	0.090680	1.53	14.295365
140	0.084090	1.49	14.972564
145	0.078150	1.44	15.630246
150	0.072790	1.40	16.268958



Material Type C5.7 – Available Products: NC

Data for material type: C5.7

Temp Range (°C)	Ratio	Beta
0 to 50	5.62	3047
0 to 70	9.78	3053
25 to 50	2.21	3048
25 to 85	5.57	3058
25 to 100	7.85	3056
25 to 125	13.28	3070
37.8 to 104.4	5.69	3064

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.1627802 x 10 ⁰¹	3.9904064 x 10 ⁰³	-1.9091905 x 10 ⁰⁵	1.0449480 x 10 ⁰⁷
0 to 50	-1.0307436 x 10 ⁰¹	3.1097967 x 10 ⁰³	-1.4022545 x 10 ⁰⁴	9.2425978 x 10 ⁰⁵
50 to 100	-9.6660960 x 10 ⁰⁰	2.5614402 x 10 ⁰³	1.3009453 x 10 ⁰⁵	-1.0026730 x 10 ⁰⁷
100 to 150	-8.8936352 x 10 ⁰⁰	1.6865838 x 10 ⁰³	4.2185371 x 10 ⁰⁵	-3.7216186 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
28.81 to 2.547	3.3532173 x 10 ⁻⁰³	3.2639468 x 10 ⁻⁰⁴	3.0960252 x 10 ⁻⁰⁶	-1.0052753 x 10 ⁻⁰⁷
2.547 to 0.4534	3.3540164 x 10 ⁻⁰³	3.2819973 x 10 ⁻⁰⁴	1.6696922 x 10 ⁻⁰⁷	-1.0597078 x 10 ⁻⁰⁸
0.4534 to 0.12740	3.3507339 x 10 ⁻⁰³	3.2307254 x 10 ⁻⁰⁴	-9.5844469 x 10 ⁻⁰⁷	1.282681 x 10 ⁻⁰⁷
0.12740 to 0.0476	3.3230437 x 10 ⁻⁰³	3.0870430 x 10 ⁻⁰⁴	-5.6092402 x 10 ⁻⁰⁷	5.4002720 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	28.810000	5.84	8.1061211
-45	21.640000	5.61	7.5301468
-40	16.440000	5.39	6.956206
-35	12.620000	5.18	6.3843721
-30	9.788000	4.99	5.8147061
-25	7.662000	4.81	5.2472587
-20	6.051000	4.64	4.6820708
-15	4.818000	4.48	4.1191756
-10	3.867000	4.32	3.5585989
-5	3.127000	4.18	3.0003605
0	2.547000	4.08	2.4444745
5	2.085000	3.94	1.9651901
10	1.718000	3.80	1.4807377
15	1.426000	3.67	0.9914951
20	1.190000	3.55	0.4978094
25	1.000000	3.43	0
30	0.844900	3.32	0.5016389
35	0.717700	3.21	1.0068358
40	0.612800	3.11	1.5153399
45	0.525900	3.01	2.0269191
50	0.453400	2.95	2.5413584
55	0.392200	2.86	2.9658607
60	0.340800	2.77	3.3832004
65	0.297400	2.68	3.793611
70	0.260600	2.60	4.197315
75	0.229200	2.53	4.5945248
80	0.202400	2.45	4.9854434
85	0.179400	2.38	5.3702643
90	0.159500	2.31	5.7491728
95	0.142300	2.25	6.1223462
100	0.127400	2.26	6.489954
105	0.114000	2.19	6.8459723
110	0.102300	2.13	7.2089656
115	0.092110	2.07	7.5786114
120	0.083170	2.01	7.9546068
125	0.075310	1.96	8.3366673
130	0.068390	1.90	8.7245255
135	0.062260	1.85	9.1179295
140	0.056830	1.80	9.5166422
145	0.052000	1.75	9.9204399
150	0.047690	1.71	10.329112



Material Type D5.9 – Available Products: RL, CL

Data for material type: D5.9

Temp Range (°C)	Ratio	Beta
0 to 50	5.57	3033
0 to 70	9.76	3051
25 to 50	2.22	3069
25 to 85	5.69	3096
25 to 100	8.12	3106
25 to 125	14.06	3138
37.8 to 104.4	5.91	3129

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.3027064 x 10 ⁰¹	4.9265152 x 10 ⁰³	-3.8133096 x 10 ⁰⁵	2.0871203 x 10 ⁰⁷
0 to 50	-1.2341583 x 10 ⁰¹	4.5769595 x 10 ⁰³	-3.4346480 x 10 ⁰⁵	2.2638593 x 10 ⁰⁷
50 to 100	-1.1826636 x 10 ⁰¹	4.2530885 x 10 ⁰³	-2.9221924 x 10 ⁰⁵	2.2522111 x 10 ⁰⁷
100 to 150	-8.8360901 x 10 ⁰⁰	1.3925042 x 10 ⁰³	5.4893887 x 10 ⁰⁵	-4.8427713 x 10 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
26.32 to 2.514	3.3560759 x 10 ⁻⁰³	3.2502715 x 10 ⁻⁰⁴	6.2802690 x 10 ⁻⁰⁶	-1.4149610 x 10 ⁻⁰⁷
2.514 to 0.4510	3.3540172 x 10 ⁻⁰³	3.2927261 x 10 ⁻⁰⁴	4.1188325 x 10 ⁻⁰⁶	-1.6472972 x 10 ⁻⁰⁷
0.4510 to 0.12319	3.3538006 x 10 ⁻⁰³	3.276567 x 10 ⁻⁰⁴	2.4256710 x 10 ⁻⁰⁶	-1.7140899 x 10 ⁻⁰⁷
0.12319 to 0.0442	3.3025878 x 10 ⁻⁰³	2.9366723 x 10 ⁻⁰⁴	-4.4370805 x 10 ⁻⁰⁶	6.3232038 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	26.320000	5.56	12.117882
-45	20.040000	5.36	11.160758
-40	15.410000	5.17	10.223131
-35	11.960000	4.99	9.3045451
-30	9.357000	4.82	8.4045406
-25	7.383000	4.66	7.5226559
-20	5.870000	4.51	6.6584311
-15	4.702000	4.37	5.8114104
-10	3.792000	4.24	4.9811438
-5	3.078000	4.11	4.1671882
0	2.514000	3.98	3.3691086
5	2.067000	3.86	2.6907581
10	1.709000	3.74	2.0140813
15	1.422000	3.63	1.3397043
20	1.189000	3.52	0.6681809
25	1.000000	3.42	0
30	0.845000	3.32	0.664408
35	0.717500	3.23	1.3246649
40	0.612000	3.14	1.9804393
45	0.524300	3.05	2.6314425
50	0.451000	2.96	3.2774231
55	0.389800	2.88	3.8040505
60	0.338200	2.80	4.3162316
65	0.294600	2.73	4.8146175
70	0.257500	2.65	5.2998198
75	0.225900	2.58	5.7724132
80	0.198900	2.52	6.2329383
85	0.175600	2.45	6.6819045
90	0.155600	2.39	7.1197916
95	0.138200	2.33	7.5470527
100	0.123200	2.36	7.9641155
105	0.109700	2.29	8.3644583
110	0.097940	2.23	8.7690747
115	0.087760	2.16	9.1774507
120	0.078890	2.10	9.5891079
125	0.071140	2.04	10.003601
130	0.064330	1.98	10.420513
135	0.058340	1.93	10.83946
140	0.053060	1.87	11.260081
145	0.048370	1.82	11.68204
150	0.044210	1.77	12.105027



Material Type C6.1 – Available Products: CL

Data for material type: C6.1

Temp Range (°C)	Ratio	Beta
0 to 50	6.00	3164
0 to 70	10.67	3170
25 to 50	2.28	3177
25 to 85	5.97	3181
25 to 100	8.53	3179
25 to 125	14.75	3195
37.8 to 104.4	6.11	3187

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.2426402 x 10 ⁰¹	4.3686037 x 10 ⁰³	-2.4250323 x 10 ⁰⁵	1.3272812 x 10 ⁰⁷
0 to 50	-1.1385102 x 10 ⁰¹	3.7143153 x 10 ⁰³	-1.2242751 x 10 ⁰⁵	8.0694927 x 10 ⁰⁶
50 to 100	-1.0226160 x 10 ⁰¹	2.8115674 x 10 ⁰³	9.6183337 x 10 ⁰⁴	-7.4131047 x 10 ⁰⁶
100 to 150	-1.0233658 x 10 ⁰¹	2.6605576 x 10 ⁰³	1.7511014 x 10 ⁰⁵	-1.5448321 x 10 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
32.30 to 2.633	3.3549949 x 10 ⁻⁰³	3.1331987 x 10 ⁻⁰⁴	3.5017065 x 10 ⁻⁰⁶	-1.0269821 x 10 ⁻⁰⁷
2.633 to 0.4386	3.3540165 x 10 ⁻⁰³	3.1591599 x 10 ⁻⁰⁴	1.2987588 x 10 ⁻⁰⁶	-6.9999138 x 10 ⁻⁰⁸
0.4386 to .11726	3.3520914 x 10 ⁻⁰³	3.1187933 x 10 ⁻⁰⁴	-6.4238893 x 10 ⁻⁰⁷	7.8778278 x 10 ⁻⁰⁸
0.11726 to 0.0419	3.3309732 x 10 ⁻⁰³	3.0209438 x 10 ⁻⁰⁴	-4.4163124 x 10 ⁻⁰⁷	1.5768905 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	32.300000	6.02	9.0884113
-45	24.060000	5.78	8.3705682
-40	18.120000	5.56	7.667348
-35	13.800000	5.35	6.9784088
-30	10.610000	5.16	6.3034055
-25	8.238000	4.97	5.6419919
-20	6.454000	4.80	4.9938233
-15	5.098000	4.63	4.3585578
-10	4.060000	4.48	3.7358579
-5	3.258000	4.33	3.1253911
0	2.633000	4.21	2.5268315
5	2.141000	4.07	2.0180686
10	1.753000	3.93	1.56105609
15	1.445000	3.80	1.0047782
20	1.198000	3.68	0.5011357
25	1.000000	3.56	0
30	0.839300	3.45	0.498306
35	0.708200	3.34	0.9934986
40	0.600700	3.24	1.4853295
45	0.512100	3.15	1.9735818
50	0.438600	3.06	2.45806783
55	0.377300	2.96	2.8530379
60	0.326100	2.87	3.2371737
65	0.283000	2.79	3.6109631
70	0.246700	2.70	3.9748649
75	0.216000	2.62	4.3293099
80	0.189800	2.55	4.6747037
85	0.167400	2.48	5.0114283
90	0.148200	2.41	5.3398437
95	0.131600	2.34	5.6602895
100	0.117300	2.35	5.9730866
105	0.104400	2.28	6.2733438
110	0.093330	2.22	6.576806
115	0.083650	2.16	6.883088
120	0.075190	2.10	7.1918309
125	0.067780	2.05	7.5027004
130	0.061260	2.00	7.8153851
135	0.055510	1.95	8.1295951
140	0.050430	1.90	8.4450606
145	0.045920	1.85	8.7615301
150	0.041920	1.80	9.0787699



Material Type C6.5 – Available Products: CL

Data for material type: C6.5

Temp Range (°C)	Ratio	Beta
0 to 50	6.38	3271
0 to 70	11.58	3280
25 to 50	2.35	3285
25 to 85	6.38	3298
25 to 100	9.26	3301
25 to 125	16.21	3306
37.8 to 104.4	6.54	3307

To calculate R_t/R_{25} at temperatures other than those listed in the table, use the following equation:

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.2846321 x 10 ⁰¹	4.5219278 x 10 ⁰³	-2.5267596 x 10 ⁰⁵	1.3829591 x 10 ⁰⁷
0 to 50	-1.1850279 x 10 ⁰¹	3.8971126 x 10 ⁰³	1.3930940 x 10 ⁰⁵	9.1822189 x 10 ⁰⁶
50 to 100	-1.1272533 x 10 ⁰¹	3.4566795 x 10 ⁰³	-3.7952197 x 10 ⁰⁴	2.9250764 x 10 ⁰⁶
100 to 150	-1.3153362 x 10 ⁰¹	5.2047014 x 10 ⁰³	-5.5069543 x 10 ⁰⁵	4.8582678 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
36.16 to 2.719	3.3542099 x 10 ⁻⁰³	3.0342926 x 10 ⁻⁰⁴	3.3155033 x 10 ⁻⁰⁶	-9.3850502 x 10 ⁻⁰⁸
2.719 to 0.4264	3.3540166 x 10 ⁻⁰³	3.0557639 x 10 ⁻⁰⁴	1.3372867 x 10 ⁻⁰⁶	-6.8649613 x 10 ⁻⁰⁸
0.4264 to 0.10804	3.3526048 x 10 ⁻⁰³	3.0295574 x 10 ⁻⁰⁴	2.3929874 x 10 ⁻⁰⁷	-2.3459389 x 10 ⁻⁰⁸
0.10804 to 0.0373	3.3740451 x 10 ⁻⁰³	3.1791733 x 10 ⁻⁰⁴	2.9960867 x 10 ⁻⁰⁶	-2.2413989 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	36.160000	6.21	8.9714446
-45	26.680000	5.97	8.1838273
-40	19.920000	5.74	7.4326042
-35	15.030000	5.52	6.7151983
-30	11.460000	5.32	6.0292721
-25	8.828000	5.13	5.3727002
-20	6.862000	4.95	4.7435456
-15	5.380000	4.78	4.1400398
-10	4.253000	4.62	3.5605644
-5	3.388000	4.47	3.0036356
0	2.719000	4.35	2.4678906
5	2.196000	4.20	1.9382997
10	1.786000	4.06	1.4277518
15	1.463000	3.93	0.9351707
20	1.206000	3.80	0.4595608
25	1.000000	3.68	0
30	0.834300	3.57	0.4443673
35	0.699900	3.46	0.874336
40	0.590400	3.35	1.2906455
45	0.500500	3.25	1.6939847
50	0.426400	3.17	2.0849962
55	0.364800	3.07	2.474984
60	0.313600	2.98	2.8635026
65	0.270800	2.89	3.2503461
70	0.234800	2.81	3.6353305
75	0.204400	2.73	4.0182913
80	0.178700	2.66	4.399082
85	0.156700	2.58	4.7775726
90	0.138000	2.51	5.1536479
95	0.121900	2.45	5.527206
100	0.108000	2.37	5.8981576
105	0.096090	2.32	5.9985988
110	0.085700	2.26	6.1326916
115	0.076630	2.21	6.2984689
120	0.068680	2.17	6.4940366
125	0.061710	2.12	6.7175741
130	0.055570	2.07	6.9673338
135	0.050150	2.03	7.2416397
140	0.045360	1.99	7.5388871
145	0.041110	1.95	7.8575411
150	0.037340	1.91	8.1961346



Material Type C4.9 – Available Products: UD

Data for material type: C4.9

Temp Range (°C)	Ratio	Beta
0 to 50	4.84	2785
0 to 70	8.03	2789
25 to 50	2.07	2805
25 to 85	4.83	2802
25 to 100	6.60	2800
25 to 125	10.63	2806
37.8 to 104.4	4.92	2804

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.1405766 x 10 ⁰¹	4.1280579 x 10 ⁰³	-2.6662686 x 10 ⁰⁵	1.4593159 x 10 ⁰⁷
0 to 50	-1.0594171 x 10 ⁰¹	3.6780544 x 10 ⁰³	-1.9881101 x 10 ⁰⁵	1.3104114 x 10 ⁰⁷
50 to 100	-8.9686238 x 10 ⁰⁰	2.4516716 x 10 ⁰³	8.9687219 x 10 ⁰⁴	-6.9124316 x 10 ⁰⁶
100 to 150	-6.5085593 x 10 ⁰⁰	6.1800395 x 10 ⁰¹	8.1249183 x 10 ⁰⁵	-7.1678513 x 10 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
34.91 to 2.721	3.3546465 x 10 ⁻⁰³	3.0130310 x 10 ⁻⁰⁴	4.8460415 x 10 ⁻⁰⁶	-1.1101738 x 10 ⁻⁰⁷
2.721 to 0.4180	3.3540179 x 10 ⁻⁰³	3.0187589 x 10 ⁻⁰⁴	4.9235531 x 10 ⁻⁰⁶	-1.3337654 x 10 ⁻⁰⁷
0.4180 to 0.10058	3.3535793 x 10 ⁻⁰³	2.9894603 x 10 ⁻⁰⁴	2.1404635 x 10 ⁻⁰⁶	-1.3398852 x 10 ⁻⁰⁷
0.10058 to 0.0327	3.3162517 x 10 ⁻⁰³	2.7499140 x 10 ⁻⁰⁴	-4.7793276 x 10 ⁻⁰⁷	-1.8609802 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	21.160000	5.26	10.141194
-45	16.350000	5.06	9.2739508
-40	12.760000	4.87	8.4390717
-35	10.050000	4.69	7.6349492
-30	7.981000	4.53	6.8600744
-25	6.390000	4.37	6.11303
-20	5.155000	4.22	5.3924841
-15	4.189000	4.08	4.6971839
-10	3.427000	3.95	4.0259507
-5	2.822000	3.82	3.377674
0	2.338000	3.69	2.7513076
5	1.951000	3.56	2.2401127
10	1.637000	3.45	1.7081672
15	1.382000	3.34	1.1567408
20	1.173000	3.23	0.5869961
25	1.000000	3.14	0
30	0.857000	3.04	0.6032668
35	0.737800	2.95	1.2219013
40	0.638000	2.87	1.8550705
45	0.554000	2.78	2.5020049
50	0.483000	2.69	3.1619925
55	0.423100	2.61	3.5885937
60	0.372200	2.53	4.0535608
65	0.328600	2.45	4.5550269
70	0.291300	2.38	5.0912796
75	0.259100	2.31	5.660746
80	0.231300	2.24	6.2619791
85	0.207100	2.18	6.8936455
90	0.186000	2.11	7.5545146
95	0.167600	2.06	8.2434492
100	0.151500	2.06	8.959397
105	0.136900	2.00	9.7898237
110	0.124100	1.93	10.59646
115	0.112800	1.87	11.379969
120	0.102900	1.81	12.140995
125	0.094080	1.76	12.880166
130	0.086280	1.70	13.598091
135	0.079340	1.65	14.295365
140	0.073140	1.60	14.972564
145	0.067590	1.55	15.630246
150	0.062610	1.51	16.268958



Material Type C5.2 – Available Products: UD

Data for material type: C5.2

Temp Range (°C)	Ratio	Beta
0 to 50	5.13	2886
0 to 70	8.69	2896
25 to 50	2.13	2906
25 to 85	5.14	2914
25 to 100	7.13	2913
25 to 125	11.63	2913
37.8 to 104.4	5.24	2918

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.2350321 x 10 ⁰¹	4.5798150 x 10 ⁰³	-3.2988115 x 10 ⁰⁵	1.8055226 x 10 ⁰⁷
0 to 50	-1.0903586 x 10 ⁰¹	3.7568367 x 10 ⁰³	-1.9369343 x 10 ⁰⁵	1.2766801 x 10 ⁰⁷
50 to 100	-9.3311616 x 10 ⁰⁰	2.5410983 x 10 ⁰³	9.7847100 x 10 ⁰⁴	-7.5413352 x 10 ⁰⁶
100 to 150	-7.7097417 x 10 ⁰⁰	9.8743173 x 10 ⁰²	5.6525911 x 10 ⁰⁵	-4.9867495 x 10 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
23.89 to 2.413	3.3606544 x 10 ⁻⁰³	3.3581928 x 10 ⁻⁰⁴	5.9441779 x 10 ⁻⁰⁶	-1.5308787 x 10 ⁻⁰⁷
2.413 to 0.4704	3.3540167 x 10 ⁻⁰³	3.4620149 x 10 ⁻⁰⁴	2.7023432 x 10 ⁻⁰⁶	-1.4213280 x 10 ⁻⁰⁷
0.4704 to 0.14033	3.3513357 x 10 ⁻⁰³	3.3982584 x 10 ⁻⁰⁴	-8.4441042 x 10 ⁻⁰⁷	1.1423443 x 10 ⁻⁰⁷
0.14033 to 0.0562	3.3309429 x 10 ⁻⁰³	3.2739091 x 10 ⁻⁰⁴	3.7842601 x 10 ⁻⁰⁹	1.0778302 x 10 ⁻⁰⁶

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	23.890000	5.45	12.884099
-45	18.290000	5.24	11.835301
-40	14.140000	5.05	10.804607
-35	11.030000	4.88	9.7919247
-30	8.683000	4.71	8.7971079
-25	6.889000	4.55	7.8199711
-20	5.509000	4.40	6.8602946
-15	4.437000	4.26	5.9178322
-10	3.599000	4.12	4.9923158
-5	2.938000	4.00	4.0834609
0	2.413000	3.82	3.1909699
5	2.000000	3.70	2.4959072
10	1.667000	3.58	1.8310776
15	1.398000	3.46	1.194609
20	1.179000	3.35	0.5847789
25	1.000000	3.25	0
30	0.852200	3.15	0.5611927
35	0.729700	3.06	1.1001533
40	0.627600	2.97	1.6181354
45	0.542200	2.88	2.1163012
50	0.470400	2.81	2.5957293
55	0.409700	2.72	3.153301
60	0.358400	2.64	3.6900936
65	0.314800	2.56	4.2072083
70	0.277600	2.48	4.7056711
75	0.245700	2.41	5.1864384
80	0.218200	2.34	5.6504033
85	0.194500	2.27	6.0984005
90	0.173900	2.21	6.5312108
95	0.156000	2.14	6.9495656
100	0.140300	2.11	7.3541507
105	0.126500	2.05	7.5934784
110	0.114300	1.99	7.8425609
115	0.103700	1.93	8.1007032
120	0.094260	1.87	8.3672505
125	0.085950	1.82	8.6415866
130	0.078580	1.77	8.9231309
135	0.072030	1.72	9.2113367
140	0.066180	1.67	9.5056892
145	0.060960	1.62	9.8057033
150	0.056280	1.58	10.110922



Material Type D7.3 – Available Products: RL, UD, NC, MS

Data for material type: D7.3

Temp Range (°C)	Ratio	Beta
0 to 50	6.85	3398
0 to 70	12.85	3419
25 to 50	2.44	3431
25 to 85	7.02	3468
25 to 100	10.45	3481
25 to 125	19.21	3509
37.8 to 104.4	7.31	3505

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4636238 x 10 ⁰¹	5.5477905 x 10 ⁰³	-4.3292916 x 10 ⁰⁵	2.3695303 x 10 ⁰⁷
0 to 50	-1.3459620 x 10 ⁰¹	4.8671021 x 10 ⁰³	-3.2692912 x 10 ⁰⁵	2.1548687 x 10 ⁰⁷
50 to 100	-1.3365175 x 10 ⁰¹	4.8538387 x 10 ⁰³	-3.4907923 x 10 ⁰⁵	2.6904461 x 10 ⁰⁷
100 to 150	-1.1796494 x 10 ⁰¹	3.3869024 x 10 ⁰³	6.8079798 x 10 ⁰⁴	-6.0060403 x 10 ⁰⁶

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
38.99 to 2.813	3.3556775 x 10 ⁻⁰³	2.9003547 x 10 ⁻⁰⁴	5.0708019 x 10 ⁻⁰⁶	-1.0057107 x 10 ⁻⁰⁷
2.813 to 0.4105	3.3540170 x 10 ⁻⁰³	2.9400700 x 10 ⁻⁰⁴	2.7918281 x 10 ⁻⁰⁶	-1.0890007 x 10 ⁻⁰⁷
0.4105 to 0.09569	3.3532194 x 10 ⁻⁰³	2.9247976 x 10 ⁻⁰⁴	2.0674135 x 10 ⁻⁰⁶	-1.2598588 x 10 ⁻⁰⁷
0.09569 to 0.0304	3.3258883 x 10 ⁻⁰³	2.7471721 x 10 ⁻⁰⁴	-1.5664133 x 10 ⁻⁰⁷	-1.1796494 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	38.990000	6.22	11.629556
-45	28.740000	5.99	10.823331
-40	21.410000	5.78	10.012822
-35	16.120000	5.58	9.1997632
-30	12.250000	5.40	8.3856792
-25	9.398000	5.22	7.5719067
-20	7.271000	5.05	6.7596174
-15	5.671000	4.89	5.9498372
-10	4.457000	4.74	5.1434621
-5	3.529000	4.60	4.3412737
0	2.813000	4.48	3.5439517
5	2.257000	4.33	2.6687962
10	1.824000	4.20	1.883588
15	1.484000	4.07	1.1812041
20	1.214000	3.94	0.5552562
25	1.000000	3.83	0
30	0.828200	3.72	0.489742
35	0.689700	3.61	0.9186477
40	0.577300	3.51	1.2909527
45	0.485700	3.41	1.6105007
50	0.410500	3.32	1.880787
55	0.348500	3.23	2.2091604
60	0.297200	3.14	2.5298446
65	0.254600	3.06	2.8431518
70	0.218900	2.98	3.1493772
75	0.189000	2.90	3.448799
80	0.163800	2.83	3.7416806
85	0.142500	2.76	4.0282711
90	0.124400	2.69	4.3088064
95	0.108900	2.62	4.5835099
100	0.095690	2.60	4.8525938
105	0.084170	2.53	5.0450769
110	0.074280	2.47	5.2479514
115	0.065770	2.40	5.4605304
120	0.058420	2.34	5.6821659
125	0.052050	2.28	5.9122467
130	0.046510	2.22	6.1501963
135	0.041670	2.17	6.3954706
140	0.037440	2.12	6.6475562
145	0.033720	2.06	6.9059686
150	0.030450	2.02	7.1702505



Material Type C7.4 – Available Products: CL

Data for material type: C7.4

Temp Range (°C)	Ratio	Beta
0 to 50	7.10	3460
0 to 70	13.37	3472
25 to 50	2.47	3490
25 to 85	7.17	3506
25 to 100	10.70	3516
25 to 125	19.66	3536
37.8 to 104.4	7.43	3531

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4098282 x 10 ⁰¹	5.1037583 x 10 ⁰³	-3.2954464 x 10 ⁰⁵	1.8036808 x 10 ⁰⁷
0 to 50	-1.3400041 x 10 ⁰¹	4.7377345 x 10 ⁰³	-2.8421057 x 10 ⁰⁵	1.8733004 x 10 ⁰⁷
50 to 100	-1.3356781 x 10 ⁰¹	4.8009468 x 10 ⁰³	-3.2985753 x 10 ⁰⁵	2.5422994 x 10 ⁰⁷
100 to 150	-1.2440303 x 10 ⁰¹	3.9733403 x 10 ⁰³	-1.0544654 x 10 ⁰⁵	9.3025568 x 10 ⁰⁶

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
43.75 to 2.871	3.3560906 x 10 ⁻⁰³	2.8535925 x 10 ⁻⁰⁴	3.6244289 x 10 ⁻⁰⁶	-8.8098132 x 10 ⁻⁰⁸
2.871 to 0.4044	3.3540169 x 10 ⁻⁰³	2.8872982 x 10 ⁻⁰⁴	2.2993258 x 10 ⁻⁰⁶	-9.4237626 x 10 ⁻⁰⁷
0.4044 to 0.09344	3.3557380 x 10 ⁻⁰³	2.9029094 x 10 ⁻⁰⁴	1.9016207 x 10 ⁻⁰⁶	-1.1907227 x 10 ⁻⁰⁷
0.09344 to 0.0297	3.3397829 x 10 ⁻⁰³	2.7936829 x 10 ⁻⁰⁴	2.9649440 x 10 ⁻⁰⁷	-5.0212128 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	43.750000	6.50	9.6727291
-45	31.810000	6.25	8.6850372
-40	23.400000	6.02	7.7733561
-35	17.420000	5.80	6.9311936
-30	13.100000	5.60	6.152735
-25	9.951000	5.40	5.4328463
-20	7.631000	5.22	4.7668131
-15	5.904000	5.05	4.1504603
-10	4.607000	4.88	3.5800039
-5	3.623000	4.73	3.0520216
0	2.871000	4.57	2.5634108
5	2.293000	4.42	1.9842532
10	1.845000	4.28	1.4406463
15	1.495000	4.15	0.9301762
20	1.219000	4.02	0.450635
25	1.000000	3.90	0
30	0.825400	3.78	0.4235852
35	0.685100	3.67	0.8218271
40	0.571800	3.57	1.1962971
45	0.479700	3.46	1.5484444
50	0.404400	3.34	1.8796071
55	0.342900	3.25	2.2321667
60	0.292200	3.16	2.5693466
65	0.250000	3.08	2.891974
70	0.214800	3.00	3.20082
75	0.185300	2.92	3.4966035
80	0.160400	2.84	3.7799959
85	0.139400	2.77	4.0516248
90	0.121600	2.70	4.3120775
95	0.106400	2.64	4.5619041
100	0.093440	2.59	4.8016204
105	0.082220	2.53	5.107526
110	0.072580	2.46	5.3822998
115	0.064280	2.40	5.6276543
120	0.057100	2.34	5.8451781
125	0.050860	2.28	6.0363464
130	0.045440	2.23	6.202531
135	0.040700	2.18	6.3450088
140	0.036550	2.12	6.4649702
145	0.032910	2.08	6.5635256
150	0.029700	2.03	6.6417123



Material Type D7.7A – Available Products: UD

Data for material type: D7.7A

Temp Range (°C)	Ratio	Beta
0 to 50	7.29	3507
0 to 70	13.98	3532
25 to 50	2.51	3550
25 to 85	7.52	3592
25 to 100	11.38	3607
25 to 125	21.29	3630
37.8 to 104.4	7.86	3632

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.5206375 x 10 ⁰¹	5.7889976 x 10 ⁰³	-4.5924941 x 10 ⁰⁵	2.5135876 x 10 ⁰⁷
0 to 50	-1.4449340 x 10 ⁰¹	5.4205262 x 10 ⁰³	-4.2581331 x 10 ⁰⁵	2.8066382 x 10 ⁰⁷
50 to 100	-1.4162863 x 10 ⁰¹	5.2865655 x 10 ⁰³	-4.2756250 x 10 ⁰⁵	3.2953375 x 10 ⁰⁷
100 to 150	-1.3952475 x 10 ⁰¹	5.1674237 x 10 ⁰³	-4.2443312 x 10 ⁰⁵	3.7443742 x 10 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
43.61 to 2.901	3.3564432 x 10 ⁻⁰³	2.8080731 x 10 ⁻⁰⁴	4.8861133 x 10 ⁻⁰⁶	-9.1110730 x 10 ⁻⁰⁸
2.901 to 0.3980	3.3540173 x 10 ⁻⁰³	2.8479115 x 10 ⁻⁰⁴	3.3033936 x 10 ⁻⁰⁶	-1.0917215 x 10 ⁻⁰⁷
0.3980 to 0.8787	3.3535396 x 10 ⁻⁰³	2.8337474 x 10 ⁻⁰⁴	2.3188232 x 10 ⁻⁰⁶	-1.2348750 x 10 ⁻⁰⁷
0.8787 to 0.0268	3.3498379 x 10 ⁻⁰³	2.7983854 x 10 ⁻⁰⁴	1.4594691 x 10 ⁻⁰⁶	-1.3611407 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	43.610000	6.40	12.527052
-45	31.850000	6.17	11.258603
-40	23.520000	5.96	10.082867
-35	17.560000	5.75	8.9914772
-30	13.230000	5.56	7.9770147
-25	10.070000	5.38	7.0328816
-20	7.726000	5.21	6.1531916
-15	5.979000	5.05	5.3326784
-10	4.664000	4.89	4.5666176
-5	3.666000	4.75	3.85076
0	2.901000	4.60	3.1812742
5	2.314000	4.46	2.4653978
10	1.858000	4.32	1.7922619
15	1.502000	4.19	1.1588008
20	1.222000	4.07	0.562227
25	1.000000	3.95	0
30	0.823100	3.84	0.5301994
35	0.681200	3.73	1.0304926
40	0.566700	3.63	1.5028233
45	0.473800	3.53	1.9489758
50	0.398000	3.44	2.3705903
55	0.336000	3.34	2.7488877
60	0.284900	3.25	3.1148424
65	0.242700	3.17	3.4690669
70	0.207600	3.09	3.8121339
75	0.178200	3.01	4.1445789
80	0.153600	2.93	4.4669039
85	0.132900	2.86	4.7795795
90	0.115400	2.79	5.0830472
95	0.100500	2.73	5.3777223
100	0.087870	2.66	5.6639949
105	0.077060	2.59	5.8774388
110	0.067800	2.53	6.0870284
115	0.059820	2.47	6.2928877
120	0.052940	2.42	6.4951354
125	0.046980	2.36	6.6938844
130	0.041800	2.31	6.8892429
135	0.037290	2.26	7.0813143
140	0.033350	2.21	7.2701974
145	0.029900	2.16	7.4559868
150	0.026870	2.12	7.6387733



Material Type S7.8 – Available Products: UD

Data for material type: S7.8

Temp Range (°C)	Ratio	Beta
0 to 50	7.39	3532
0 to 70	14.17	3550
25 to 50	2.52	3559
25 to 85	7.52	3590
25 to 100	11.33	3600
25 to 125	21.24	3627
37.8 to 104.4	7.82	3622

To calculate Rt/R25 at temperatures other than those listed in the table, use the following equation: $Rt/R25 = A + B/T + C/T^2 + D/T^3$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.4699482E+01	5.4485687E+03	-3.8911993E+05	2.1297514E+07
0 to 50	-1.3480230E+01	4.6953809E+03	-2.5884751E+05	1.7061264E+07
50 to 100	-1.3385370E+01	4.6620047E+03	-2.6943390E+05	2.0765985E+07
100 to 150	-1.1314278E+01	2.6849670E+03	3.0850677E+05	-2.7216651E+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
45.58 to 2.937	-8.9342941E-08	4.1114789E-06	2.8079207E-04	3.3538118E-03
2.937 to 0.3972	-8.2368311E-08	1.9702173E-06	2.8290063E-04	3.3540168E-03
0.3972 to 0.08830	-9.4310350E-08	1.4044273E-06	2.8130889E-04	3.3530200E-03
0.08830 to 0.0271	1.7187539E-07	-4.3649704E-07	2.6136354E-04	3.3192613E-03

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	45.58	6.52	8.97
-45	33.11	6.27	8.19
-40	24.34	6.05	7.45
-35	18.09	5.83	6.73
-30	13.58	5.63	6.05
-25	10.30	5.44	5.39
-20	7.881	5.26	4.75
-15	6.084	5.09	4.15
-10	4.736	4.93	3.56
-5	3.716	4.78	3.00
0	2.937	4.67	2.45
5	2.334	4.52	1.93
10	1.869	4.37	1.42
15	1.507	4.23	0.93
20	1.224	4.10	0.46
25	1.000	3.98	0.00
30	0.8222	3.86	0.44
35	0.6799	3.74	0.87
40	0.5654	3.64	1.29
45	0.4727	3.53	1.70
50	0.3972	3.44	2.10
55	0.3353	3.34	2.49
60	0.2843	3.25	2.87
65	0.2422	3.16	3.24
70	0.2073	3.08	3.60
75	0.1781	2.99	3.96
80	0.1537	2.92	4.30
85	0.1331	2.84	4.64
90	0.1157	2.77	4.97
95	0.1009	2.70	5.30
100	0.08830	2.70	5.61
105	0.07731	2.62	5.93
110	0.06795	2.55	6.24
115	0.05993	2.48	6.54
120	0.05303	2.41	6.83
125	0.04709	2.35	7.12
130	0.04194	2.28	7.40
135	0.03747	2.23	7.67
140	0.03357	2.17	7.94
145	0.03017	2.11	8.20
150	0.02718	2.06	8.45



Material Type D8.5 – Available Products: RL, UD

Data for material type: D8.5

Temp Range (°C)	Ratio	Beta
0 to 50	8.40	3758
0 to 70	16.58	3760
25 to 50	2.67	3782
25 to 85	8.32	3772
25 to 100	12.69	3769
25 to 125	23.78	3762
37.8 to 104.4	8.49	3768

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.6362140 x 10 ⁰¹	6.1785837 x 10 ⁰³	-4.7680967 x 10 ⁰⁵	2.6096993 x 10 ⁰⁷
0 to 50	-1.4063644 x 10 ⁰¹	4.7969869 x 10 ⁰³	-2.3115843 x 10 ⁰⁵	1.5236210 x 10 ⁰⁷
50 to 100	-1.2316203 x 10 ⁰¹	3.5082935 x 10 ⁰³	6.5599415 x 10 ⁰⁴	-5.0559208 x 10 ⁰⁶
100 to 150	-1.0116187 x 10 ⁰¹	1.4634643 x 10 ⁰³	6.6626499 x 10 ⁰⁵	-5.8778294 x 10 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
60.29 to 3.150	3.3589355 x 10 ⁻⁰³	2.5878281 x 10 ⁻⁰⁴	3.9462432 x 10 ⁻⁰⁶	-7.1349459 x 10 ⁻⁰⁸
3.150 to 0.3748	3.3540167 x 10 ⁻⁰³	2.6591761 x 10 ⁻⁰⁴	1.4616501 x 10 ⁻⁰⁶	-6.0475280 x 10 ⁻⁰⁸
0.3748 to 0.07882	3.3545842 x 10 ⁻⁰³	2.6471301 x 10 ⁻⁰⁴	-2.69994412 x 10 ⁻⁰⁷	2.6520380 x 10 ⁻⁰⁸
0.07882 to 0.0244	3.3386094 x 10 ⁻⁰³	2.5611471 x 10 ⁻⁰⁴	-8.5972073 x 10 ⁻⁰⁸	4.5688416 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	60.290000	6.99	9.6277428
-45	42.790000	6.73	8.6774616
-40	30.750000	6.49	7.7765901
-35	22.350000	6.27	6.9214403
-30	16.430000	6.06	6.1086792
-25	12.200000	5.86	5.3352872
-20	9.143000	5.67	4.5985226
-15	6.917000	5.49	3.8958904
-10	5.279000	5.32	3.2251151
-5	4.062000	5.16	2.5841178
0	3.150000	4.98	1.9709948
5	2.466000	4.82	1.5618156
10	1.946000	4.66	1.160373
15	1.548000	4.51	0.7664148
20	1.240000	4.37	0.3797005
25	1.000000	4.23	0
30	0.812000	4.10	0.3729067
35	0.663500	3.98	0.73923
40	0.545400	3.86	1.0991714
45	0.450900	3.75	1.4529238
50	0.374800	3.61	1.8006721
55	0.313800	3.50	2.1066525
60	0.264200	3.39	2.3907887
65	0.223500	3.29	2.6543632
70	0.190100	3.20	2.8985643
75	0.162400	3.10	3.1244943
80	0.139400	3.01	3.3331772
85	0.120100	2.93	3.5255656
90	0.104000	2.85	3.7025463
95	0.090360	2.77	3.8649461
100	0.078820	2.71	4.0135365
105	0.068990	2.63	4.2688619
110	0.060620	2.55	4.4920077
115	0.053470	2.47	4.6847307
120	0.047330	2.40	4.8486593
125	0.042050	2.33	4.9853045
130	0.037480	2.27	5.0960705
135	0.033520	2.20	5.1822635
140	0.030070	2.14	5.2451001
145	0.027060	2.08	5.2857149
150	0.024420	2.03	5.3051669



Material Type C8.5 – Available Products: CL, NC

Data for material type: C8.5

Temp Range (°C)	Ratio	Beta
0 to 50	7.95	3660
0 to 70	15.56	3675
25 to 50	2.62	3706
25 to 85	8.11	3726
25 to 100	12.45	3741
25 to 125	23.76	3761
37.8 to 104.4	8.46	3760

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.5844952 x 10 ⁰¹	5.9737509 x 10 ⁰³	-4.5845335 x 10 ⁰⁵	2.5092306 x 10 ⁰⁷
0 to 50	-1.5133216 x 10 ⁰¹	5.6947205 x 10 ⁰³	-4.5272060 x 10 ⁰⁵	2.9839907 x 10 ⁰⁷
50 to 100	-1.5023467 x 10 ⁰¹	5.7816363 x 10 ⁰³	-5.2518671 x 10 ⁰⁵	4.0477531 x 10 ⁰⁷
100 to 150	-1.3339561 x 10 ⁰¹	4.3349151 x 10 ⁰³	-1.4580832 x 10 ⁰⁵	1.2863297 x 10 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
53.34 to 3.039	3.3594077 x 10 ⁻⁰³	2.6679050 x 10 ⁻⁰⁴	4.1649434 x 10 ⁻⁰⁶	-7.8111089 x 10 ⁻⁰⁸
3.039 to 0.3822	3.3540174 x 10 ⁻⁰³	2.7285893 x 10 ⁻⁰⁴	3.0887913 x 10 ⁻⁰⁶	-9.6534431 x 10 ⁻⁰⁸
0.3822 to 0.08029	3.3575603 x 10 ⁻⁰³	2.7614120 x 10 ⁻⁰⁴	2.6483077 x 10 ⁻⁰⁶	-1.2033859 x 10 ⁻⁰⁷
0.08029 to 0.0237	3.3422529 x 10 ⁻⁰³	2.6385714 x 10 ⁻⁰⁴	3.5357168 x 10 ⁻⁰⁷	-5.3180819 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	53.340000	6.78	9.6147123
-45	38.240000	6.54	8.7568476
-40	27.740000	6.30	7.9365706
-35	20.360000	6.09	7.1513141
-30	15.090000	5.88	6.3987423
-25	11.310000	5.69	5.6767253
-20	8.547000	5.50	4.9833172
-15	6.520000	5.33	4.3167359
-10	5.015000	5.17	3.6753468
-5	3.889000	5.01	3.0576474
0	3.039000	4.80	2.4622542
5	2.400000	4.65	1.8953155
10	1.909000	4.51	1.3682867
15	1.529000	4.37	0.8783822
20	1.233000	4.25	0.4230609
25	1.000000	4.12	0
30	0.816100	4.01	0.3929276
35	0.669800	3.90	0.757673
40	0.552700	3.79	1.0960289
45	0.458500	3.69	1.4096451
50	0.382200	3.54	1.7000423
55	0.321000	3.44	2.06999
60	0.270800	3.35	2.4147364
65	0.229500	3.27	2.735779
70	0.195300	3.19	3.0345037
75	0.166900	3.11	3.3121947
80	0.143100	3.03	3.5700432
85	0.123200	2.96	3.8091561
90	0.106500	2.89	4.0305626
95	0.092310	2.82	4.2352214
100	0.080290	2.75	4.4240259
105	0.070100	2.68	4.4788558
110	0.061410	2.61	4.5551175
115	0.053970	2.55	4.6516365
120	0.047590	2.49	4.7672939
125	0.042090	2.43	4.9010244
130	0.037340	2.37	5.0518135
135	0.033210	2.31	5.2186953
140	0.029630	2.26	5.4007506
145	0.026500	2.21	5.5971045
150	0.023760	2.16	5.8069245



Material Type D8.7 – Available Products: MS

Data for material type: D8.7

Temp Range (°C)	Ratio	Beta
0 to 50	8.14	3701
0 to 70	16.10	3721
25 to 50	2.64	3743
25 to 85	8.34	3775
25 to 100	12.87	3790
25 to 125	24.73	3808
37.8 to 104.4	8.70	3811

To calculate R_t/R_{25} at temperatures other than those listed in the table, use the following equation:

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.5730366 x 10 ⁰¹	5.8928896 x 10 ⁰³	-4.4024166 x 10 ⁰⁵	2.4095534 x 10 ⁰⁷
0 to 50	-1.4998209 x 10 ⁰¹	5.5416556 x 10 ⁰³	-4.0953952 x 10 ⁰⁵	2.6993738 x 10 ⁰⁷
50 to 100	-1.4933035 x 10 ⁰¹	5.6076362 x 10 ⁰³	-4.6505048 x 10 ⁰⁵	3.5842673 x 10 ⁰⁷
100 to 150	-1.4661462 x 10 ⁰¹	5.4760877 x 10 ⁰³	-4.6848196 x 10 ⁰⁵	4.1329758 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
54.87 to 3.081	3.3565515 x 10 ⁻⁰³	2.6618072 x 10 ⁻⁰⁴	3.9701350 x 10 ⁻⁰⁶	-7.7284120 x 10 ⁻⁰⁸
3.081 to 0.3786	3.3540172 x 10 ⁻⁰³	2.6987348 x 10 ⁻⁰⁴	2.7040810 x 10 ⁻⁰⁶	-8.9868499 x 10 ⁻⁰⁸
0.3786 to 0.07767	3.3551874 x 10 ⁻⁰³	2.7060402 x 10 ⁻⁰⁴	2.1971300 x 10 ⁻⁰⁶	-1.0897057 x 10 ⁻⁰⁷
0.07767 to 0.0225	3.3561850 x 10 ⁻⁰³	2.6916079 x 10 ⁻⁰⁴	1.4411373 x 10 ⁻⁰⁶	-1.2399931 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	54.870000	6.83	9.6277428
-45	39.250000	6.58	8.6774616
-40	28.420000	6.34	7.7765901
-35	20.820000	6.12	6.9214403
-30	15.410000	5.91	6.1086792
-25	11.520000	5.72	5.3352872
-20	8.701000	5.53	4.5985226
-15	6.629000	5.35	3.8958904
-10	5.094000	5.19	3.2251151
-5	3.946000	5.03	2.5841178
0	3.081000	4.86	1.9709948
5	2.425000	4.71	1.5618156
10	1.924000	4.56	1.160373
15	1.536000	4.43	0.7664148
20	1.236000	4.29	0.3797005
25	1.000000	4.17	0
30	0.814300	4.05	0.3729067
35	0.667000	3.94	0.73923
40	0.549400	3.83	1.0991714
45	0.454900	3.72	1.4529238
50	0.378600	3.60	1.8006721
55	0.317000	3.50	2.1066525
60	0.266700	3.41	2.3907887
65	0.225400	3.32	2.6543632
70	0.191300	3.24	2.8985643
75	0.163100	3.15	3.1244943
80	0.139600	3.08	3.3331772
85	0.119900	3.00	3.5255656
90	0.103400	2.93	3.7025463
95	0.089460	2.86	3.8649461
100	0.077670	2.77	4.0135365
105	0.067740	2.70	4.2688619
110	0.059270	2.64	4.4920077
115	0.052020	2.58	4.6847307
120	0.045800	2.52	4.8486593
125	0.040430	2.46	4.9853045
130	0.035800	2.41	5.0960705
135	0.031780	2.36	5.1822635
140	0.028280	2.31	5.2451001
145	0.025230	2.26	5.2857149
150	0.022570	2.21	5.3051669



Material Type D9.5 – Available Products: RL, NC, MS

Data for material type: D9.5

Temp Range (°C)	Ratio	Beta
0 to 50	9.25	3927
0 to 70	18.77	3926
25 to 50	2.82	3997
25 to 85	9.28	3965
25 to 100	14.53	3970
25 to 125	28.34	3970
37.8 to 104.4	9.54	3972

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7300408 x 10 ⁰¹	6.6673051 x 10 ⁰³	-5.5246661 x 10 ⁰⁵	3.0237888 x 10 ⁰⁷
0 to 50	-1.7451259 x 10 ⁰¹	6.9742767 x 10 ⁰³	-6.7795393 x 10 ⁰⁵	4.4685579 x 10 ⁰⁷
50 to 100	-1.5113251 x 10 ⁰¹	5.4915916 x 10 ⁰³	-4.0012272 x 10 ⁰⁵	3.0838518 x 10 ⁰⁷
100 to 150	-1.2761641 x 10 ⁰¹	3.4549793 x 10 ⁰³	1.5066226 x 10 ⁰⁵	-1.3291514 x 10 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
66.97 to 3.279	3.3573160 x 10 ⁻⁰³	2.5080613 x 10 ⁻⁰⁴	4.2008236 x 10 ⁻⁰⁶	-6.3842900 x 10 ⁻⁰⁸
3.279 to 0.3545	3.3540180 x 10 ⁻⁰³	2.5415585 x 10 ⁻⁰⁴	3.7354242 x 10 ⁻⁰⁶	-7.8037673 x 10 ⁻⁰⁸
0.3545 to 0.06880	3.3623675 x 10 ⁻⁰³	2.6006156 x 10 ⁻⁰⁴	1.6553817 x 10 ⁻⁰⁶	-8.9265938 x 10 ⁻⁰⁸
0.06880 to 0.0196	3.3491833 x 10 ⁻⁰³	2.4905364 x 10 ⁻⁰⁴	-2.1959257 x 10 ⁻⁰⁷	5.9212818 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	66.970000	7.11	8.9621801
-45	47.250000	6.86	8.1762247
-40	33.740000	6.62	7.4133024
-35	24.370000	6.40	6.6722521
-30	17.800000	6.19	5.9519946
-25	13.130000	5.99	5.2515254
-20	9.776000	5.80	4.569908
-15	7.347000	5.63	3.9062679
-10	5.570000	5.46	3.2597878
-5	4.257000	5.30	2.6297022
0	3.279000	5.10	2.0152938
5	2.550000	4.95	1.5746264
10	1.998000	4.81	1.1539316
15	1.576000	4.68	0.7519946
20	1.252000	4.55	0.3676955
25	1.000000	4.43	0
30	0.803800	4.31	0.3520485
35	0.649800	4.20	0.689336
40	0.528200	4.09	1.012684
45	0.431600	3.99	1.3228556
50	0.354500	3.74	1.6205602
55	0.294800	3.63	1.9330747
60	0.246500	3.54	2.227981
65	0.207000	3.44	2.5062746
70	0.174700	3.35	2.7688805
75	0.148100	3.26	3.0166591
80	0.126100	3.18	3.250412
85	0.107700	3.10	3.4708866
90	0.092430	3.03	3.6787806
95	0.079610	2.95	3.874746
100	0.068800	2.86	4.0593929
105	0.059770	2.78	4.1527077
110	0.052110	2.70	4.2475235
115	0.045600	2.63	4.3437222
120	0.040050	2.56	4.4411935
125	0.035290	2.50	4.5398341
130	0.031190	2.44	4.6395467
135	0.027660	2.37	4.7402407
140	0.024600	2.31	4.8418306
145	0.021940	2.26	4.9442364
150	0.019630	2.20	5.0473829



Material Type F9.6 – Available Products: MS

Data for material type: F9.6

Temp Range (°C)	Ratio	Beta
0 to 50	8.79	3837
0 to 70	17.96	3867
25 to 50	2.75	3899
25 to 85	9.17	3943
25 to 100	14.42	3959
25 to 125	28.74	3986
37.8 to 104.4	9.62	3987

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.6499247 x 10 ⁰¹	6.2917907 x 10 ⁰³	-5.0137339 x 10 ⁰⁵	2.7441428 x 10 ⁰⁷
0 to 50	-1.6703899 x 10 ⁰¹	6.5681637 x 10 ⁰³	-6.0779712 x 10 ⁰⁵	4.0061374 x 10 ⁰⁷
50 to 100	-1.5313979 x 10 ⁰¹	5.6124967 x 10 ⁰³	-4.2041691 x 10 ⁰⁵	3.2402645 x 10 ⁰⁷
100 to 150	-1.6024924 x 10 ⁰¹	6.3176611 x 10 ⁰³	-6.5182667 x 10 ⁰⁵	5.7504537 x 10 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
60.16 to 3.195	3.3545590 x 10 ⁻⁰³	2.5903082 x 10 ⁻⁰⁴	4.1929419 x 10 ⁻⁰⁶	-7.1497776 x 10 ⁻⁰⁸
3.195 to 0.3636	3.3540178 x 10 ⁻⁰³	2.6021087 x 10 ⁻⁰⁴	3.5946173 x 10 ⁻⁰⁶	-8.5676875 x 10 ⁻⁰⁸
0.3636 to 0.06933	3.3531474 x 10 ⁻⁰³	2.5743868 x 10 ⁻⁰⁴	1.7022402 x 10 ⁻⁰⁶	-8.8297492 x 10 ⁻⁰⁸
0.06933 to 0.0187	3.3547977 x 10 ⁻⁰³	2.5879299 x 10 ⁻⁰⁴	1.8964602 x 10 ⁻⁰⁶	-1.1884916 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	60.160000	6.93	8.9621801
-45	42.810000	6.68	8.1762247
-40	30.830000	6.45	7.4133024
-35	22.460000	6.23	6.6722521
-30	16.540000	6.02	5.9519946
-25	12.300000	5.83	5.2515254
-20	9.232000	5.64	4.569908
-15	6.994000	5.47	3.9062679
-10	5.344000	5.30	3.2597878
-5	4.116000	5.14	2.6297022
0	3.195000	5.00	2.0152938
5	2.498000	4.85	1.5746264
10	1.967000	4.71	1.1539316
15	1.560000	4.57	0.7519946
20	1.245000	4.45	0.3676955
25	1.000000	4.32	0
30	0.808000	4.21	0.3520485
35	0.656500	4.10	0.689336
40	0.536400	3.99	1.012684
45	0.440500	3.89	1.3228556
50	0.363600	3.78	1.6205602
55	0.301900	3.67	1.9330747
60	0.251900	3.57	2.227981
65	0.211200	3.48	2.5062746
70	0.177900	3.39	2.7688805
75	0.150500	3.30	3.0166591
80	0.127900	3.22	3.250412
85	0.109100	3.14	3.4708866
90	0.093450	3.06	3.6787806
95	0.080350	2.99	3.874746
100	0.069330	2.92	4.0593929
105	0.060020	2.85	4.1527077
110	0.052130	2.79	4.2475235
115	0.045420	2.72	4.3437222
120	0.039700	2.66	4.4411935
125	0.034800	2.61	4.5398341
130	0.030590	2.55	4.6395467
135	0.026960	2.50	4.7402407
140	0.023830	2.45	4.8418306
145	0.021120	2.39	4.9442364
150	0.018760	2.35	5.0473829



Material Type P9.7 – Available Products: SP

Data for material type: P9.7

Temp Range (°C)	Ratio	Beta
0 to 50	9.06	3891
0 to 70	18.64	3917
25 to 50	2.78	3934
25 to 85	9.36	3981
25 to 100	14.82	3999
25 to 125	29.79	4029
37.8 to 104.4	9.84	4027

To calculate R_t/R_{25} at temperatures other than those listed in the table, use the following equation:

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.5121815 x 10 ⁰¹	5.3051754 x 10 ⁰³	-2.90851754 x 10 ⁰⁵	1.5919020 x 10 ⁰⁷
0 to 50	-1.5707708 x 10 ⁰¹	5.7832264 x 10 ⁰³	-4.2103540 x 10 ⁰⁵	2.7751459 x 10 ⁰⁷
50 to 100	-9.3880754 x 10 ⁰¹	6.0137424 x 10 ⁰³	-5.1352303 x 10 ⁰⁵	3.9578581 x 10 ⁰⁷
100 to 150	-1.6267532 x 10 ⁰¹	6.4400358 x 10 ⁰³	-6.7233836 x 10 ⁰⁵	5.9314090 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
69.68 to 3.265	3.3539540 x 10 ⁻⁰³	2.5682855 x 10 ⁻⁰⁴	2.3119915 x 10 ⁻⁰⁶	-5.5896405 x 10 ⁻⁰⁸
3.265 to 0.3603	3.3540172 x 10 ⁻⁰³	2.5670858 x 10 ⁻⁰⁴	2.3927749 x 10 ⁻⁰⁶	-7.6632007 x 10 ⁻⁰⁸
0.3603 to 0.06748	3.3538682 x 10 ⁻⁰³	2.5624713 x 10 ⁻⁰⁴	2.0661774 x 10 ⁻⁰⁶	-9.3880754 x 10 ⁻⁰⁸
0.06748 to 0.0179	3.3534672 x 10 ⁻⁰³	2.5580127 x 10 ⁻⁰⁴	1.8988588 x 10 ⁻⁰⁶	-1.1502468 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	69.680000	7.35	0.576866
-45	48.620000	7.06	0.7049465
-40	34.400000	6.79	0.8057808
-35	24.660000	6.53	0.8814745
-30	17.900000	6.30	0.9339607
-25	13.140000	6.07	0.9650157
-20	9.753000	5.86	0.9762733
-15	7.314000	5.66	0.9692375
-10	5.539000	5.47	0.9452938
-5	4.234000	5.29	0.9057197
0	3.265000	5.12	0.8516941
5	2.539000	4.95	0.6474621
10	1.989000	4.80	0.4613288
15	1.571000	4.65	0.2920942
20	1.249000	4.52	0.1386561
25	1.000000	4.38	1.11E-14
30	0.805800	4.26	0.1248089
35	0.653300	4.14	0.2366334
40	0.532800	4.02	0.3362708
45	0.437000	3.91	0.4244591
50	0.360300	3.81	0.5018821
55	0.298700	3.70	0.6382078
60	0.248800	3.61	0.7829818
65	0.208300	3.51	0.9355965
70	0.175100	3.42	1.0954843
75	0.147900	3.34	1.262115
80	0.125400	3.25	1.4349932
85	0.106800	3.17	1.6136556
90	0.091320	3.10	1.7976688
95	0.078360	3.03	1.9866274
100	0.067480	2.96	2.180152
105	0.058310	2.89	2.2616915
110	0.050550	2.82	2.3926935
115	0.043970	2.76	2.5703846
120	0.038360	2.70	2.7920885
125	0.033570	2.64	3.055226
130	0.029460	2.58	3.3573156
135	0.025930	2.53	3.6959726
140	0.022880	2.48	4.0689085
145	0.020240	2.43	4.4739296
150	0.017950	2.38	4.9089352



Material Type D9.7A – Available Products: RL, MS

Data for material type: D9.7A

Temp Range (°C)	Ratio	Beta
0 to 50	9.11	3900
0 to 70	18.70	3921
25 to 50	2.78	3938
25 to 85	9.32	3972
25 to 100	14.67	3984
25 to 125	29.06	4000
37.8 to 104.4	9.71	4003

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.6443767 x 10 ⁰¹	6.1080608 x 10 ⁰³	-4.4141671 x 10 ⁰⁵	2.4159818 x 10 ⁰⁷
0 to 50	-1.5470381 x 10 ⁰¹	5.6022839 x 10 ⁰³	-3.7886070 x 10 ⁰⁵	2.4971623 x 10 ⁰⁷
50 to 100	-1.4807463 x 10 ⁰¹	5.1550854 x 10 ⁰³	-2.9717659 x 10 ⁰⁵	2.2904187 x 10 ⁰⁷
100 to 150	-1.4862658 x 10 ⁰¹	5.2676519 x 10 ⁰³	-3.5374848 x 10 ⁰⁵	3.1207901 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
69.26 to 3.277	3.3570420 x 10 ⁻⁰³	2.5214848 x 10 ⁻⁰⁴	3.3743283 x 10 ⁻⁰⁶	-6.4957311 x 10 ⁻⁰⁸
3.277 to 0.3599	3.3540170 x 10 ⁻⁰³	2.5617244 x 10 ⁻⁰⁴	2.1400943 x 10 ⁻⁰⁶	-7.2405219 x 10 ⁻⁰⁸
0.3599 to 0.06816	3.3530481 x 10 ⁻⁰³	2.5420230 x 10 ⁻⁰⁴	1.1431163 x 10 ⁻⁰⁶	-6.9383563 x 10 ⁻⁰⁸
0.06816 to 0.0187	3.3536166 x 10 ⁻⁰³	2.5377200 x 10 ⁻⁰⁴	8.5433271 x 10 ⁻⁰⁷	-8.7912262 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	69.260000	7.25	5.9747867
-45	48.550000	6.98	5.4508164
-40	34.470000	6.73	4.9422016
-35	24.780000	6.49	4.4481681
-30	18.010000	6.27	3.9679964
-25	13.240000	6.06	3.5010107
-20	9.832000	5.86	3.0466053
-15	7.372000	5.67	2.6041786
-10	5.579000	5.49	2.1731918
-5	4.258000	5.32	1.7531348
0	3.277000	5.14	1.3435292
5	2.546000	4.97	1.0497509
10	1.993000	4.82	0.7692877
15	1.573000	4.67	0.5013297
20	1.250000	4.53	0.2451304
25	1.000000	4.39	0
30	0.805500	4.26	0.234699
35	0.652800	4.14	0.4595573
40	0.532300	4.03	0.6751227
45	0.436500	3.91	0.8819037
50	0.359900	3.81	1.0803735
55	0.298300	3.70	1.2887164
60	0.248600	3.60	1.4853207
65	0.208200	3.50	1.6708498
70	0.175200	3.40	1.8459203
75	0.148200	3.31	2.0111061
80	0.125800	3.23	2.1669413
85	0.107300	3.14	2.3139244
90	0.091890	3.06	2.4525204
95	0.078990	2.99	2.583164
100	0.068160	2.90	2.7062619
105	0.059060	2.83	2.7684718
110	0.051340	2.77	2.8316823
115	0.044790	2.70	2.8958148
120	0.039200	2.64	2.9607957
125	0.034410	2.57	3.026556
130	0.030300	2.52	3.0930312
135	0.026760	2.46	3.1601605
140	0.023690	2.40	3.2278871
145	0.021040	2.35	3.2961576
150	0.018730	2.30	3.3649219



Material Type S10.0 – Available Products: UD

Data for material type: S10.0

Temp Range (°C)	Ratio	Beta
0 to 50	9.68	4007
0 to 70	20.15	4021
25 to 50	2.84	4022
25 to 85	9.71	4045
25 to 100	15.31	4048
25 to 125	30.53	4058
37.8 to 104.4	10.02	4059

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.6866908 x 10 ⁰¹	6.2294562 x 10 ⁰³	2.4417555 x 10 ⁰⁵	2.4067033 x 10 ⁰⁷
0 to 50	-1.4320597 x 10 ⁰¹	4.6338319 x 10 ⁰³	2.4944559 x 10 ⁰⁵	9.1871170 x 10 ⁰⁶
50 to 100	-1.3528266 x 10 ⁰¹	3.9881319 x 10 ⁰³	2.4577208 x 10 ⁰⁴	-1.5144560 x 10 ⁰⁶
100 to 150	-1.2613978 x 10 ⁰¹	3.0686669 x 10 ⁰³	2.3859694 x 10 ⁰⁵	-2.6733134 x 10 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
80.20 to 3.409	3.3570409 x 10 ⁻⁰³	2.4417555 x 10 ⁻⁰⁴	3.0473488 x 10 ⁻⁰⁶	-5.8373827 x 10 ⁻⁰⁸
3.409 to 0.3522	3.3540165 x 10 ⁻⁰³	2.4944559 x 10 ⁻⁰⁴	7.2796857 x 10 ⁻⁰⁷	-3.1440043 x 10 ⁻⁰⁸
0.3522 to 0.06531	3.3510893 x 10 ⁻⁰³	2.4577208 x 10 ⁻⁰⁴	-6.5570225 x 10 ⁻⁰⁷	5.6137262 x 10 ⁻⁰⁹
0.06531 to 0.0179	3.3356311 x 10 ⁻⁰³	2.3859694 x 10 ⁻⁰⁴	-3.2335321 x 10 ⁻⁰⁷	1.1394256 x 10 ⁻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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	80.200000	7.51	9.429826
-45	55.490000	7.23	8.6519716
-40	38.920000	6.97	7.8912872
-35	27.650000	6.72	7.1471232
-30	19.880000	6.49	6.4188633
-25	14.450000	6.27	5.7059224
-20	10.620000	6.06	5.0077444
-15	7.884000	5.86	4.323801
-10	5.909000	5.68	3.6535896
-5	4.469000	5.50	2.9966322
0	3.409000	5.34	2.3524733
5	2.623000	5.16	1.8709272
10	2.036000	4.98	1.394947
15	1.594000	4.82	0.924496
20	1.258000	4.66	0.4595303
25	1.000000	4.51	3.701E-14
30	0.801000	4.37	0.4541499
35	0.646000	4.23	0.9029788
40	0.524500	4.11	1.3465495
45	0.428500	3.98	1.7849276
50	0.352200	3.89	2.2181811
55	0.290800	3.78	2.6111991
60	0.241400	3.66	2.9956725
65	0.201600	3.56	3.3719324
70	0.169200	3.45	3.7402918
75	0.142700	3.35	4.101047
80	0.121000	3.26	4.4544788
85	0.103000	3.17	4.8008531
90	0.088140	3.08	5.1404224
95	0.075720	3.00	5.4734264
100	0.065310	2.96	5.800093
105	0.056460	2.88	6.1668357
110	0.048990	2.80	6.4892849
115	0.042680	2.72	6.7698172
120	0.037330	2.65	7.0106422
125	0.032760	2.58	7.2138164
130	0.028850	2.51	7.381256
135	0.025490	2.44	7.5147485
140	0.022590	2.38	7.6159637
145	0.020080	2.32	7.6864622
150	0.017910	2.26	7.7277049



Material Type D10.3 – Available Products: RL, MS, SA, NC

Data for material type: D10.3

Temp Range (°C)	Ratio	Beta
0 to 50	9.59	3991
0 to 70	20.05	4015
25 to 50	2.85	4038
25 to 85	9.86	4073
25 to 100	15.70	4085
25 to 125	31.65	4101
37.8 to 104.4	10.29	4106

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7642468 x 10 ⁰¹	6.8080897 x 10 ⁰³	-5.6629170 x 10 ⁰⁵	3.0994570 x 10 ⁰⁷
0 to 50	-1.6297435 x 10 ⁰¹	6.0647292 x 10 ⁰³	-4.6148486 x 10 ⁰⁵	3.0417580 x 10 ⁰⁷
50 to 100	-1.5174585 x 10 ⁰¹	5.2798047 x 10 ⁰³	-3.0330666 x 10 ⁰⁵	2.3376648 x 10 ⁰⁷
100 to 150	-1.4556547 x 10 ⁰¹	4.7622671 x 10 ⁰³	-1.7495470 x 10 ⁰⁵	1.5434608 x 10 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
72.50 to 3.363	3.3564846 x 10 ⁻⁰³	2.4622340 x 10 ⁻⁰⁴	4.0776512 x 10 ⁻⁰⁶	-6.0295285 x 10 ⁻⁰⁸
3.363 to 0.3507	3.3540172 x 10 ⁻⁰³	2.5027462 x 10 ⁻⁰⁴	2.4300527 x 10 ⁻⁰⁶	-7.2909526 x 10 ⁻⁰⁸
0.3507 to 0.06370	3.3530496 x 10 ⁻⁰³	2.4792929 x 10 ⁻⁰⁴	1.0822040 x 10 ⁻⁰⁶	-6.4194339 x 10 ⁻⁰⁸
0.06370 to 0.0169	3.3467185 x 10 ⁻⁰³	2.4342924 x 10 ⁻⁰⁴	3.3465275 x 10 ⁻⁰⁷	-4.5415459 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	72.500000	7.23	5.6578956
-45	50.830000	6.98	5.191183
-40	36.090000	6.74	4.7347723
-35	25.920000	6.51	4.2882739
-30	18.820000	6.30	3.851318
-25	13.800000	6.10	3.4235534
-20	10.230000	5.91	3.0046466
-15	7.646000	5.73	2.5942806
-10	5.767000	5.56	2.1921538
-5	4.386000	5.39	1.7979793
0	3.363000	5.24	1.411484
5	2.599000	5.08	1.1225563
10	2.024000	4.92	0.8369682
15	1.589000	4.77	0.5546976
20	1.256000	4.63	0.2757182
25	1.000000	4.50	2.22E-14
30	0.801300	4.37	0.27249
35	0.646100	4.25	0.5417873
40	0.524100	4.13	0.8079297
45	0.427600	4.02	1.0709566
50	0.350700	3.90	1.3309087
55	0.289400	3.79	1.5667195
60	0.240000	3.69	1.7974035
65	0.200100	3.59	2.0231594
70	0.167700	3.49	2.2441751
75	0.141200	3.40	2.4606282
80	0.119400	3.31	2.6726873
85	0.101400	3.22	2.8805119
90	0.086520	3.14	3.0842534
95	0.074090	3.06	3.2840559
100	0.063700	2.99	3.4800558
105	0.054970	2.91	3.70001014
110	0.047610	2.84	3.8935709
115	0.041390	2.77	4.0618903
120	0.036100	2.70	4.2063853
125	0.031600	2.63	4.3282898
130	0.027740	2.57	4.4287536
135	0.024430	2.51	4.5088491
140	0.021580	2.45	4.5695782
145	0.019120	2.40	4.6118773
150	0.016980	2.34	4.636623



Material Type S10.5 – Available Products: UD

Data for material type: S10.5

Temp Range (°C)	Ratio	Beta
0 to 50	10.12	4085
0 to 70	21.31	4096
25 to 50	2.90	4110
25 to 85	10.16	4125
25 to 100	16.22	4134
25 to 125	32.73	4141
37.8 to 104.4	10.52	4144

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7159688 x 10 ⁰¹	6.3308802 x 10 ⁰³	-4.4505347 x 10 ⁰⁵	2.4358897 x 10 ⁰⁷
0 to 50	-1.5196362 x 10 ⁰¹	5.1490779 x 10 ⁰³	-2.3665929 x 10 ⁰⁵	1.5598785 x 10 ⁰⁷
50 to 100	-1.5036719 x 10 ⁰¹	5.0946294 x 10 ⁰³	-2.4617882 x 10 ⁰⁵	1.8973654 x 10 ⁰⁷
100 to 150	-1.3982702 x 10 ⁰¹	4.1877968 x 10 ⁰³	-4.8576985 x 10 ⁰³	4.2854900 x 10 ⁰⁵

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
86.96 to 3.483	3.3573658 x 10 ⁻⁰³	2.3976249 x 10 ⁻⁰⁴	2.9186292 x 10 ⁻⁰⁶	-5.5139566 x 10 ⁻⁰⁸
3.483 to 0.3443	3.3540167 x 10 ⁻⁰³	2.4461895 x 10 ⁻⁰⁴	1.1649647 x 10 ⁻⁰⁶	-4.4991361 x 10 ⁻⁰⁸
0.3443 to 0.06164	3.3547004 x 10 ⁻⁰³	2.4492243 x 10 ⁻⁰⁴	8.3969261 x 10 ⁻⁰⁷	-5.3078460 x 10 ⁻⁰⁸
0.06164 to 0.0164	3.3480791 x 10 ⁻⁰³	2.3982662 x 10 ⁻⁰⁴	7.6684516 x 10 ⁻⁰⁹	-1.4110860 x 10 ⁻⁰⁹

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	86.960000	7.65	8.5031159
-45	59.750000	7.37	7.6720988
-40	41.620000	7.10	6.8987649
-35	29.380000	6.85	6.1786417
-30	20.990000	6.61	5.5076906
-25	15.170000	6.39	4.8822561
-20	11.080000	6.17	4.299022
-15	8.182000	5.97	3.7549735
-10	6.099000	5.78	3.2473642
-5	4.589000	5.60	2.7736876
0	3.483000	5.42	2.3316514
5	2.668000	5.24	1.8714515
10	2.063000	5.07	1.4075627
15	1.608000	4.90	0.9406385
20	1.263000	4.75	0.4712718
25	1.000000	4.60	0
30	0.797400	4.46	0.472689
35	0.640200	4.33	0.9463527
40	0.517400	4.20	1.4205895
45	0.420800	4.07	1.8950351
50	0.344300	3.94	2.3693589
55	0.283500	3.83	2.6669441
60	0.234700	3.72	2.9814288
65	0.195400	3.62	3.3115592
70	0.163500	3.52	3.6561646
75	0.137400	3.42	4.0141517
80	0.116100	3.33	4.3844991
85	0.098460	3.25	4.766252
90	0.083890	3.16	5.1585178
95	0.071760	3.08	5.5604619
100	0.061640	3.00	5.9713034
105	0.053170	2.92	6.1675063
110	0.046040	2.84	6.3833198
115	0.040020	2.77	6.6175817
120	0.034900	2.70	6.8691928
125	0.030550	2.63	7.1371133
130	0.026830	2.57	7.4203596
135	0.023630	2.50	7.7180012
140	0.020880	2.44	8.0291573
145	0.018510	2.39	8.3529945
150	0.016450	2.33	8.6887236



Material Type S10.7 – Available Products: UD

Data for material type: S10.7

Temp Range (°C)	Ratio	Beta
0 to 50	10.30	4117
0 to 70	21.83	4128
25 to 50	2.93	4145
25 to 85	10.36	4161
25 to 100	16.61	4168
25 to 125	33.64	4173
37.8 to 104.4	10.72	4178

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7806855 x 10 ⁰¹	6.6913499 x 10 ⁰³	-5.0700649 x 10 ⁰⁵	2.7749741 x 10 ⁰⁷
0 to 50	-1.5557214 x 10 ⁰¹	5.3625389 x 10 ⁰³	-2.7718416 x 10 ⁰⁵	1.8269877 x 10 ⁰⁷
50 to 100	-1.5054986 x 10 ⁰¹	5.0483675 x 10 ⁰³	-2.2530458 x 10 ⁰⁵	1.7364821 x 10 ⁰⁷
100 to 150	-1.4842972 x 10 ⁰¹	4.9344102 x 10 ⁰³	-2.1709181 x 10 ⁰⁵	1.9151968 x 10 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
89.53 to 3.513	3.3590436 x 10 ⁻⁰³	2.3639206 x 10 ⁻⁰⁴	3.2017589 x 10 ⁻⁰⁶	-5.4263672 x 10 ⁻⁰⁸
3.513 to 0.3411	3.3540167 x 10 ⁻⁰³	2.4273295 x 10 ⁻⁰⁴	1.3328516 x 10 ⁻⁰⁶	-4.9081822 x 10 ⁻⁰⁸
0.3411 to 0.06022	3.3545241 x 10 ⁻⁰³	2.4257068 x 10 ⁻⁰⁴	7.4466320 x 10 ⁻⁰⁷	-4.7905533 x 10 ⁻⁰⁸
0.06022 to 0.0159	3.3571801 x 10 ⁻⁰³	2.4263457 x 10 ⁻⁰⁴	4.1605318 x 10 ⁻⁰⁷	-5.3222558 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	89.530000	7.67	7.549274
-45	61.450000	7.39	6.929628
-40	42.750000	7.13	6.334988
-35	30.130000	6.88	5.7637473
-30	21.480000	6.65	5.2144367
-25	15.500000	6.43	4.6857101
-20	11.300000	6.22	4.1763318
-15	8.319000	6.02	3.6851651
-10	6.186000	5.84	3.2111628
-5	4.641000	5.66	2.7533581
0	3.513000	5.45	2.3108575
5	2.687000	5.27	1.8241807
10	2.073000	5.10	1.3503314
15	1.613000	4.94	0.8887159
20	1.265000	4.78	0.4387788
25	1.000000	4.64	1.485E-14
30	0.796000	4.50	0.4281084
35	0.637900	4.36	0.8460043
40	0.514600	4.23	1.2541181
45	0.417700	4.11	1.6528549
50	0.341100	3.98	2.0425962
55	0.280400	3.86	2.4321163
60	0.231800	3.75	2.8122372
65	0.192600	3.65	3.1833484
70	0.160900	3.55	3.5458176
75	0.135100	3.45	3.8999916
80	0.113900	3.36	4.2461979
85	0.096540	3.27	4.5847462
90	0.082150	3.19	4.9159295
95	0.070190	3.11	5.2400254
100	0.060220	3.01	5.5572968
105	0.051920	2.93	5.8992986
110	0.044930	2.86	6.2292682
115	0.039020	2.79	6.5477513
120	0.034000	2.72	6.8552623
125	0.029730	2.65	7.1522857
130	0.026080	2.59	7.439279
135	0.022940	2.53	7.7166738
140	0.020250	2.47	7.9848783
145	0.017920	2.42	8.2442782
150	0.015900	2.36	8.4952389



Material Type S10.9 – Available Products: UD

Data for material type: S10.9

Temp Range (°C)	Ratio	Beta
0 to 50	10.48	4147
0 to 70	22.32	4158
25 to 50	2.96	4176
25 to 85	10.53	4190
25 to 100	16.94	4198
25 to 125	34.56	4205
37.8 to 104.4	10.91	4208

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.7804976 x 10 ⁰¹	6.6661922 x 10 ⁰³	-4.9774218 x 10 ⁰⁵	2.7242682 x 10 ⁰⁷
0 to 50	-1.5710129 x 10 ⁰¹	5.4294501 x 10 ⁰³	-2.8534465 x 10 ⁰⁵	1.8807754 x 10 ⁰⁷
50 to 100	-1.5166411 x 10 ⁰¹	5.0887869 x 10 ⁰³	-2.2828274 x 10 ⁰⁵	1.7594356 x 10 ⁰⁷
100 to 150	-1.4734544 x 10 ⁰¹	4.7531896 x 10 ⁰³	-1.5196510 x 10 ⁰⁵	1.3406452 x 10 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
92.22 to 3.545	3.3584052 x 10 ⁻⁰³	2.3527874 x 10 ⁻⁰⁴	3.0966178 x 10 ⁻⁰⁶	-5.3341075 x 10 ⁻⁰⁸
3.545 to 0.3384	3.3540167 x 10 ⁻⁰³	2.4095941 x 10 ⁻⁰⁴	1.3421911 x 10 ⁻⁰⁶	-4.8750616 x 10 ⁻⁰⁸
0.3384 to 0.05902	3.3546894 x 10 ⁻⁰³	2.4092488 x 10 ⁻⁰⁴	7.3925177 x 10 ⁻⁰⁷	-4.7166850 x 10 ⁻⁰⁸
0.05902 to 0.0154	3.3531235 x 10 ⁻⁰³	2.3895783 x 10 ⁻⁰⁴	2.6671753 x 10 ⁻⁰⁷	-3.7612903 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	92.220000	7.73	7.6903819
-45	63.130000	7.44	7.0591538
-40	43.810000	7.18	6.453399
-35	30.800000	6.93	5.8714809
-30	21.910000	6.69	5.3119028
-25	15.770000	6.47	4.7732935
-20	11.480000	6.26	4.2543941
-15	8.436000	6.06	3.7540467
-10	6.262000	5.87	3.2711845
-5	4.691000	5.69	2.8048227
0	3.545000	5.49	2.3540511
5	2.706000	5.31	1.8582775
10	2.084000	5.14	1.3755713
15	1.619000	4.97	0.9053275
20	1.268000	4.82	0.4469803
25	1.000000	4.67	0
30	0.794600	4.53	0.4361104
35	0.635800	4.39	0.8618174
40	0.512100	4.27	1.2775596
45	0.415000	4.14	1.6837494
50	0.338400	4.01	2.0807755
55	0.277800	3.89	2.4775765
60	0.229300	3.78	2.8648023
65	0.190300	3.67	3.2428503
70	0.158800	3.57	3.6120946
75	0.133200	3.48	3.9728886
80	0.112200	3.38	4.3255661
85	0.094930	3.29	4.6704424
90	0.080690	3.21	5.0078161
95	0.068870	3.13	5.3379698
100	0.059020	3.04	5.6611715
105	0.050810	2.96	6.0095659
110	0.043900	2.88	6.3457031
115	0.038070	2.81	6.6701392
120	0.033140	2.74	6.983398
125	0.028940	2.68	7.2859733
130	0.025350	2.61	7.5783309
135	0.022280	2.55	7.8609107
140	0.019640	2.49	8.1341283
145	0.017370	2.43	8.3983769
150	0.015400	2.38	8.6540284



Material Type S11.1 – Available Products: UD

Data for material type: S11.1

Temp Range (°C)	Ratio	Beta
0 to 50	10.64	4174
0 to 70	22.81	4187
25 to 50	2.98	4205
25 to 85	10.73	4223
25 to 100	17.33	4231
25 to 125	35.54	4239
37.8 to 104.4	11.12	4243

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.8010356 x 10 ⁰¹	6.7683622 x 10 ⁰³	-5.1272722 x 10 ⁰⁵	2.8062852 x 10 ⁰⁷
0 to 50	-1.5866931 x 10 ⁰¹	5.5033836 x 10 ⁰³	-2.9574941 x 10 ⁰⁵	1.9493557 x 10 ⁰⁷
50 to 100	-1.5366608 x 10 ⁰¹	5.1924158 x 10 ⁰³	-2.4581020 x 10 ⁰⁵	1.8945243 x 10 ⁰⁷
100 to 150	-1.4997245 x 10 ⁰¹	4.9270260 x 10 ⁰³	-1.9308986 x 10 ⁰⁵	1.7034503 x 10 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
94.59 to 3.573	3.3584600 x 10 ⁻⁰³	2.3365646 x 10 ⁻⁰⁴	3.1277274 x 10 ⁻⁰⁶	-5.2409093 x 10 ⁻⁰⁸
3.573 to 0.3359	3.3540168 x 10 ⁻⁰³	2.3938569 x 10 ⁻⁰⁴	1.3639909 x 10 ⁻⁰⁶	-4.8779055 x 10 ⁻⁰⁸
0.3359 to 0.05771	3.3544058 x 10 ⁻⁰³	2.3910451 x 10 ⁻⁰⁴	7.7977021 x 10 ⁻⁰⁷	-4.8455338 x 10 ⁻⁰⁸
0.05771 to 0.0148	3.3544523 x 10 ⁻⁰³	2.3784814 x 10 ⁻⁰⁴	3.4338360 x 10 ⁻⁰⁷	-4.5015955 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	94.590000	7.76	7.8314899
-45	64.630000	7.48	7.1886795
-40	44.780000	7.21	6.57181
-35	31.420000	6.96	5.9792145
-30	22.320000	6.73	5.4093689
-25	16.040000	6.50	4.8608769
-20	11.650000	6.29	4.3324564
-15	8.549000	6.09	3.8229283
-10	6.334000	5.90	3.3312062
-5	4.737000	5.72	2.8562874
0	3.573000	5.53	2.3972447
5	2.724000	5.34	1.8923744
10	2.094000	5.17	1.4008111
15	1.624000	5.01	0.921939
20	1.270000	4.85	0.4551818
25	1.000000	4.70	0
30	0.793400	4.56	0.4441124
35	0.633900	4.42	0.8776306
40	0.509800	4.30	1.301001
45	0.412600	4.17	1.7146439
50	0.335900	4.04	2.1189549
55	0.275300	3.92	2.5230366
60	0.226900	3.81	2.9173675
65	0.188100	3.71	3.3023521
70	0.156700	3.60	3.6783716
75	0.131200	3.51	4.0457857
80	0.110300	3.41	4.4049343
85	0.093230	3.32	4.7561386
90	0.079130	3.24	5.0997026
95	0.067440	3.16	5.4359142
100	0.057710	3.06	5.7650462
105	0.049630	2.98	6.1198331
110	0.042830	2.91	6.462138
115	0.037110	2.84	6.7925271
120	0.032260	2.77	7.1115338
125	0.028140	2.70	7.4196609
130	0.024630	2.64	7.7173828
135	0.021620	2.57	8.0051476
140	0.019040	2.51	8.2833784
145	0.016810	2.46	8.5524756
150	0.014890	2.40	8.8128179



Material Type S12.0 – Available Products: RL, MS, NC, UD

Data for material type: D12.0

Temp Range (°C)	Ratio	Beta
0 to 50	11.42	4300
0 to 70	25.08	4314
25 to 50	3.08	4335
25 to 85	11.56	4356
25 to 100	18.99	4367
25 to 125	39.83	4374
37.8 to 104.4	12.02	4380

To calculate R_t/R_{25} at temperatures other than those listed in the table, use the following equation:

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.8393219 x 10 ⁰¹	6.9172170 x 10 ⁰³	-5.2439951 x 10 ⁰⁵	2.8701706 x 10 ⁰⁷
0 to 50	-1.6634994 x 10 ⁰¹	5.8763651 x 10 ⁰³	-3.5086176 x 10 ⁰⁵	2.3126145 x 10 ⁰⁷
50 to 100	-1.6260733 x 10 ⁰¹	5.6896214 x 10 ⁰³	-3.3885090 x 10 ⁰⁵	2.6116137 x 10 ⁰⁷
100 to 150	-1.6347069 x 10 ⁰¹	5.9049156 x 10 ⁰³	-4.4157598 x 10 ⁰⁵	3.8956096 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
105.30 to 3.708	3.3562675 x 10 ⁻⁰³	2.2867106 x 10 ⁻⁰⁴	3.0023339 x 10 ⁻⁰⁶	-4.9166554 x 10 ⁻⁰⁸
3.708 to 0.3247	3.3540169 x 10 ⁻⁰³	2.3238314 x 10 ⁻⁰⁴	1.4799309 x 10 ⁻⁰⁶	-4.8940483 x 10 ⁻⁰⁸
0.3247 to 0.05265	3.3550070 x 10 ⁻⁰³	2.3273088 x 10 ⁻⁰⁴	1.0001279 x 10 ⁻⁰⁶	-5.4722780 x 10 ⁻⁰⁸
0.05265 to 0.0129	3.3638469 x 10 ⁻⁰³	2.3552593 x 10 ⁻⁰⁴	8.6665836 x 10 ⁻⁰⁷	-7.6116315 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	105.300000	7.93	6.2084394
-45	71.370000	7.64	5.8975088
-40	49.060000	7.37	5.5596574
-35	34.170000	7.11	5.1975943
-30	24.090000	6.87	4.813773
-25	17.190000	6.64	4.4104183
-20	12.400000	6.43	3.9895491
-15	9.039000	6.22	3.5529993
-10	6.654000	6.03	3.1024365
-5	4.945000	5.85	2.6393777
0	3.708000	5.68	2.1652045
5	2.805000	5.50	1.7272058
10	2.140000	5.32	1.291536
15	1.648000	5.15	0.8583556
20	1.279000	4.99	0.4278036
25	1.000000	4.84	0
30	0.787900	4.70	0.424952
35	0.625100	4.56	0.8469645
40	0.499300	4.43	1.2659631
45	0.401400	4.30	1.6818855
50	0.324700	4.16	2.0946802
55	0.264500	4.04	2.4127985
60	0.021670	3.93	2.7383626
65	0.178500	3.82	3.0707235
70	0.147900	3.72	3.4092785
75	0.123100	3.62	3.753468
80	0.102900	3.53	4.1027718
85	0.086480	3.44	4.4567064
90	0.072990	3.35	4.8148218
95	0.061860	3.27	5.1766996
100	0.052650	3.14	5.5419504
105	0.045080	3.07	5.8873508
110	0.038740	3.00	6.2251855
115	0.033410	2.92	6.5557337
120	0.028920	2.86	6.8792609
125	0.025110	2.79	7.1960189
130	0.021870	2.73	7.5062475
135	0.019110	2.67	7.8101747
140	0.016750	2.61	8.1080177
145	0.014730	2.55	8.3999831
150	0.012980	2.50	8.6862684



Material Type D12.2 – Available Products: RL, MS, NC

Data for material type: D12.2

Temp Range (°C)	Ratio	Beta
0 to 50	11.07	4244
0 to 70	24.44	4280
25 to 50	3.06	4312
25 to 85	11.62	4365
25 to 100	19.19	4383
25 to 125	41.30	4417
37.8 to 104.4	12.27	4416

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-1.791861 x 10 ⁰¹	6.8143133 x 10 ⁰³	-5.3633730 x 10 ⁰⁵	2.9355090 x 10 ⁰⁷
0 to 50	-1.8419094 x 10 ⁰¹	7.2238145 x 10 ⁰³	-6.6301746 x 10 ⁰⁵	4.3701080 x 10 ⁰⁷
50 to 100	-1.6877070 x 10 ⁰¹	6.1464358 x 10 ⁰³	-4.4735013 x 10 ⁰⁵	3.4478460 x 10 ⁰⁷
100 to 150	-1.6532084 x 10 ⁰¹	5.8365085 x 10 ⁰³	-3.7630512 x 10 ⁰⁵	3.3197861 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
89.49 to 3.615	3.3505347 x 10 ⁻⁰³	2.3721963 x 10 ⁻⁰⁴	3.4494293 x 10 ⁻⁰⁶	-5.5089698 x 10 ⁻⁰⁸
3.615 to 0.3266	3.3540178 x 10 ⁻⁰³	2.3523316 x 10 ⁻⁰⁴	2.8970198 x 10 ⁻⁰⁶	-6.3414282 x 10 ⁻⁰⁸
0.3266 to 0.05210	3.3525172 x 10 ⁻⁰³	2.3213472 x 10 ⁻⁰⁴	1.3263281 x 10 ⁻⁰⁶	-6.3500803 x 10 ⁻⁰⁸
0.05210 to 0.0122	3.3401422 x 10 ⁻⁰³	2.2590630 x 10 ⁻⁰⁴	6.4595366 x 10 ⁻⁰⁷	-6.0096759 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α(%/°C)	β Deviation† (±%)
-50	89.490000	7.59	6.3119133
-45	61.680000	7.31	5.9958006
-40	43.070000	7.06	5.6523184
-35	30.460000	6.81	5.2842208
-30	21.790000	6.59	4.8940026
-25	15.770000	6.37	4.4839253
-20	11.520000	6.17	4.0560416
-15	8.509000	5.98	3.612216
-10	6.341000	5.79	3.1541437
-5	4.768000	5.62	2.6833673
0	3.615000	5.53	2.2012913
5	2.753000	5.37	1.7559926
10	2.114000	5.21	1.3130616
15	1.635000	5.06	0.8726615
20	1.274000	4.92	0.4349336
25	1.000000	4.78	2.257E-14
30	0.789900	4.65	0.4320345
35	0.627900	4.53	0.8610806
40	0.502100	4.41	1.2870625
45	0.403900	4.30	1.709917
50	0.326600	4.18	2.1295915
55	0.265800	4.07	2.4530119
60	0.217500	3.96	2.784002
65	0.178900	3.85	3.1219022
70	0.147900	3.75	3.4660998
75	0.122900	3.66	3.8160258
80	0.102600	3.56	4.1711514
85	0.086080	3.47	4.5309848
90	0.072510	3.39	4.8950688
95	0.061340	3.31	5.262978
100	0.052100	3.26	5.6343163
105	0.044360	3.18	5.9854734
110	0.037920	3.10	6.3289386
115	0.032540	3.03	6.664996
120	0.028020	2.95	6.9939152
125	0.024210	2.89	7.3159525
130	0.020990	2.82	7.6313516
135	0.018260	2.76	7.9403443
140	0.015940	2.69	8.2431513
145	0.013950	2.63	8.5399829
150	0.012250	2.58	8.8310395



Material Type D13.8 – Available Products: RL

Data for material type: D13.8

Temp Range (°C)	Ratio	Beta
0 to 50	12.12	4404
0 to 70	27.77	4451
25 to 50	3.20	4486
25 to 85	12.97	4561
25 to 100	22.05	4589
25 to 125	49.43	4630
37.8 to 104.4	13.88	4632

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-2.0361452 x 10 ⁰¹	8.1450651 x 10 ⁰³	-7.5831325 x 10 ⁰⁵	4.1504393 x 10 ⁰⁷
0 to 50	-1.9840228 x 10 ⁰¹	8.0140478 x 10 ⁰³	-8.0331068 x 10 ⁰⁵	5.2948144 x 10 ⁰⁷
50 to 100	-1.8833107 x 10 ⁰¹	7.3848239 x 10 ⁰³	-7.1083347 x 10 ⁰⁵	5.4785819 x 10 ⁰⁷
100 to 150	-1.8690248 x 10 ⁰¹	7.3566309 x 10 ⁰³	-7.5091838 x 10 ⁰⁵	6.6246466 x 10 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
104.13 to 3.783	3.3559985 x 10 ⁻⁰³	2.2378858 x 10 ⁻⁰⁴	4.1383963 x 10 ⁻⁰⁶	-3.6522231 x 10 ⁻⁰⁸
3.783 to 0.3122	3.3440182 x 10 ⁻⁰³	2.2663848 x 10 ⁻⁰⁴	3.1381406 x 10 ⁻⁰⁶	-5.3835553 x 10 ⁻⁰⁸
0.3122 to 0.04535	3.3526798 x 10 ⁻⁰³	2.2409820 x 10 ⁻⁰⁴	1.9303234 x 10 ⁻⁰⁶	-6.5206279 x 10 ⁻⁰⁸
0.04535 to 0.0098	3.3472092 x 10 ⁻⁰³	2.2064064 x 10 ⁻⁰⁴	1.3583678 x 10 ⁻⁰⁶	-7.3589609 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	104.100000	7.73	6.0311408
-45	71.210000	7.48	5.4123316
-40	49.310000	7.23	4.8536872
-35	34.550000	7.01	4.3504338
-30	24.470000	6.79	3.8982614
-25	17.520000	6.59	3.4932698
-20	12.660000	6.40	3.1319217
-15	9.242000	6.21	2.8110026
-10	6.805000	6.04	2.527585
-5	5.053000	5.87	2.2789985
0	3.783000	5.71	2.0628018
5	2.855000	5.55	1.6053483
10	2.172000	5.39	1.1717281
15	1.665000	5.24	0.7605008
20	1.286000	5.10	0.3703354
25	1.000000	4.96	0
30	0.782800	4.84	0.3516468
35	0.616600	4.71	0.6856643
40	0.488700	4.59	1.0030363
45	0.389500	4.48	1.3046781
50	0.312200	4.37	1.5914423
55	0.251700	4.25	2.0327264
60	0.204100	4.14	2.4683026
65	0.166300	4.04	2.898292
70	0.136200	3.94	3.3228128
75	0.112200	3.84	3.7419807
80	0.092780	3.75	4.1559083
85	0.077080	3.66	4.5647054
90	0.064330	3.58	4.9684792
95	0.053910	3.49	5.3673341
100	0.045350	3.42	5.7613719
105	0.038310	3.34	6.0848444
110	0.032480	3.26	6.3979451
115	0.027640	3.19	6.7011173
120	0.023610	3.12	6.9947802
125	0.020230	3.05	7.2793303
130	0.017400	2.99	7.5551427
135	0.015010	2.92	7.8225725
140	0.012990	2.86	8.0819566
145	0.011270	2.80	8.3336142
150	0.009811	2.75	8.5778483



Material Type D14.0 – Available Products: RL

Data for material type: D14.0

Temp Range (°C)	Ratio	Beta
0 to 50	12.88	4511
0 to 70	29.75	4543
25 to 50	3.27	4569
25 to 85	13.37	4615
25 to 100	22.66	4629
25 to 125	50.28	4651
37.8 to 104.4	14.06	4655

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-2.1159972 x 10 ⁰¹	8.4293418 x 10 ⁰³	-7.7725412 x 10 ⁰⁵	4.2541075 x 10 ⁰⁷
0 to 50	-1.8702016 x 10 ⁰¹	7.0546445 x 10 ⁰³	-5.6597660 x 10 ⁰⁵	3.7304883 x 10 ⁰⁷
50 to 100	-1.6993691 x 10 ⁰¹	5.8087185 x 10 ⁰³	-2.9718853 x 10 ⁰⁵	2.2905107 x 10 ⁰⁷
100 to 150	-1.6721946 x 10 ⁰¹	5.5839876 x 10 ⁰³	-2.4854696 x 10 ⁰⁵	2.1926961 x 10 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
125.71 to 3.934	3.3600018 x 10 ⁻⁰³	2.1469204 x 10 ⁻⁰⁴	3.7335033 x 10 ⁻⁰⁶	3.3600018 x 10 ⁻⁰⁸
3.934 to 0.3056	3.3540174 x 10 ⁻⁰³	2.2138462 x 10 ⁻⁰⁴	2.0624152 x 10 ⁻⁰⁶	3.3540174 x 10 ⁻⁰⁸
0.3056 to 0.4414	3.3518831 x 10 ⁻⁰³	2.1797293 x 10 ⁻⁰⁴	7.1785786 x 10 ⁻⁰⁷	3.3518831 x 10 ⁻⁰⁸
0.4414 to 0.0098	3.3459735 x 10 ⁻⁰³	2.1487264 x 10 ⁻⁰⁴	3.3752977 x 10 ⁻⁰⁷	3.3459735 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	125.700000	8.09	5.480388
-45	84.480000	7.82	5.1591328
-40	57.530000	7.56	4.82595
-35	39.660000	7.32	4.4822155
-30	27.660000	7.10	4.129168
-25	19.500000	6.88	3.7679236
-20	13.900000	6.68	3.3994893
-15	9.999000	6.49	3.0247744
-10	7.263000	6.31	2.6446006
-5	5.323000	6.13	2.2597113
0	3.934000	5.91	1.8707796
5	2.941000	5.73	1.5233398
10	2.218000	5.56	1.1612636
15	1.688000	5.39	0.7858823
20	1.294000	5.23	0.3984194
25	1.000000	5.08	0
30	0.778400	4.94	0.4083404
35	0.610200	4.80	0.8256482
40	0.481500	4.67	1.2510448
45	0.382400	4.55	1.68372
50	0.305600	4.43	2.1229265
55	0.245600	4.31	2.4976773
60	0.198700	4.18	2.8558535
65	0.161600	4.07	3.1983078
70	0.132300	3.96	3.528376
75	0.108800	3.85	3.8391894
80	0.089970	3.75	4.1390629
85	0.074770	3.65	4.4261141
90	0.062440	3.56	4.7009592
95	0.052380	3.47	4.9641772
100	0.044140	3.39	5.2163124
105	0.037330	3.31	5.6762285
110	0.031700	3.23	6.0983883
115	0.027040	3.15	6.4847392
120	0.023150	3.07	6.837103
125	0.019890	3.00	7.157185
130	0.017150	2.93	7.4465837
135	0.014840	2.86	7.7067987
140	0.012890	2.79	7.9392379
145	0.011230	2.73	8.1452245
150	0.009809	2.67	8.3260032



Material Type D15.0 – Available Products: RL, UD

Data for material type: D15.0

Temp Range (°C)	Ratio	Beta
0 to 50	13.54	4600
0 to 70	31.95	4638
25 to 50	3.36	4676
25 to 85	14.25	4728
25 to 100	24.48	4744
25 to 125	55.56	4769
37.8 to 104.4	15.04	4775

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

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-2.2180584 x 10 ⁰¹	8.9750475 x 10 ⁰³	-8.6633718 x 10 ⁰⁵	4.7416815 x 10 ⁰⁷
0 to 50	-2.0135414 x 10 ⁰¹	7.9520619 x 10 ⁰³	-7.4589708 x 10 ⁰⁵	4.9163837 x 10 ⁰⁷
50 to 100	-1.7588267 x 10 ⁰¹	6.0923981 x 10 ⁰³	-3.3985162 x 10 ⁰⁵	2.6193265 x 10 ⁰⁷
100 to 150	-1.7989982 x 10 ⁰¹	6.4956737 x 10 ⁰³	-4.7696941 x 10 ⁰⁵	4.2078525 x 10 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
135.45 to 4.024	3.3616847 x 10 ⁻⁰³	2.0962893 x 10 ⁻⁰⁴	3.8822929 x 10 ⁻⁰⁶	-2.4766822 x 10 ⁻⁰⁸
4.024 to 0.2972	3.3540179 x 10 ⁻⁰³	2.1702574 x 10 ⁻⁰⁴	2.5592363 x 10 ⁻⁰⁶	-4.9508057 x 10 ⁻⁰⁸
0.2972 to 0.04085	3.3517200 x 10 ⁻⁰³	2.1294425 x 10 ⁻⁰⁴	7.6822798 x 10 ⁻⁰⁷	-3.9649251 x 10 ⁻⁰⁸
0.04085 to 0.00867	3.3505578 x 10 ⁻⁰³	2.1250688 x 10 ⁻⁰⁴	6.9521697 x 10 ⁻⁰⁷	-5.5249288 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	135.500000	8.17	5.7343136
-45	90.650000	7.91	5.2276852
-40	61.440000	7.66	4.7537398
-35	42.160000	7.42	4.3100968
-30	29.250000	7.20	3.8945923
-25	20.520000	6.99	3.5052544
-20	14.540000	6.79	3.1402834
-15	10.410000	6.60	2.7980333
-10	7.516000	6.42	2.4769963
-5	5.476000	6.25	2.1757885
0	4.024000	5.99	1.8931379
5	2.996000	5.81	1.5385305
10	2.250000	5.64	1.170738
15	1.704000	5.48	0.7909844
20	1.301000	5.33	0.4003941
25	1.000000	5.18	5.551E-14
30	0.774400	5.05	0.4092477
35	0.603800	4.91	0.826475
40	0.473800	4.79	1.2508767
45	0.374100	4.66	1.6817114
50	0.297200	4.54	2.1182955
55	0.237600	4.41	2.4120811
60	0.191200	4.29	2.7229631
65	0.154700	4.17	3.0497159
70	0.126000	4.06	3.3911957
75	0.103100	3.95	3.7463342
80	0.084840	3.85	4.1141335
85	0.070170	3.75	4.4936612
90	0.058320	3.65	4.8840452
95	0.048700	3.56	5.2844699
100	0.040850	3.48	5.694172
105	0.034400	3.40	5.8548019
110	0.029080	3.32	6.0480489
115	0.024690	3.24	6.2720972
120	0.021040	3.16	6.5252254
125	0.018000	3.09	6.8058017
130	0.015450	3.02	7.1122791
135	0.013310	2.95	7.4431907
140	0.011500	2.89	7.797145
145	0.009971	2.82	8.1728227
150	0.008672	2.76	8.5689718



Material Type D15.5 – Available Products: RL, UD

Data for material type: D15.5

Temp Range (°C)	Ratio	Beta
0 to 50	13.85	4640
0 to 70	33.03	4683
25 to 50	3.41	4723
25 to 85	14.69	4783
25 to 100	25.44	4801
25 to 125	58.31	4826
37.8 to 104.4	15.56	4834

To calculate R_t/R_{25} at temperatures other than those listed in the table, use the following equation:

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-2.2971561 x 10 ⁰¹	9.4219390 x 10 ⁰³	-9.4420771 x 10 ⁰⁵	5.1678865 x 10 ⁰⁷
0 to 50	-2.0694719 x 10 ⁰¹	8.2946355 x 10 ⁰³	-8.1319421 x 10 ⁰⁵	5.3599592 x 10 ⁰⁷
50 to 100	-1.8055502 x 10 ⁰¹	6.3730026 x 10 ⁰³	-3.9652936 x 10 ⁰⁵	3.0561568 x 10 ⁰⁷
100 to 150	-1.8759948 x 10 ⁰¹	7.0890071 x 10 ⁰³	-6.3348697 x 10 ⁰⁵	5.5886597 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
139.78 to 4.066	3.3631214 x 10 ⁻⁰³	2.0668438 x 10 ⁻⁰⁴	4.0601753 x 10 ⁻⁰⁶	-1.6194929 x 10 ⁻⁰⁸
4.066 to 0.2936	3.3540181 x 10 ⁻⁰³	2.1511912 x 10 ⁻⁰⁴	2.7168000 x 10 ⁻⁰⁶	-4.7021481 x 10 ⁻⁰⁸
0.2936 to 0.03931	3.3515087 x 10 ⁻⁰³	2.1080591 x 10 ⁻⁰⁴	8.7406666 x 10 ⁻⁰⁷	-4.2183871 x 10 ⁻⁰⁸
0.03931 to 0.0081	3.3550573 x 10 ⁻⁰³	2.1243225 x 10 ⁻⁰⁴	9.7230719 x 10 ⁻⁰⁷	-6.2412488 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	139.800000	8.18	5.9254574
-45	93.470000	7.92	5.4019414
-40	63.290000	7.68	4.9121977
-35	43.360000	7.45	4.4537667
-30	30.030000	7.24	4.024412
-25	21.020000	7.03	3.6220962
-20	14.870000	6.84	3.2449595
-15	10.610000	6.65	2.8913011
-10	7.642000	6.48	2.5595628
-5	5.552000	6.31	2.2483148
0	4.066000	6.03	1.9562425
5	3.022000	5.85	1.5898149
10	2.265000	5.68	1.2097626
15	1.712000	5.53	0.8173506
20	1.303000	5.38	0.4137405
25	1.000000	5.23	0
30	0.772600	5.09	0.4228893
35	0.600900	4.96	0.8540241
40	0.470400	4.84	1.2925726
45	0.370500	4.71	1.7377685
50	0.293600	4.59	2.1889054
55	0.234100	4.47	2.4924838
60	0.187800	4.34	2.8137285
65	0.151600	4.22	3.1513731
70	0.123100	4.11	3.5042355
75	0.100500	4.00	3.871212
80	0.082500	3.90	4.2512713
85	0.068060	3.80	4.6434499
90	0.056420	3.70	5.0468467
95	0.046990	3.61	5.4606189
100	0.039310	3.52	5.8839778
105	0.033040	3.44	6.049962
110	0.027890	3.36	6.2496506
115	0.023630	3.28	6.4811671
120	0.020090	3.20	6.7427329
125	0.017150	3.13	7.0326618
130	0.014690	3.06	7.3493551
135	0.012620	3.00	7.691297
140	0.010890	2.93	8.0570498
145	0.009416	2.87	8.4452501
150	0.008170	2.81	8.8546042



Material Type HL24.5 – Available Products: UD

Data for material type: HL24.5

Temp Range (°C)	Ratio	Beta
0 to 50	21.86	5445
0 to 70	60.13	5485
25 to 50	4.19	5526
25 to 85	23.06	5585
25 to 100	43.86	5609
25 to 125	116.05	5643
37.8 to 104.4	24.67	5646

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

$$R_t/R_{25} = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-2.7197874 x 10 ⁰¹	1.1258413 x 10 ⁰⁴	-1.1540548 x 10 ⁰⁶	6.3164322 x 10 ⁰⁷
0 to 50	-3.0097515 x 10 ⁰¹	8.9705138 x 10 ⁰³	-7.8436653 x 10 ⁰⁵	5.1699490 x 10 ⁰⁷
50 to 100	-3.2345965 x 10 ⁰¹	8.1255489 x 10 ⁰³	-6.4128818 x 10 ⁰⁵	4.9425779 x 10 ⁰⁷
100 to 150	-3.3825133 x 10 ⁰¹	7.7862186 x 10 ⁰³	-5.8802356 x 10 ⁰⁵	5.1875788 x 10 ⁰⁷

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

$$1/T = a + b(\ln R_t/R_{25}) + c(\ln R_t/R_{25})^2 + d(\ln R_t/R_{25})^3$$

Rt/R25 range	a	b	c	d
318.30 to 5.211	3.3608334 x 10 ⁻⁰³	1.7671536 x 10 ⁻⁰⁴	3.1089171 x 10 ⁻⁰⁶	-6.3101747 x 10 ⁻⁰⁹
5.211 to 0.2384	3.3540176 x 10 ⁻⁰³	1.8336112 x 10 ⁻⁰⁴	1.6234781 x 10 ⁻⁰⁶	-3.0097515 x 10 ⁻⁰⁸
0.2384 to 0.02280	3.3537489 x 10 ⁻⁰³	1.8217325 x 10 ⁻⁰⁴	9.2248783 x 10 ⁻⁰⁷	-3.2345965 x 10 ⁻⁰⁸
0.02280 to 0.0036	3.3482897 x 10 ⁻⁰³	1.7922709 x 10 ⁻⁰⁴	5.1956706 x 10 ⁻⁰⁷	-3.3825133 x 10 ⁻⁰⁸

†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.

Temp. (°C)	Rt/R25 nominal	Temp Coef α (%/°C)	β Deviation† (±%)
-50	318.300000	9.48	9.3660456
-45	199.600000	9.19	8.5385525
-40	127.000000	8.92	7.7644416
-35	81.850000	8.66	7.0398248
-30	53.430000	8.41	6.3611674
-25	35.300000	8.18	5.7252488
-20	23.590000	7.96	5.1291295
-15	15.930000	7.75	4.5701211
-10	10.870000	7.55	4.0457606
-5	7.491000	7.35	3.5537879
0	5.211000	7.11	3.0921252
5	3.672000	6.90	2.5129332
10	2.614000	6.69	1.9122053
15	1.880000	6.50	1.2919412
20	1.365000	6.31	0.653977
25	1.000000	6.14	0
30	0.739000	5.97	0.668438
35	0.550600	5.81	1.3499091
40	0.413400	5.65	2.0430986
45	0.312800	5.51	2.7467953
50	0.238400	5.34	3.4598827
55	0.183200	5.20	3.9397324
60	0.141800	5.06	4.4475064
65	0.110500	4.92	4.9812027
70	0.086660	4.80	5.538953
75	0.068390	4.67	6.1190125
80	0.054300	4.56	6.7197515
85	0.043360	4.45	7.3396467
90	0.034810	4.34	7.9772739
95	0.028100	4.23	8.6313009
100	0.022800	4.13	9.300481
105	0.018590	4.03	9.9628431
110	0.015230	3.94	9.8784799
115	0.012540	3.84	10.244425
120	0.010370	3.75	10.657868
125	0.008617	3.67	11.116143
130	0.007188	3.59	11.616723
135	0.006021	3.51	12.157211
140	0.005063	3.43	12.735337
145	0.004273	3.35	13.348944
150	0.003620	3.28	13.995987