THERMOMETRICS
A COMMITMENT TO EXCELLENCE

Sensor Temperature Resistance Curves

Reference Guide

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Amphenol
Advanced Sensors

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Material Type 1 – Available Products: DK, NK

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:

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

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

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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 ∝ (%/°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	0005035	-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

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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:
$I/T=a+b(Ln\ Rt/R25)+c(Ln\ Rt/R25)^2+d(Ln\ Rt/R25)^3$

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 ∝ (%/°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

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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:
$I/T=a+b(Ln\ Rt/R25)+c(Ln\ Rt/R25)^2+d(Ln\ Rt/R25)^3$

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 ∝ (%/°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

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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:

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

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 ∝ (%/°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

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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:
$I/T=a+b(Ln\ Rt/R25)+c(Ln\ Rt/R25)^2+d(Ln\ Rt/R25)^3$

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 ∝ (%/°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

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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 ∝ (%/°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	1.0000	-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

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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 ∝ (%/°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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)	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%

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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:
$1/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)	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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)	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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)	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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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

†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	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%

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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:
$1/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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 ∝ (%/°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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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 ∝ (%/°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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)
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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)
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%

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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:
$1/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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)
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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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%

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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:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

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 ∝ (%/°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%

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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

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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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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 ∝ (%/°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 ∝ (%/°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

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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	-11.2193	3787.4811	-162202.0117	8869763.3657
0 to 50	-10.6818	3486.4365	-115448.3088	7604814.1206
50 to 100	-10.5391	3418.5506	-111442.9881	8585378.9686
100 to 150	-10.0819	3061.2969	-24602.3331	2169697.0141
150 to 200	-10.0942	3076.9191	-31200.6882	3099285.1486
200 to 250	-10.1053	3092.5356	-38578.7166	4261813.8921

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	0.003356088	0.000333392	2.7933E-06	-9.58272E-08
2.479 to 0.4616	0.003354016	0.000336853	1.48672E-06	-8.52271E-08
0.4616 to 0.13360	0.003355027	0.00033778	9.86611E-07	-9.58707E-08
0.13360 to 0.05202	0.003357106	0.000336767	1.08715E-07	-2.69891E-08
0.05202 to 0.02469	0.003356817	0.000336474	9.75046E-09	-3.81828E-08
0.024692 to 0.013501	0.003356117	0.000335907	-1.43432E-07	-5.20027E-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)	β Deviation† (±%)
-50	26.960000	5.76	12.117882
-45	20.333526	5.53	11.160758
-40	15.509474	5.31	10.223131
-35	11.955631	5.11	9.304545
-30	9.308141	4.91	8.404541
-25	7.315000	4.73	7.522656
-20	5.799523	4.56	6.658431
-15	4.636395	4.40	5.811410
-10	3.735757	4.25	4.981144
5	3.032503	4.10	4.167188
0	2.479000	3.95	3.369109
5	2.041701	3.82	2.690758
10	1.692637	3.69	2.014081
15	1.412035	3.57	1.339704
20	1.184950	3.45	0.668181
25	1.000000	3.34	0.000000
30	0.848450	3.24	0.664408
35	0.723548	3.14	1.324665
40	0.620038	3.04	1.980439
45	0.533804	2.95	2.631442
50	0.461600	2.85	3.277423
55	0.401148	2.77	3.804051
60	0.350036	2.69	4.316232
65	0.306628	2.61	4.814618
70	0.269605	2.54	5.299820
75	0.237900	2.47	5.772413
80	0.210642	2.40	6.232938
85	0.187119	2.34	6.681904
90	0.166746	2.28	7.119792
95	0.149040	2.22	7.547053
100	0.133600	2.14	7.964115
105	0.120227	2.08	8.364458
110	0.108489	2.03	8.769075
115	0.098155	1.98	9.177451
120	0.089030	1.93	9.589108
125	0.080950	1.88	10.003601
130	0.073776	1.83	10.420513
135	0.067390	1.79	10.839460
140	0.061691	1.75	11.260081
145	0.056592	1.70	11.682040
1	0.052020	1.67	12.105027
155	0.047911	1.63	12.528750
160	0.044209	1.59	12.952940
165	0.040868	1.55	13.377346
170	0.037846	1.52	13.801736
175	0.035108	1.49	14.225891
180	0.032621	1.45	14.649611
185	0.030358	1.42	15.072708
190	0.028296	1.39	15.495011
195	0.026413	1.36	15.916357
200	0.024691	1.33	16.336598
205	0.023114	1.31	16.755596
210	0.021667	1.28	17.173223
215	0.020337	1.25	17.589362
220	0.019113	1.23	18.003904
225	0.017985	1.20	18.416749
230	0.016944	1.18	18.827804
235	0.015982	1.16	19.236984
240	0.015091	1.14	19.644211
245	0.014266	1.11	20.049414
250	0.013500	1.09	20.452528

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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	-14.9534	5599.7023	-418546.1019	22887539.0877
0 to 50	-12.9566	4405.2525	-207513.9518	13669364.6463
50 to 100	-12.2502	3917.2090	-106717.1949	8221311.8618
100 to 150	-12.0393	3761.6801	-71845.6587	5907049.2698
150 to 200	-12.2727	4021.7586	-164832.3839	16373438.8055
200 to 250	-12.3506	4147.9755	-225052.0110	24861630.2186

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
44.48 to 2.888	0.003358909	0.000280289	4.41987E-06	-9.09878E-08
2.888 to 0.4039	0.003354016	0.000287807	1.66609E-06	-7.51025E-08
0.4039 to 0.09436	0.003354622	0.000287469	5.80351E-07	-4.95892E-08
0.09436 to 0.03103	0.003356306	0.000287472	3.115E-07	-3.60515E-08
0.03103 to 0.01285	0.003360252	0.000288715	1.39052E-07	-9.442E-08
0.012850 to 0.006280	0.003364877	0.000288857	-2.59288E-07	-1.37409E-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)	β Deviation† (±%)
-50	44.478214	6.48	11.629556
-45	32.362160	6.25	10.823331
-40	23.818529	6.02	10.012822
-35	17.720876	5.81	9.199763
-30	13.319172	5.61	8.385679
-25	10.107437	5.43	7.571907
-20	7.740087	5.25	6.759617
-15	5.978303	5.08	5.949837
-10	4.655210	4.93	5.143462
5	3.652971	4.78	4.341274
0	2.887539	4.61	3.543952
5	2.302674	4.45	2.668796
10	1.850087	4.31	1.883588
15	1.497067	4.17	1.181204
20	1.219622	4.03	0.555256
25	1.000000	3.91	0.000000
30	0.824955	3.79	0.489742
35	0.684527	3.68	0.918648
40	0.571165	3.57	1.290953
45	0.479108	3.46	1.610501
50	0.403925	3.35	1.880787
55	0.342567	3.25	2.209160
60	0.291930	3.15	2.529845
65	0.249925	3.06	2.843152
70	0.214908	2.98	3.149377
75	0.185577	2.89	3.448799
80	0.160897	2.82	3.741681
85	0.140040	2.74	4.028271
90	0.122339	2.67	4.308806
95	0.107257	2.60	4.583510
100	0.094356	2.52	4.852594
105	0.083337	2.45	5.045077
110	0.073839	2.39	5.247951
115	0.065624	2.33	5.460530
120	0.058494	2.27	5.682166
125	0.052288	2.22	5.912247
130	0.046867	2.16	6.150196
135	0.042119	2.11	6.395471
140	0.037948	2.06	6.647556
145	0.034274	2.01	6.905969
150	0.031029	1.96	7.170251
155	0.028158	1.92	7.439970
160	0.025608	1.88	7.714721
165	0.023337	1.84	7.994117
170	0.021311	1.80	8.277796
175	0.019499	1.76	8.565415
180	0.017875	1.72	8.856650
185	0.016417	1.68	9.151196
190	0.015104	1.65	9.448764
195	0.013920	1.62	9.749081
200	0.012850	1.58	10.051890
205	0.011885	1.55	10.356949
210	0.011010	1.51	10.664026
215	0.010214	1.49	10.972907
220	0.009490	1.46	11.283386
225	0.008830	1.43	11.595270
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

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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	-14.8010	5495.3083	-396748.3767	21695564.5668
0 to 50	-13.7404	4932.3403	-319802.8157	21066059.7259
50 to 100	-12.8409	4284.2708	-182671.4717	14072700.6466
100 to 150	-12.9819	4449.2941	-244730.1508	21581938.9924
150 to 200	-12.7258	4238.4453	-196499.0450	19519010.8397
200 to 250	-11.3854	2680.6866	367557.1930	-40604262.8786

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
45.15 to 2.899	0.003358197	0.000280172	4.17443E-06	-8.97748E-08
2.899 to 0.4004	0.003354016	0.000285875	2.51494E-06	-9.77124E-08
0.4004 to 0.09067	0.003352706	0.000283	9.60066E-07	-7.29246E-08
0.09067 to 0.02875	0.003353617	0.000283132	7.83805E-07	-1.03489E-07
0.02875 to 0.01155	0.003350097	0.000279922	1.83568E-07	-9.64867E-08
0.011547 to 0.005506	0.003302977	0.000267628	1.43039E-06	2.70008E-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)	β Deviation† (±%)
-50	45.15152	6.52	11.6295563
-45	32.79210	6.28	10.8233312
-40	24.09552	6.05	10.0128218
-35	17.90081	5.84	9.1997632
-30	13.43698	5.64	8.3856792
-25	10.18516	5.45	7.5719067
-20	7.79177	5.27	6.7596174
-15	6.01296	5.10	5.9498372
-10	4.67867	4.94	5.1434621
5	3.66903	4.79	4.3412737
0	2.89868	4.61	3.5439517
5	2.31090	4.46	2.6687962
10	1.85568	4.32	1.8835880
15	1.50041	4.18	1.1812041
20	1.22111	4.06	0.5552562
25	1.00000	3.94	0.0000000
30	0.82379	3.82	0.4897420
35	0.68247	3.71	0.9186477
40	0.56844	3.60	1.2909527
45	0.47591	3.50	1.6105007
50	0.40040	3.41	1.8807870
55	0.33852	3.31	2.2091604
60	0.28758	3.22	2.5298446
65	0.24544	3.13	2.8431518
70	0.21039	3.04	3.1493772
75	0.18111	2.96	3.4487990
80	0.15654	2.88	3.7416806
85	0.13582	2.80	4.0282711
90	0.11829	2.73	4.3088064
95	0.10338	2.66	4.5835099
100	0.09067	2.59	4.8525938
105	0.07979	2.52	5.0450769
110	0.07045	2.46	5.2479514
115	0.06238	2.40	5.4605304
120	0.05541	2.34	5.6821659
125	0.04935	2.29	5.9122467
130	0.04407	2.24	6.1501963
135	0.03946	2.18	6.3954706
140	0.03542	2.14	6.6475562
145	0.03187	2.09	6.9059686
150	0.02875	2.03	7.1702505
155	0.02600	1.99	7.4399704
160	0.02357	1.94	7.7147208
165	0.02141	1.90	7.9941171
170	0.01949	1.86	8.2777962
175	0.01778	1.82	8.5654152
180	0.01625	1.78	8.8566505
185	0.01488	1.74	9.1511963
190	0.01365	1.71	9.4487640
195	0.01254	1.67	9.7490812
200	0.01155	1.65	10.0518904
205	0.01064	1.61	10.3569486
210	0.00983	1.58	10.6640264
215	0.00909	1.54	10.9729070
220	0.00842	1.51	11.2833858
225	0.00782	1.48	11.5952697
230	0.00727	1.45	11.9083762
235	0.00676	1.42	12.2225331
240	0.00631	1.39	12.5375780
245	0.00589	1.36	12.8533573
250	0.00551	1.33	13.1697264

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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	-16.1573	5930.839703	-406993.2557	22255789.76
0 to 50	-15.6983	5735.836468	-403903.3082	26605929.64
50 to 100	-15.6608	5826.639187	-465897.0005	35891915.46
100 to 150	-14.2660	4617.881899	-147823.8601	13040477.81
150 to 200	-14.5503	4936.065973	-262321.9435	26057454.17
200 to 250	-14.1790	4533.015131	-130009.0498	14362177.47

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
70.12 to 3.296	0.003355162	0.000252785	3.13812E-06	-6.4261E-08
3.296 to 0.3577	0.003354016	0.00025482	2.24915E-06	-7.35716E-08
0.3577 to 0.06712	0.003355344	0.000255724	1.85471E-06	-9.03212E-08
0.06712 to 0.01820	0.003341405	0.000245975	2.88794E-07	-4.11203E-08
0.01820 to 0.00645	0.003345484	0.000247177	1.98407E-07	-7.51725E-08
0.006450 to 0.002770	0.003329274	0.000241516	-1.29269E-07	-4.39222E-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)	β Deviation† (±%)
-50	70.11550	7.28	8.9621801
-45	49.06822	7.01	8.1762247
-40	34.79563	6.75	7.4133024
-35	24.98302	6.51	6.6722521
-30	18.14872	6.28	5.9519946
-25	13.33024	6.07	5.2515254
-20	9.89356	5.86	4.5699080
-15	7.41552	5.67	3.9062679
-10	5.61017	5.49	3.2597878
5	4.28196	5.32	2.6297022
0	3.29567	5.16	2.0152938
5	2.55711	4.99	1.5746264
10	1.99998	4.84	1.1539316
15	1.57615	4.69	0.7519946
20	1.25114	4.55	0.3676955
25	1.00000	4.42	0.0000000
30	0.80452	4.29	0.3520485
35	0.65130	4.17	0.6893360
40	0.53041	4.05	1.0126840
45	0.43443	3.94	1.3228556
50	0.35775	3.81	1.6205602
55	0.29653	3.70	1.9330747
60	0.24703	3.60	2.2279810
65	0.20679	3.51	2.5062746
70	0.17390	3.42	2.7688805
75	0.14690	3.33	3.0166591
80	0.12462	3.25	3.2504120
85	0.10615	3.17	3.4708866
90	0.09077	3.09	3.6787806
95	0.07792	3.02	3.8747460
100	0.06712	2.95	4.0593929
105	0.05803	2.87	4.1527077
110	0.05035	2.80	4.2475235
115	0.04385	2.73	4.3437222
120	0.03832	2.67	4.4411935
125	0.03359	2.60	4.5398341
130	0.02954	2.54	4.6395467
135	0.02606	2.48	4.7402407
140	0.02306	2.42	4.8418306
145	0.02046	2.36	4.9442364
150	0.01820	2.31	5.0473829
155	0.01624	2.26	5.1511996
160	0.01452	2.21	5.2556204
165	0.01302	2.16	5.3605828
170	0.01170	2.11	5.4660285
175	0.01054	2.07	5.5719024
180	0.00951	2.03	5.6781530
185	0.00861	1.98	5.7847317
190	0.00780	1.94	5.8915928
195	0.00709	1.90	5.9986934
200	0.00645	1.87	6.1059931
205	0.00588	1.83	6.2134539
210	0.00537	1.79	6.3210402
215	0.00492	1.75	6.4287182
220	0.00451	1.72	6.5364565
225	0.00414	1.69	6.6442253
230	0.00381	1.65	6.7519966
235	0.00351	1.62	6.8597442
240	0.00324	1.59	6.9674432
245	0.00299	1.56	7.0750705
250	0.00277	1.53	7.1826042

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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	-17.7058	6984.076553	-625015.3286	34177985.89
0 to 50	-16.3866	6341.81857	-557276.2667	36708917.31
50 to 100	-16.2643	6362.289848	-608015.5679	46840489.08
100 to 150	-15.5856	5836.418385	-498591.0914	43966144.47
150 to 200	-14.3604	4569.949215	-102124.2598	10144398.07
200 to 250	-14.9562	5189.275804	-313537.9745	34636727.52

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
61.32 to 3.199	0.003360074	0.000253113	4.93284E-06	-6.02571E-08
3.199 to 0.3641	0.003354016	0.000260251	3.30403E-06	-8.65453E-08
0.3641 to 0.06862	0.003353469	0.000258959	2.54693E-06	-1.00815E-07
0.06862 to 0.01837	0.003344673	0.00025229	1.27899E-06	-1.02336E-07
0.01837 to 0.00633	0.00330652	0.000236637	4.4029E-08	-2.90066E-08
0.006331 to 0.002630	0.003302125	0.000236434	-9.69761E-08	-8.28272E-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)	β Deviation† (±%)
-50	61.32080	6.91	8.9621801
-45	43.66574	6.68	8.1762247
-40	31.44855	6.46	7.4133024
-35	22.89318	6.25	6.6722521
-30	16.83443	6.05	5.9519946
-25	12.49793	5.87	5.2515254
-20	9.36276	5.69	4.5699080
-15	7.07441	5.52	3.9062679
-10	5.38899	5.37	3.2597878
5	4.13692	5.21	2.6297022
0	3.19916	5.01	2.0152938
5	2.49993	4.86	1.5746264
10	1.96799	4.72	1.1539316
15	1.56013	4.58	0.7519946
20	1.24509	4.45	0.3676955
25	1.00000	4.32	0.0000000
30	0.80804	4.21	0.3520485
35	0.65672	4.09	0.6893360
40	0.53670	3.98	1.0126840
45	0.44094	3.88	1.3228556
50	0.36410	3.78	1.6205602
55	0.30218	3.68	1.9330747
60	0.25201	3.59	2.2279810
65	0.21114	3.49	2.5062746
70	0.17769	3.41	2.7688805
75	0.15017	3.32	3.0166591
80	0.12743	3.24	3.2504120
85	0.10856	3.17	3.4708866
90	0.09283	3.09	3.6787806
95	0.07967	3.02	3.8747460
100	0.06862	2.95	4.0593929
105	0.05931	2.88	4.1527077
110	0.05143	2.82	4.2475235
115	0.04475	2.75	4.3437222
120	0.03907	2.69	4.4411935
125	0.03421	2.63	4.5398341
130	0.03004	2.57	4.6395467
135	0.02646	2.51	4.7402407
140	0.02337	2.46	4.8418306
145	0.02069	2.41	4.9442364
150	0.01837	2.38	5.0473829
155	0.01633	2.32	5.1511996
160	0.01456	2.27	5.2556204
165	0.01301	2.22	5.3605828
170	0.01166	2.17	5.4660285
175	0.01047	2.12	5.5719024
180	0.00943	2.08	5.6781530
185	0.00851	2.03	5.7847317
190	0.00769	1.99	5.8915928
195	0.00697	1.95	5.9986934
200	0.00633	1.93	6.1059931
205	0.00575	1.90	6.2134539
210	0.00524	1.86	6.3210402
215	0.00478	1.82	6.4287182
220	0.00437	1.79	6.5364565
225	0.00400	1.75	6.6442253
230	0.00366	1.72	6.7519966
235	0.00336	1.69	6.8597442
240	0.00309	1.66	6.9674432
245	0.00285	1.63	7.0750705
250	0.00263	1.60	7.1826042

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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	-17.2050	6644.807181	-555595.6776	30381880.82
0 to 50	-16.9830	6743.286608	-642867.4625	42346982.87
50 to 100	-15.2383	5483.383606	-376669.7712	29018000.92
100 to 150	-15.0850	5318.135534	-338616.2429	29861705.76
150 to 200	-14.8623	5116.521715	-290908.373	28897054.88
200 to 250	-15.6592	6052.933269	-645115.5151	71266296.68

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$1/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
63.37 to 3.208	0.003359883	0.000253297	4.36914E-06	-6.6109E-08
3.208 to 0.3617	0.003354016	0.000259066	3.75874E-06	-8.41547E-08
0.3617 to 0.06787	0.003351366	0.00025412	1.46322E-06	-8.00094E-08
0.06787 to 0.01806	0.003337187	0.000246943	7.60431E-07	-7.78083E-08
0.01806 to 0.00625	0.003326709	0.000242197	2.39148E-07	-7.5087E-08
0.006250 to 0.002610	0.003344024	0.000247652	2.98079E-07	-1.42836E-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 ∝	β Deviation† (±%)
-50	63.368364	7.02	8.962180
-45	44.892050	6.77	8.176225
-40	32.184317	6.54	7.413302
-35	23.334422	6.33	6.672252
-30	17.098234	6.12	5.951995
-25	12.654698	5.92	5.251525
-20	9.455027	5.74	4.569908
-15	7.127968	5.57	3.906268
-10	5.419485	5.40	3.259788
5	4.153856	5.24	2.629702
0	3.208270	5.01	2.015294
5	2.506555	4.86	1.574626
10	1.972418	4.72	1.153932
15	1.562736	4.59	0.751995
20	1.246225	4.46	0.367696
25	1.000000	4.34	0.000000
30	0.807184	4.23	0.352049
35	0.655238	4.12	0.689336
40	0.534775	4.01	1.012684
45	0.438719	3.91	1.322856
50	0.361700	3.82	1.620560
55	0.299658	3.71	1.933075
60	0.249546	3.61	2.227981
65	0.208844	3.51	2.506275
70	0.175612	3.42	2.768880
75	0.148340	3.33	3.016659
80	0.125850	3.25	3.250412
85	0.107217	3.16	3.470887
90	0.091710	3.09	3.678781
95	0.078748	3.01	3.874746
100	0.067870	2.98	4.059393
105	0.058588	2.91	4.152708
110	0.050758	2.83	4.247523
115	0.044127	2.77	4.343722
120	0.038489	2.70	4.441194
125	0.033680	2.64	4.539834
130	0.029563	2.58	4.639547
135	0.026026	2.52	4.740241
140	0.022979	2.46	4.841831
145	0.020344	2.41	4.944236
150	0.018060	2.36	5.047383
155	0.016071	2.31	5.151200
160	0.014338	2.26	5.255620
165	0.012823	2.21	5.360583
170	0.011496	2.16	5.466028
175	0.010330	2.12	5.571902
180	0.009303	2.07	5.678153
185	0.008397	2.03	5.784732
190	0.007594	1.99	5.891593
195	0.006883	1.95	5.998693
200	0.006250	1.91	6.105993
205	0.005685	1.88	6.213454
210	0.005181	1.84	6.321040
215	0.004729	1.81	6.428718
220	0.004324	1.77	6.536457
225	0.003960	1.74	6.644225
230	0.003632	1.71	6.751997
235	0.003337	1.68	6.859744
240	0.003070	1.65	6.967443
245	0.002829	1.62	7.075071
250	0.002610	1.60	7.182604

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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	-18.0895	6748.0367	-496306.3665	27139737.5581
0 to 50	-10.2821	1536.9441	585020.6629	-38536496.9232
50 to 100	-11.4295	2192.8905	490570.1788	-37792695.3186
100 to 150	-17.6159	7902.1795	-1151983.9786	101594275.0627
150 to 200	12.0248	-23327.5830	9141611.8267	-908071692.3247
200 to 250	15.2547	-27903.1029	11303329.2571	-1248685541.5898

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
102.10 to 3.650	0.003357824	0.00023047	2.91161E-06	-5.03449E-08
3.650 to 0.3445	0.003354019	0.000240344	-2.74932E-06	1.88214E-07
0.3445 to 0.06348	0.003349772	0.000237859	-1.34944E-06	1.83821E-07
0.06348 to 0.01770	0.003424469	0.000283988	4.75029E-06	-1.07877E-07
0.01770 to 0.00663	0.004528414	0.001234855	0.000266957	2.3274E-05
0.006628 to 0.004075	0.051970995	0.02905337	0.00570628	0.000377934

†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)	β Deviation† (±%)
-50	102.100000	7.90	12.052819
-45	69.286911	7.61	10.695609
-40	47.685688	7.34	9.485473
-35	33.256358	7.08	8.408248
-30	23.484336	6.84	7.451514
-25	16.779999	6.61	6.604338
-20	12.123617	6.40	5.857064
-15	8.851907	6.19	5.201136
-10	6.527740	6.00	4.628946
5	4.859423	5.81	4.133711
0	3.650000	5.73	3.709364
5	2.757577	5.49	2.802582
10	2.107041	5.27	1.984964
15	1.627280	5.07	1.249447
20	1.269546	4.87	0.589693
25	1.000000	4.68	0.000000
30	0.794881	4.50	0.524774
35	0.637315	4.34	0.989278
40	0.515191	4.18	1.397722
45	0.419728	4.02	1.753929
50	0.344500	3.97	2.061377
55	0.283451	3.84	2.337792
60	0.234736	3.71	2.611080
65	0.195598	3.59	2.881278
70	0.163950	3.47	3.148427
75	0.138200	3.36	3.412566
80	0.117124	3.26	3.673737
85	0.099775	3.16	3.931982
90	0.085417	3.06	4.187343
95	0.073471	2.97	4.439862
100	0.063483	2.81	4.689580
105	0.055233	2.76	4.730341
110	0.048190	2.70	4.772122
115	0.042159	2.65	4.814854
120	0.036978	2.60	4.858472
125	0.032516	2.55	4.902917
130	0.028662	2.50	4.948131
135	0.025324	2.45	4.994062
140	0.022426	2.41	5.040659
145	0.019903	2.37	5.087876
150	0.017702	2.61	5.135671
155	0.015595	2.46	5.167135
160	0.013836	2.33	5.205396
165	0.012359	2.19	5.250126
170	0.011111	2.07	5.301014
175	0.010051	1.94	5.357763
180	0.009147	1.83	5.420091
185	0.008371	1.72	5.487728
190	0.007704	1.61	5.560416
195	0.007128	1.50	5.637911
200	0.006628	1.40	5.719980
205	0.006193	1.31	5.788145
210	0.005815	1.22	5.853021
215	0.005484	1.13	5.914733
220	0.005194	1.04	5.973401
225	0.004941	0.96	6.029137
230	0.004719	0.88	6.082051
235	0.004524	0.80	6.132246
240	0.004354	0.73	6.179820
245	0.004205	0.66	6.224869
250	0.004075	0.59	6.267483

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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	-23.7174	10049.2910	-1103384.0337	60336830.4778
0 to 50	-22.5636	10272.1624	-1356611.5315	89362751.4832
50 to 100	-16.8569	6129.4888	-442887.5949	34119309.8501
100 to 150	-16.6236	6009.3515	-444051.6085	39161222.8071
150 to 200	-15.8236	5195.8924	-196714.1755	19540380.5895
200 to 250	-15.8931	5294.3509	-243231.1870	26869894.6623

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	0.003386128	0.000214219	5.23709E-06	2.12661E-08
3.473 to 0.3266	0.003354017	0.000238792	6.20771E-06	2.78529E-08
0.3266 to 0.05210	0.003352514	0.000232086	1.313E-06	-6.32381E-08
0.05210 to 0.01246	0.003351268	0.000230287	8.24501E-07	-7.07375E-08
0.01246 to 0.00394	0.003326146	0.000220713	8.61127E-08	-3.91616E-08
0.003941 to 0.001543	0.003324011	0.000219557	-1.22794E-07	-5.17688E-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)	β Deviation† (±%)
-50	98.310000	7.62	3.104220
-45	67.533330	7.41	2.948754
-40	46.877537	7.20	2.779829
-35	32.862780	7.01	2.598797
-30	23.255224	6.83	2.406887
-25	16.604000	6.65	2.205209
-20	11.956229	6.49	1.994775
-15	8.679428	6.33	1.776500
-10	6.349525	6.18	1.551218
-5	4.679431	6.03	1.319689
0	3.473000	5.27	1.082602
5	2.676813	5.15	0.863603
10	2.075443	5.03	0.645768
15	1.618352	4.92	0.429178
20	1.268825	4.81	0.213902
25	1.000000	4.71	0.000000
30	0.792094	4.61	0.212476
35	0.630443	4.52	0.423482
40	0.504110	4.43	0.632982
45	0.404893	4.34	0.840943
50	0.326600	4.18	1.047340
55	0.265727	4.07	1.206399
60	0.217421	3.96	1.369181
65	0.178858	3.85	1.535362
70	0.147896	3.75	1.704639
75	0.122900	3.66	1.876734
80	0.102614	3.56	2.051386
85	0.086068	3.47	2.228353
90	0.072506	3.39	2.407411
95	0.061338	3.31	2.588350
100	0.052100	3.21	2.770975
105	0.044456	3.14	2.943675
110	0.038079	3.06	3.112593
115	0.032736	2.99	3.277867
120	0.028243	2.92	3.439630
125	0.024450	2.85	3.598009
130	0.021236	2.79	3.753124
135	0.018503	2.72	3.905087
140	0.016171	2.66	4.054009
145	0.014174	2.61	4.199992
150	0.012460	2.57	4.343134
155	0.010976	2.51	4.483531
160	0.009696	2.45	4.621271
165	0.008589	2.40	4.756441
170	0.007629	2.35	4.889122
175	0.006793	2.30	5.019392
180	0.006064	2.25	5.147328
185	0.005426	2.20	5.272999
190	0.004867	2.15	5.396476
195	0.004375	2.11	5.517824
200	0.003941	2.07	5.637105
205	0.003558	2.03	5.754381
210	0.003219	1.98	5.869710
215	0.002917	1.95	5.983146
220	0.002649	1.91	6.094745
225	0.002411	1.87	6.204557
230	0.002197	1.84	6.312631
235	0.002006	1.80	6.419016
240	0.001835	1.77	6.523756
245	0.001681	1.73	6.626897
250	0.001543	1.70	6.728480

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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	-19.9886	7913.5336	-712495.1742	38961684.4414
0 to 50	-18.6586	7130.9308	-600023.7618	39524781.4614
50 to 100	-18.0928	6769.1915	-551348.3419	42474942.0114
100 to 150	-17.7680	6518.0424	-509428.6104	44929880.9078
150 to 200	-18.4829	7334.8299	-811328.4747	80592398.2517
200 to 250	-20.6297	10095.4499	-1913285.3526	211361776.9022

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
106.93 to 3.838	0.003352493	0.000224163	3.92611E-06	-4.14379E-08
3.838 to 0.3115	0.003354016	0.000225234	2.3063E-06	-5.5671E-08
0.3115 to 0.04531	0.003351525	0.000222097	1.44361E-06	-5.98364E-08
0.04531 to 0.00989	0.003341991	0.000217083	8.13164E-07	-6.17011E-08
0.00989 to 0.00290	0.003351522	0.00022013	9.08508E-07	-8.71181E-08
0.002897 to 0.001063	0.003479122	0.000258079	3.71723E-06	-7.83602E-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 ∝(%/°C)	β Deviation † (±%)
-50	106.926974	7.78	5.880572
-45	72.950831	7.52	6.045464
-40	50.408242	7.27	6.055748
-35	35.252220	7.04	5.924208
-30	24.934162	6.82	5.662994
-25	17.826184	6.61	5.283593
-20	12.874464	6.41	4.796830
-15	9.388090	6.23	4.212866
-10	6.908585	6.05	3.541213
5	5.128216	5.88	2.790748
0	3.838170	5.80	1.969738
5	2.885034	5.62	1.410834
10	2.187411	5.45	0.940872
15	1.672161	5.29	0.553038
20	1.288314	5.14	0.241237
25	1.000000	5.00	0.000000
30	0.781740	4.86	0.175593
35	0.615273	4.72	0.289977
40	0.487398	4.60	0.347159
45	0.388495	4.48	0.350769
50	0.311498	4.38	0.304102
55	0.250944	4.27	0.561551
60	0.203335	4.15	0.850071
65	0.165675	4.04	1.167404
70	0.135709	3.94	1.511422
75	0.111730	3.84	1.880122
80	0.092439	3.74	2.271619
85	0.076838	3.65	2.684142
90	0.064158	3.56	3.116022
95	0.053803	3.48	3.565693
100	0.045307	3.42	4.031683
105	0.038274	3.33	4.302338
110	0.032463	3.25	4.554178
115	0.027642	3.18	4.788183
120	0.023624	3.11	5.005272
125	0.020264	3.03	5.206303
130	0.017441	2.97	5.392080
135	0.015063	2.90	5.563354
140	0.013050	2.84	5.720832
145	0.011342	2.78	5.865177
150	0.009887	2.71	5.997012
155	0.008647	2.65	6.099913
160	0.007583	2.60	6.190856
165	0.006667	2.55	6.270388
170	0.005877	2.50	6.339026
175	0.005194	2.45	6.397255
180	0.004601	2.40	6.445535
185	0.004085	2.36	6.484301
190	0.003635	2.31	6.513963
195	0.003242	2.27	6.534907
200	0.002897	2.16	6.547503
205	0.002603	2.13	6.550705
210	0.002342	2.10	6.545207
215	0.002110	2.06	6.531365
220	0.001905	2.03	6.509513
225	0.001722	2.00	6.479971
230	0.001559	1.97	6.443041
235	0.001414	1.94	6.399011
240	0.001284	1.92	6.348154
245	0.001167	1.89	6.290731
250	0.001063	1.86	6.226988

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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	-22.1595	9145.2522	-929223.5375	50813136.0834
0 to 50	-19.7988	7856.5345	-747612.7419	49246766.7498
50 to 100	-18.3366	6785.9172	-527762.2426	40657908.8892
100 to 150	-18.9775	7436.6224	-749443.4613	66073278.1799
150 to 200	-17.9249	6460.8417	-482012.4337	47880161.0386
200 to 250	-15.7692	3884.5685	463823.4673	-51238855.7702

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
113.88 to 3.897	0.003359294	0.00021562	4.57593E-06	-1.49858E-08
3.897 to 0.3053	0.003354016	0.00022205	2.75247E-06	-5.30377E-08
0.3053 to 0.04247	0.003349621	0.0002166	1.28E-06	-5.40233E-08
0.04247 to 0.00895	0.003349234	0.000216622	1.27706E-06	-6.94966E-08
0.00895 to 0.00255	0.00332891	0.000207565	3.19491E-07	-5.90612E-08
0.002552 to 0.000906	0.003253675	0.000191169	5.5917E-07	8.7545E-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 ∝(%/°C)	β Deviation† (±%)
-50	113.878523	7.79	5.880572
-45	77.626083	7.55	6.045464
-40	53.534430	7.32	6.055748
-35	37.328739	7.11	5.924208
-30	26.301703	6.90	5.662994
-25	18.716277	6.71	5.283593
-20	13.444103	6.53	4.796830
-15	9.743571	6.35	4.212866
-10	7.121800	6.19	3.541213
5	5.247723	6.03	2.790748
0	3.896705	5.85	1.969738
5	2.921615	5.68	1.410834
10	2.208951	5.51	0.940872
15	1.683492	5.36	0.553038
20	1.292807	5.21	0.241237
25	1.000000	5.07	0.000000
30	0.778872	4.93	0.175593
35	0.610657	4.80	0.289977
40	0.481800	4.68	0.347159
45	0.382433	4.56	0.350769
50	0.305317	4.49	0.304102
55	0.244690	4.37	0.561551
60	0.197277	4.25	0.850071
65	0.159964	4.14	1.167404
70	0.130421	4.03	1.511422
75	0.106894	3.93	1.880122
80	0.088054	3.83	2.271619
85	0.072886	3.73	2.684142
90	0.060612	3.64	3.116022
95	0.050630	3.56	3.565693
100	0.042474	3.48	4.031683
105	0.035766	3.40	4.302338
110	0.030236	3.32	4.554178
115	0.025659	3.25	4.788183
120	0.021854	3.17	5.005272
125	0.018679	3.11	5.206303
130	0.016020	3.04	5.392080
135	0.013784	2.97	5.563354
140	0.011898	2.91	5.720832
145	0.010302	2.85	5.865177
150	0.008946	2.78	5.997012
155	0.007795	2.72	6.099913
160	0.006813	2.67	6.190856
165	0.005971	2.61	6.270388
170	0.005248	2.56	6.339026
175	0.004625	2.50	6.397255
180	0.004086	2.45	6.445535
185	0.003620	2.40	6.484301
190	0.003214	2.35	6.513963
195	0.002860	2.31	6.534907
200	0.002552	2.30	6.547503
205	0.002277	2.25	6.550705
210	0.002037	2.20	6.545207
215	0.001826	2.16	6.531365
220	0.001641	2.11	6.509513
225	0.001479	2.07	6.479971
230	0.001335	2.02	6.443041
235	0.001208	1.98	6.399011
240	0.001095	1.94	6.348154
245	0.000995	1.90	6.290731
250	0.000906	1.86	6.226988

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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	-24.3642	10391.3603	-1144797.8833	62601482.0793
0 to 50	-21.8030	9046.1418	-974203.7770	64172777.5373
50 to 100	-21.0451	8690.7572	-971521.0755	74844337.4343
100 to 150	-19.1003	7030.2143	-551514.3543	48285319.6524
150 to 200	-18.5925	6533.9599	-415987.8197	41321680.5271
200 to 250	-20.0470	8226.1177	-1048486.6085	115826942.5644

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
127.27 to 4.082	0.003360314	0.000206743	4.96342E-06	2.15441E-08
4.082 to 0.2903	0.003354016	0.00021382	3.20133E-06	-4.01762E-08
0.2903 to 0.03719	0.003354431	0.00021305	2.29103E-06	-5.40018E-08
0.03719 to 0.00723	0.003335052	0.000202022	7.46521E-07	-4.87254E-08
0.00723 to 0.00193	0.003315715	0.000195307	2.06424E-07	-4.33837E-08
0.001928 to 0.000646	0.003343345	0.00020322	5.21955E-07	-8.23003E-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 ∝(%/°C)	β Deviation† (±%)
-50	127.275815	7.84	5.880572
-45	86.505388	7.62	6.045464
-40	59.425414	7.41	6.055748
-35	41.237764	7.21	5.924208
-30	28.892907	7.02	5.662994
-25	20.429406	6.85	5.283593
-20	14.571294	6.68	4.796830
-15	10.479506	6.51	4.212866
-10	7.596582	6.36	3.541213
5	5.548501	6.21	2.790748
0	4.081956	6.02	1.969738
5	3.033487	5.86	1.410834
10	2.272760	5.70	0.940872
15	1.716073	5.55	0.553038
20	1.305369	5.40	0.241237
25	1.000000	5.26	0.000000
30	0.771257	5.13	0.175593
35	0.598691	5.00	0.289977
40	0.467616	4.88	0.347159
45	0.367406	4.77	0.350769
50	0.290313	4.62	0.304102
55	0.231064	4.51	0.561551
60	0.184944	4.40	0.850071
65	0.148830	4.29	1.167404
70	0.120389	4.19	1.511422
75	0.097867	4.09	1.880122
80	0.079940	4.00	2.271619
85	0.065596	3.91	2.684142
90	0.054064	3.82	3.116022
95	0.044750	3.74	3.565693
100	0.037191	3.67	4.031683
105	0.031020	3.59	4.302338
110	0.025985	3.50	4.554178
115	0.021858	3.42	4.788183
120	0.018461	3.34	5.005272
125	0.015652	3.26	5.206303
130	0.013320	3.19	5.392080
135	0.011376	3.12	5.563354
140	0.009750	3.05	5.720832
145	0.008384	2.99	5.865177
150	0.007233	2.94	5.997012
155	0.006255	2.87	6.099913
160	0.005426	2.81	6.190856
165	0.004722	2.75	6.270388
170	0.004121	2.69	6.339026
175	0.003607	2.64	6.397255
180	0.003166	2.58	6.445535
185	0.002786	2.53	6.484301
190	0.002458	2.48	6.513963
195	0.002175	2.43	6.534907
200	0.001928	2.39	6.547503
205	0.001713	2.34	6.550705
210	0.001525	2.30	6.545207
215	0.001361	2.26	6.531365
220	0.001217	2.22	6.509513
225	0.001090	2.18	6.479971
230	0.000978	2.15	6.443041
235	0.000879	2.11	6.399011
240	0.000792	2.07	6.348154
245	0.000715	2.04	6.290731
250	0.000646	2.01	6.226988

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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	-13.6125	6182.1874	-776431.3486	42457934.161
0 to 50	-12.5324	5680.2241	-743859.9541	48999563.009
50 to 100	-12.1530	5532.9454	-767134.6037	59098749.974
100 to 150	-12.5758	6051.2692	-973344.4629	85839930.875

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
10.18 to 2.008	0.003358484	0.000414909	2.59466E-05	1.63197E-06
2.008 to 0.5347	0.003354017	0.00042662	1.94101E-05	1.18763E-07
0.5347 to 0.18318	0.003352322	0.000420739	1.4144E-05	-1.91774E-07
0.18318 to 0.07590	0.00335425	0.000421502	1.39597E-05	-1.70908E-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 ∝(%/°C)	β Deviation† (±%)
-50	10.178876	3.575511	26.321150
-45	8.528539	3.502252	24.264463
-40	7.171459	3.431921	22.240877
-35	6.051135	3.364347	20.251675
-30	5.122765	3.299371	18.297812
-25	4.350665	3.236848	16.379963
-20	3.706283	3.176641	14.498567
-15	3.166682	3.118625	12.653860
-10	2.713358	3.062682	10.845907
-5	2.331323	3.008705	9.074630
0	2.008395	2.953637	7.339830
5	1.735705	2.884758	5.492301
10	1.505099	2.818859	3.853126
15	1.309345	2.755757	2.402523
20	1.142574	2.695283	1.123203
25	1.000000	2.637282	0.000000
30	0.877706	2.581610	0.980427
35	0.772473	2.528134	1.829851
40	0.681640	2.476729	2.558696
45	0.603006	2.427281	3.176207
50	0.534738	2.377725	3.690616
55	0.475430	2.325528	4.323033
60	0.423783	2.275370	4.936275
65	0.378677	2.227140	5.531265
70	0.339172	2.180734	6.108867
75	0.304481	2.136057	6.669889
80	0.273938	2.093018	7.215090
85	0.246980	2.051532	7.745184
90	0.223129	2.011523	8.260838
95	0.201977	1.972915	8.762683
100	0.183178	1.927526	9.251311
105	0.166502	1.891269	9.601592
110	0.151613	1.856236	9.968885
115	0.138294	1.822368	10.351913
120	0.126355	1.789613	10.749470
125	0.115633	1.757917	11.160419
130	0.105986	1.727234	11.583689
135	0.097290	1.697517	12.018269
140	0.089439	1.668724	12.463205
145	0.082338	1.640815	12.917601
150	0.075905	1.613751	13.380610

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

Data for material type: C4.6

CL Material C46.55

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:
$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$
where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-11.1337	4062.6881	-272227.2357	14886320.6904
0 to 50	-9.2725	2881.5195	-44748.1276	2947649.8701
50 to 100	-6.7996	875.2799	465403.5527	-35853901.0807
100 to 150	-6.2332	200.8241	709910.8414	-62607535.0251

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
19.01 to 2.274	0.003357114	0.000364814	6.2915E-06	-1.90129E-07
2.274 to 0.4982	0.003354016	0.000373019	7.82867E-07	-5.3899E-08
0.4982 to 0.16504	0.00334742	0.00035955	-4.17032E-06	1.06902E-06
0.16504 to 0.07279	0.003337014	0.000360776	2.06003E-06	2.3701E-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 ∝(%/°C)	β Deviation† (±%)
-50	19.014882	5.060643	10.141194
-45	14.836349	4.869878	9.273951
-40	11.683518	4.690648	8.439072
-35	9.280971	4.522022	7.634949
-30	7.433026	4.363158	6.860074
-25	5.999110	4.213298	6.113030
-20	4.877184	4.071759	5.392484
-15	3.992444	3.937919	4.697184
-10	3.289540	3.811216	4.025951
-5	2.727149	3.691137	3.377674
0	2.274161	3.582502	2.751308
5	1.907300	3.457026	2.240113
10	1.609416	3.338101	1.708167
15	1.365942	3.225279	1.156741
20	1.165688	3.118147	0.586996
25	1.000000	3.016327	0.000000
30	0.862131	2.919474	0.603267
35	0.746789	2.827269	1.221901
40	0.649795	2.739417	1.855071
45	0.567828	2.655649	2.502005
50	0.498235	2.610754	3.161992
55	0.438275	2.519826	3.588594
60	0.387245	2.433140	4.053561
65	0.343609	2.350442	4.555027
70	0.306123	2.271496	5.091280
75	0.273781	2.196084	5.660746
80	0.245760	2.124002	6.261979
85	0.221386	2.055062	6.893645
90	0.200102	1.989087	7.554515
95	0.181449	1.925915	8.243449
100	0.165045	1.908479	8.959397
105	0.150255	1.847848	9.789824
110	0.137196	1.789711	10.596460
115	0.125630	1.733937	11.379969
120	0.115354	1.680405	12.140995
125	0.106196	1.628997	12.880166
130	0.098012	1.579607	13.598091
135	0.090678	1.532134	14.295365
140	0.084088	1.486483	14.972564
145	0.078151	1.442564	15.630246
150	0.072791	1.400294	16.268958

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Material Type C5.7 – Available Products: NC

Data for material type: C5.7

CL Material C57.25

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:
$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$
where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-11.6240	3987.8855	-190366.8420	10409913.0691
0 to 50	-10.3073	3109.6909	-13994.6830	921858.1341
50 to 100	-9.6668	2562.0533	129905.9116	-10007731.3051
100 to 150	-8.8949	1687.9082	421387.5939	-37162467.4633

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
28.81 to 2.547	0.003353211	0.0003264	3.09493E-06	-1.00595E-07
2.547 to 0.4534	0.003354016	0.0003282	1.66806E-07	-1.05325E-08
0.4534 to 0.12740	0.003350735	0.000323073	-9.59166E-07	1.27846E-07
0.12740 to 0.0476	0.003323031	0.000308678	-5.75103E-07	5.37681E-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 ∝(%/°C)	β Deviation† (±%)
-50	28.809914	5.842937	8.106121
-45	21.640401	5.609619	7.530147
-40	16.439671	5.390730	6.956206
-35	12.621919	5.185089	6.384372
-30	9.787832	4.991632	5.814706
-25	7.661655	4.809403	5.247259
-20	6.050618	4.637536	4.682071
-15	4.818387	4.475249	4.119176
-10	3.867482	4.321832	3.558599
-5	3.127479	4.176641	3.000360
0	2.546994	4.081186	2.444474
5	2.084551	3.936432	1.965190
10	1.718129	3.799268	1.480738
15	1.425602	3.669173	0.991495
20	1.190399	3.545669	0.497809
25	1.000000	3.428317	0.000000
30	0.844873	3.316716	0.501639
35	0.717706	3.210495	1.006836
40	0.612847	3.109313	1.515340
45	0.525898	3.012857	2.026919
50	0.453416	2.948642	2.541358
55	0.392186	2.856117	2.965861
60	0.340760	2.767777	3.383200
65	0.297359	2.683375	3.793611
70	0.260558	2.602681	4.197315
75	0.229214	2.525483	4.594525
80	0.202403	2.451584	4.985443
85	0.179375	2.380798	5.370264
90	0.159520	2.312955	5.749173
95	0.142333	2.247894	6.122346
100	0.127404	2.259620	6.489954
105	0.113983	2.194026	6.845972
110	0.102304	2.131064	7.208966
115	0.092105	2.070597	7.578611
120	0.083169	2.012498	7.954607
125	0.075314	1.956647	8.336667
130	0.068388	1.902930	8.724525
135	0.062263	1.851242	9.117929
140	0.056830	1.801484	9.516642
145	0.051998	1.753562	9.920440
150	0.047689	1.707389	10.329112

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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	-13.0195	4921.4801	-380228.0106	20792174.1833
0 to 50	-12.3384	4574.3683	-342782.3492	22579768.1721
50 to 100	-11.8252	4251.7114	-291795.5628	22479435.7188
100 to 150	-8.8377	1394.2276	548332.3246	-48357812.2981

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
26.32 to 2.514	0.003356079	0.000325016	6.28771E-06	-1.42855E-07
2.514 to 0.4510	0.003354016	0.000329273	4.11778E-06	-1.65195E-07
0.4510 to 0.12319	0.003353798	0.000327654	2.42499E-06	-1.71327E-07
0.12319 to 0.0442	0.003302566	0.000293629	-4.63791E-07	6.29121E-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 ∝(%/°C)	β Deviation† (±%)
-50	26.323714	5.555870	12.11788
-45	20.042092	5.355002	11.16075
-40	15.408727	5.166073	10.22313
-35	11.955558	4.988125	9.304545
-30	9.356719	4.820296	8.404541
-25	7.382731	4.661809	7.522656
-20	5.870231	4.511960	6.658431
-15	4.701731	4.370112	5.811410
-10	3.791905	4.235685	4.981144
-5	3.078216	4.108154	4.167188
0	2.514422	3.984486	3.369109
5	2.066841	3.859256	2.690758
10	1.709327	3.740310	2.014081
15	1.421872	3.627225	1.339704
20	1.189297	3.519614	0.668181
25	1.000000	3.417122	0.000000
30	0.845049	3.319421	0.664408
35	0.717522	3.226212	1.324665
40	0.612019	3.137216	1.980439
45	0.524305	3.052177	2.631442
50	0.451032	2.960949	3.277423
55	0.389781	2.878892	3.804051
60	0.338201	2.800390	4.316232
65	0.294576	2.725239	4.814618
70	0.257523	2.653247	5.299820
75	0.225925	2.584237	5.772413
80	0.198875	2.518044	6.232938
85	0.175632	2.454515	6.681904
90	0.155589	2.393506	7.119792
95	0.138246	2.334884	7.547053
100	0.123190	2.364169	7.964115
105	0.109651	2.293952	8.364458
110	0.097936	2.226571	8.769075
115	0.087762	2.161879	9.177451
120	0.078895	2.099736	9.589108
125	0.071140	2.040015	10.00360
130	0.064335	1.982592	10.42051
135	0.058345	1.927353	10.83946
140	0.053057	1.874192	11.26008
145	0.048373	1.823007	11.68204
150	0.044214	1.773704	12.10502

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Material Type C6.1 – Available Products: CL

Data for material type: C6.1

CL Material C61.20

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	-12.4216	4365.4016	-241801.8224	13222554.5420
0 to 50	-11.3839	3713.3916	-122184.2547	8048524.5277
50 to 100	-10.2266	2812.0207	96043.8847	-7399058.1290
100 to 150	-10.2342	2661.1073	174916.6581	-15426022.7587

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
32.30 to 2.633	0.00335449	0.000313323	3.50187E-06	-1.0294E-07
2.633 to 0.4386	0.003354016	0.000315916	1.29794E-06	-6.98573E-08
0.4386 to .11726	0.003352092	0.00031188	-6.42849E-07	7.85221E-08
0.11726 to 0.0419	0.003330972	0.000302091	-4.43954E-07	1.57278E-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 ∝(%/°C)	β Deviation† (±%)
-50	32.301065	6.015542	12.117882
-45	24.055634	5.780156	11.160758
-40	18.120320	5.559216	10.223131
-35	13.796331	5.351543	9.304545
-30	10.610454	5.156078	8.404541
-25	8.238015	4.971865	7.522656
-20	6.453494	4.798041	6.658431
-15	5.098403	4.633825	5.811410
-10	4.060127	4.478509	4.981144
-5	3.257807	4.331449	4.167188
0	2.632805	4.212606	3.369109
5	2.140641	4.068458	2.690758
10	1.752733	3.931776	2.014081
15	1.444701	3.802051	1.339704
20	1.198353	3.678813	0.668181
25	1.000000	3.561636	0.000000
30	0.839260	3.450125	0.664408
35	0.708199	3.343919	1.324665
40	0.600710	3.242683	1.980439
45	0.512060	3.146110	2.631442
50	0.438556	3.059113	3.277423
55	0.377267	2.964116	3.804051
60	0.326052	2.873402	4.316232
65	0.283042	2.786718	4.814618
70	0.246748	2.703830	5.299820
75	0.215982	2.624521	5.772413
80	0.189787	2.548587	6.232938
85	0.167390	2.475842	6.681904
90	0.148162	2.406109	7.119792
95	0.131591	2.339227	7.547053
100	0.117258	2.346132	7.964115
105	0.104449	2.281907	8.364458
110	0.093333	2.220214	8.769075
115	0.083652	2.160922	9.177451
120	0.075194	2.103909	9.589108
125	0.067780	2.049061	10.003601
130	0.061262	1.996270	10.420513
135	0.055514	1.945435	10.839460
140	0.050431	1.896462	11.260081
145	0.045924	1.849261	11.682040
150	0.041916	1.803748	12.105027

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Material Type C6.5 – Available Products: CL

Data for material type: C6.5

CL Material C65.15

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 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	-12.8413	4518.5914	-251945.1288	13777225.3902
0 to 50	-11.8490	3896.0616	-139032.6029	9158359.3754
50 to 100	-11.2723	3456.5006	-37897.1720	2919533.9137
100 to 150	-13.1517	5202.9725	-550086.9479	48512553.7563

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
36.16 to 2.719	0.003354205	0.000303432	3.31573E-06	-9.4081E-08
2.719 to 0.4264	0.003354016	0.000305576	1.33649E-06	-6.85472E-08
0.4264 to 0.10804	0.003352607	0.000302955	2.38989E-07	-2.34973E-08
0.10804 to 0.0373	0.003374028	0.0003197	2.99039E-06	-2.24762E-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 ∝(%/°C)	β Deviation† (±%)
-50	36.16489	6.207813	11.961926
-45	26.68053	5.965156	10.911770
-40	19.91606	5.737385	9.910139
-35	15.03159	5.523286	8.953598
-30	11.46343	5.321767	8.039030
-25	8.828154	5.131845	7.163600
-20	6.861660	4.952629	6.324727
-15	5.379838	4.783315	5.520053
-10	4.252879	4.623173	4.747419
-5	3.388277	4.471539	4.004847
0	2.719438	4.351951	3.290521
5	2.195964	4.203661	2.584400
10	1.786100	4.063039	1.903669
15	1.462715	3.929564	1.246894
20	1.205696	3.802754	0.612748
25	1.000000	3.682170	0.000000
30	0.834287	3.567408	0.592490
35	0.699943	3.458096	1.165781
40	0.590372	3.353892	1.720861
45	0.500494	3.254480	2.258646
50	0.426364	3.166298	2.779995
55	0.364817	3.071502	3.299979
60	0.313603	2.980928	3.818003
65	0.270775	2.894329	4.333795
70	0.234788	2.811476	4.847107
75	0.204411	2.732154	5.357722
80	0.178655	2.656166	5.865443
85	0.156727	2.583328	6.370097
90	0.137981	2.513467	6.871530
95	0.121894	2.446422	7.369608
100	0.108036	2.370133	7.864210
105	0.096095	2.315992	7.998132
110	0.085701	2.263851	8.176922
115	0.076627	2.213611	8.397959
120	0.068683	2.165179	8.658715
125	0.061709	2.118466	8.956766
130	0.055571	2.073390	9.289778
135	0.050154	2.029874	9.655520
140	0.045362	1.987844	10.051850
145	0.041112	1.947233	10.476721
150	0.037336	1.907974	10.928179

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Material Type C4.9 – Available Products: UD

Data for material type: C4.9

CL Material C49.45

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	-11.4005	4124.5373	-265855.6767	14537901.9485
0 to 50	-10.5923	3676.5545	-198415.9858	13070063.1806
50 to 100	-8.9691	2452.0943	89557.1843	-6899333.7279
100 to 150	-6.5109	64.3512	811594.0806	-71575051.2118

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
34.91 to 2.721	0.003357305	0.000352893	5.54558E-06	-1.67399E-07
2.721 to 0.4180	0.003354016	0.000358852	3.08734E-06	-1.65226E-07
0.4180 to 0.10058	0.003353157	0.00035463	-8.78998E-07	1.23234E-07
0.10058 to 0.0327	0.00331626	0.000333422	1.86966E-06	2.04495E-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 ∝(%/°C)	β Deviation† (±%)
-50	21.160844	5.257504	10.14119
-45	16.352910	5.057530	9.273951
-40	12.760375	4.869692	8.439072
-35	10.048142	4.693008	7.634949
-30	7.980493	4.526590	6.860074
-25	6.389715	4.369641	6.113030
-20	5.155176	4.221439	5.392484
-15	4.189220	4.081331	4.697184
-10	3.427531	3.948723	4.025951
-5	2.822483	3.823077	3.377674
0	2.338500	3.685440	2.751308
5	1.951005	3.563809	2.240113
10	1.637385	3.448396	1.708167
15	1.381927	3.338780	1.156741
20	1.172571	3.234572	0.586996
25	1.000000	3.135419	0.000000
30	0.856961	3.040994	0.603267
35	0.737774	2.950998	1.221901
40	0.637960	2.865154	1.855071
45	0.553968	2.783206	2.502005
50	0.482963	2.689624	3.161992
55	0.423092	2.605971	3.588594
60	0.372160	2.526092	4.053561
65	0.328639	2.449763	4.555027
70	0.291293	2.376778	5.091280
75	0.259113	2.306945	5.660746
80	0.231277	2.240087	6.261979
85	0.207108	2.176038	6.893645
90	0.186047	2.114642	7.554515
95	0.167631	2.055757	8.243449
100	0.151474	2.063169	8.959397
105	0.136857	1.996970	9.789824
110	0.124051	1.933502	10.59646
115	0.112794	1.872621	11.37996
120	0.102865	1.814192	12.14099
125	0.094078	1.758089	12.88016
130	0.086279	1.704195	13.59809
135	0.079336	1.652397	14.29536
140	0.073137	1.602593	14.97256
145	0.067587	1.554685	15.63024
150	0.062606	1.508580	16.26895

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Material Type C5.2 – Available Products: UD

Data for material type: C5.2

CL Material C52.35

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	-12.3438	4575.4592	-328927.0173	17986859.5874
0 to 50	-10.9018	3755.4754	-193308.5692	12733627.2963
50 to 100	-9.3317	2541.5594	97705.2350	-7527045.7420
100 to 150	-7.7114	989.2064	564634.5333	-49795515.5237

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	0.003360655	0.000335813	5.94937E-06	-1.54175E-07
2.413 to 0.4704	0.003354016	0.000346202	2.70105E-06	-1.42068E-07
0.4704 to 0.14033	0.003351336	0.000339827	-8.44661E-07	1.13963E-07
0.14033 to 0.0562	0.003330905	0.000327324	-3.23241E-08	1.07177E-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 ∝(%/°C)	β Deviation† (±%)
-50	23.887229	5.445032	12.884099
-45	18.288326	5.243568	11.835301
-40	14.139084	5.054194	10.804607
-35	11.032048	4.875937	9.791925
-30	8.682546	4.707919	8.797108
-25	6.889389	4.549350	7.819971
-20	5.508836	4.399512	6.860295
-15	4.437130	4.257759	5.917832
-10	3.598644	4.123501	4.992316
-5	2.937738	3.996204	4.083461
0	2.413121	3.823270	3.190970
5	1.999700	3.696477	2.495907
10	1.667367	3.576177	1.831078
15	1.398436	3.461930	1.194609
20	1.179428	3.353331	0.584779
25	1.000000	3.250010	0.000000
30	0.852152	3.151625	0.561193
35	0.729657	3.057863	1.100153
40	0.627637	2.968436	1.618135
45	0.542244	2.883076	2.116301
50	0.470427	2.806359	2.595729
55	0.409750	2.718966	3.153301
60	0.358427	2.635516	3.690094
65	0.314813	2.555776	4.207208
70	0.277585	2.479532	4.705671
75	0.245675	2.406583	5.186438
80	0.218209	2.336741	5.650403
85	0.194478	2.269836	6.098400
90	0.173896	2.205703	6.531211
95	0.155981	2.144195	6.949566
100	0.140334	2.113737	7.354151
105	0.126464	2.049859	7.593478
110	0.114323	1.988574	7.842561
115	0.103657	1.929747	8.100703
120	0.094258	1.873250	8.367251
125	0.085949	1.818965	8.641587
130	0.078581	1.766780	8.923131
135	0.072028	1.716591	9.211337
140	0.066185	1.668300	9.505689
145	0.060960	1.621814	9.805703
150	0.056276	1.577046	10.110922

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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	-14.6277	5542.0741	-431676.9669	23605579.9064
0 to 50	-13.4565	4864.6356	-326279.5309	21492694.0795
50 to 100	-13.3634	4852.1936	-348573.1136	26853482.0250
100 to 150	-11.7967	3387.1161	68004.5730	-5997370.9894

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:
$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
38.99 to 2.813	0.003355681	0.000290025	5.07691E-06	-1.01561E-07
2.813 to 0.4105	0.003354016	0.000294007	2.79093E-06	-1.09098E-07
0.4105 to 0.09569	0.003353216	0.000292477	2.06642E-06	-1.26029E-07
0.09569 to 0.0304	0.003325888	0.000274717	-1.57014E-07	3.67592E-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 ∝(%/°C)	β Deviation† (±%)
-50	38.992448	6.216772	11.629556
-45	28.740127	5.992660	10.823331
-40	21.414789	5.781851	10.012822
-35	16.120520	5.583280	9.199763
-30	12.252636	5.395987	8.385679
-25	9.397885	5.219105	7.571907
-20	7.270490	5.051852	6.759617
-15	5.670600	4.893517	5.949837
-10	4.456971	4.743455	5.143462
-5	3.528767	4.601080	4.341274
0	2.813311	4.477138	3.543952
5	2.257328	4.333543	2.668796
10	1.823932	4.197209	1.883588
15	1.483567	4.067648	1.181204
20	1.214363	3.944409	0.555256
25	1.000000	3.827082	0.000000
30	0.828204	3.715286	0.489742
35	0.689675	3.608672	0.918648
40	0.577314	3.506920	1.290953
45	0.485667	3.409732	1.610501
50	0.410514	3.319909	1.880787
55	0.348539	3.228452	2.209160
60	0.297246	3.140950	2.529845
65	0.254589	3.057173	2.843152
70	0.218949	2.976911	3.149377
75	0.189039	2.899965	3.448799
80	0.163832	2.826153	3.741681
85	0.142499	2.755305	4.028271
90	0.124376	2.687260	4.308806
95	0.108920	2.621870	4.583510
100	0.095691	2.601947	4.852594
105	0.084166	2.532580	5.045077
110	0.074281	2.465924	5.247951
115	0.065772	2.401841	5.460530
120	0.058420	2.340200	5.682166
125	0.052048	2.280878	5.912247
130	0.046506	2.223761	6.150196
135	0.041670	2.168742	6.395471
140	0.037438	2.115719	6.647556
145	0.033724	2.064596	6.905969
150	0.030454	2.015285	7.170251

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Material Type C7.4 – CL74.10 – 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	-14.0918	5099.4070	-328591.4771	17968511.0960
0 to 50	-13.3974	4735.5903	-283645.8582	18684327.6408
50 to 100	-13.3551	4799.3924	-329379.2810	25374821.6786
100 to 150	-12.4400	3973.0093	-105330.0347	9289129.6336

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	0.003356088	0.000285358	3.62633E-06	-8.85187E-08
2.871 to 0.4044	0.003354016	0.00028873	2.29845E-06	-9.43315E-08
0.4044 to 0.09344	0.003355735	0.000290288	1.90068E-06	-1.19111E-07
0.09344 to 0.0297	0.003339781	0.000279368	2.96581E-07	-5.01723E-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 ∝(%/°C)	β Deviation† (±%)
-50	43.747117	6.501720	9.672729
-45	31.807504	6.254389	8.685037
-40	23.405157	6.022071	7.773356
-35	17.417393	5.803547	6.931194
-30	13.099575	5.597723	6.152753
-25	9.951055	5.403612	5.432846
-20	7.630881	5.220319	4.766813
-15	5.904023	5.047037	4.150460
-10	4.606597	4.883033	3.580004
-5	3.623073	4.727639	3.052022
0	2.871168	4.571313	2.563411
5	2.293250	4.422275	1.984253
10	1.844997	4.280822	1.440646
15	1.494625	4.146441	0.930176
20	1.218746	4.018660	0.450635
25	1.000000	3.897047	0.000000
30	0.825397	3.781206	0.423585
35	0.685143	3.670772	0.821827
40	0.571795	3.565407	1.196297
45	0.479662	3.464801	1.548444
50	0.404356	3.342439	1.879607
55	0.342935	3.249808	2.232167
60	0.292163	3.161190	2.569347
65	0.249989	3.076355	2.891974
70	0.214792	2.995086	3.200820
75	0.185287	2.917184	3.496603
80	0.160445	2.842462	3.779996
85	0.139443	2.770746	4.051625
90	0.121617	2.701876	4.312078
95	0.106428	2.635700	4.561904
100	0.093438	2.592011	4.801620
105	0.082220	2.525467	5.107526
110	0.072585	2.461491	5.382300
115	0.064280	2.399953	5.627654
120	0.057097	2.340729	5.845178
125	0.050865	2.283705	6.036346
130	0.045439	2.228772	6.202531
135	0.040702	2.175829	6.345009
140	0.036554	2.124781	6.464970
145	0.032911	2.075539	6.563526
150	0.029703	2.028016	6.641712

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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	-15.1973	5782.9337	-457921.0927	25040698.884
0 to 50	-14.4453	5417.3138	-424967.2389	27993453.452
50 to 100	-14.1607	5284.5506	-426942.5953	32890934.097
100 to 150	-13.9512	5166.0912	-423964.1520	37389695.925

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
43.61 to 2.901	0.003356447	0.000280796	4.89239E-06	-9.20797E-08
2.901 to 0.3980	0.003354016	0.000284792	3.30266E-06	-1.09549E-07
0.3980 to 0.8787	0.003353533	0.000283371	2.31722E-06	-1.2367E-07
0.8787 to 0.0268	0.003349827	0.000279831	1.45738E-06	-1.36287E-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 ∝(%/°C)	β Deviation† (±%)
-50	43.607510	6.401779	12.527052
-45	31.850209	6.172407	11.258603
-40	23.522921	5.956615	10.082867
-35	17.555596	5.753316	8.991477
-30	13.231988	5.561532	7.977015
-25	10.066527	5.380380	7.032882
-20	7.726050	5.209062	6.153192
-15	5.979340	5.046853	5.332678
-10	4.664193	4.893095	4.566618
-5	3.665646	4.747190	3.850760
0	2.901422	4.599700	3.181274
5	2.313783	4.456562	2.465398
10	1.858071	4.320577	1.792262
15	1.502036	4.191267	1.158801
20	1.221902	4.068191	0.562227
25	1.000000	3.950945	0.000000
30	0.823092	3.839158	0.530199
35	0.681188	3.732488	1.030493
40	0.566694	3.630620	1.502823
45	0.473796	3.533261	1.948976
50	0.398017	3.435571	2.370590
55	0.335993	3.342630	2.748888
60	0.284926	3.253680	3.114842
65	0.242675	3.168490	3.469067
70	0.207552	3.086849	3.812134
75	0.178223	3.008557	4.144579
80	0.153627	2.933431	4.466904
85	0.132913	2.861298	4.779579
90	0.115399	2.791998	5.083047
95	0.100534	2.725383	5.377722
100	0.087870	2.657121	5.663995
105	0.077063	2.593575	5.877439
110	0.067796	2.532419	6.087028
115	0.059822	2.473534	6.292888
120	0.052939	2.416807	6.495135
125	0.046979	2.362131	6.693884
130	0.041802	2.309408	6.889243
135	0.037291	2.258543	7.081314
140	0.033351	2.209450	7.270197
145	0.029899	2.162045	7.455987
150	0.026866	2.116250	7.638773

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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	-14.6918	5443.4307	-387994.4574	21216870.1788
0 to 50	-13.4778	4693.4281	-258333.1948	17016931.1934
50 to 100	-13.3840	4660.7400	-269043.2588	20726636.7681
100 to 150	-11.3152	2685.9355	308165.8898	-27177365.9644

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

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

Rt/R25 range	a	b	c	d
45.58 to 2.937	0.003353812	0.000280787	4.11501E-06	-8.99605E-08
2.937 to 0.3972	0.003354016	0.000282901	1.96938E-06	-8.24044E-08
0.3972 to 0.08830	0.003353018	0.000281307	1.40413E-06	-9.42315E-08
0.08830 to 0.0271	0.003319257	0.000261356	-4.40229E-07	1.71321E-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 ∝(%/°C)	β Deviation† (±%)
-50	45.580171	6.516244	9.427385
-45	33.111496	6.274541	8.499913
-40	24.336985	6.047359	7.638221
-35	18.085803	5.833527	6.836851
-30	13.580441	5.631992	6.090916
-25	10.297667	5.441802	5.396026
-20	7.880902	5.262097	4.748228
-15	6.084240	5.092099	4.143954
-10	4.736170	4.931101	3.579976
-5	3.715785	4.778460	3.053365
0	2.936982	4.673429	2.561462
5	2.334163	4.519514	1.982762
10	1.869026	4.373462	1.439576
15	1.507262	4.234738	0.929493
20	1.223766	4.102855	0.450308
25	1.000000	3.977364	0.000000
30	0.822167	3.857853	0.423285
35	0.679912	3.743942	0.821251
40	0.565405	3.635281	1.195469
45	0.472685	3.531550	1.547385
50	0.397177	3.439445	1.878337
55	0.335255	3.342328	2.151185
60	0.284333	3.249448	2.424502
65	0.242243	3.160561	2.698088
70	0.207283	3.075437	2.971759
75	0.178109	2.993864	3.245348
80	0.153653	2.915647	3.518701
85	0.133064	2.840600	3.791680
90	0.115658	2.768552	4.064156
95	0.100884	2.699345	4.336013
100	0.088296	2.695164	4.607147
105	0.077313	2.619798	4.786098
110	0.067946	2.547423	4.959010
115	0.059926	2.477885	5.126148
120	0.053033	2.411037	5.287761
125	0.047087	2.346746	5.444087
130	0.041940	2.284882	5.595348
135	0.037469	2.225327	5.741757
140	0.033572	2.167969	5.883512
145	0.030166	2.112702	6.020804
150	0.027178	2.059426	6.153812

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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	-16.3527	6172.2879	-475430.5590	25998176.6681
0 to 50	-14.0615	4795.2430	-230699.1259	15196619.0607
50 to 100	-12.3165	3508.6026	65504.3051	-5046340.6725
100 to 150	-10.1181	1465.5561	665528.8124	-58693452.7586

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
60.29 to 3.150	0.003358939	0.000258775	3.96071E-06	-7.20097E-08
3.150 to 0.3748	0.003354016	0.000265918	1.46091E-06	-6.04342E-08
0.3748 to 0.07882	0.003354584	0.000264714	-2.69817E-07	2.65025E-08
0.07882 to 0.0244	0.003338578	0.000256071	-1.04443E-07	4.54471E-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 ∝(%/°C)	β Deviation† (±%)
-50	60.289705	6.984734	9.627743
-45	42.795819	6.731922	8.677462
-40	30.752460	6.494143	7.776590
-35	22.354550	6.270191	6.921440
-30	16.427504	6.058982	6.108679
-25	12.196388	5.859535	5.335287
-20	9.143227	5.670965	4.598523
-15	6.917502	5.492469	3.895890
-10	5.279224	5.323318	3.225115
-5	4.062248	5.162847	2.584118
0	3.150335	4.983169	1.970995
5	2.466039	4.816862	1.561816
10	1.946071	4.659092	1.160373
15	1.547584	4.509279	0.766415
20	1.239710	4.366890	0.379700
25	1.000000	4.231438	0.000000
30	0.811986	4.102474	0.372907
35	0.663483	3.979585	0.739230
40	0.545401	3.862391	1.099171
45	0.450907	3.750542	1.452924
50	0.374827	3.610085	1.800672
55	0.313811	3.499205	2.106652
60	0.264154	3.393306	2.390789
65	0.223509	3.292095	2.654363
70	0.190055	3.195300	2.898564
75	0.162375	3.102668	3.124494
80	0.139357	3.013965	3.333177
85	0.120122	2.928972	3.525566
90	0.103973	2.847485	3.702546
95	0.090356	2.769315	3.864946
100	0.078822	2.706707	4.013537
105	0.068987	2.625757	4.268862
110	0.060619	2.548083	4.492008
115	0.053469	2.473514	4.684731
120	0.047335	2.401892	4.848659
125	0.042052	2.333064	4.985305
130	0.037485	2.266891	5.096071
135	0.033522	2.203242	5.182263
140	0.030072	2.141991	5.245100
145	0.027058	2.083022	5.285715
150	0.024417	2.026226	5.305167

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Material Type C8.5 - CL84.5 – 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	-15.8359	5967.6974	-457127.3333	24997293.390
0 to 50	-15.1290	5691.3050	-451821.0677	29762369.588
50 to 100	-15.0208	5779.1614	-524425.2592	40400833.344
100 to 150	-13.3391	4334.4573	-145647.2179	12844730.303

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
53.34 to 3.039	0.00335941	0.000266782	4.16974E-06	-7.88399E-08
3.039 to 0.3822	0.003354016	0.000272859	3.08814E-06	-9.68905E-08
0.3822 to 0.08029	0.003357556	0.000276137	2.64637E-06	-1.20589E-07
0.08029 to 0.0237	0.00334225	0.000263856	3.53579E-07	-5.31493E-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 ∝(%/°C)	β Deviation† (±%)
-50	53.338084	6.782126	9.614712
-45	38.239912	6.536173	8.756848
-40	27.744205	6.304858	7.936571
-35	20.356311	6.087006	7.151314
-30	15.094437	5.881559	6.398742
-25	11.304912	5.687564	5.676725
-20	8.546947	5.504158	4.983317
-15	6.519695	5.330558	4.316736
-10	5.015463	5.166054	3.675347
-5	3.889307	5.010000	3.057647
0	3.039022	4.798797	2.462254
5	2.399869	4.649876	1.895316
10	1.908938	4.508389	1.368287
15	1.528941	4.373839	0.878382
20	1.232647	4.245768	0.423061
25	1.000000	4.123756	0.000000
30	0.816107	4.007419	0.392928
35	0.669825	3.896401	0.757673
40	0.552752	3.790375	1.096029
45	0.458510	3.689037	1.409645
50	0.382225	3.538066	1.700042
55	0.321018	3.444530	2.069990
60	0.270848	3.354975	2.414736
65	0.229523	3.269171	2.735779
70	0.195321	3.186907	3.034504
75	0.166887	3.107988	3.312195
80	0.143144	3.032229	3.570043
85	0.123235	2.959460	3.809156
90	0.106475	2.889521	4.030563
95	0.092310	2.822265	4.235221
100	0.080293	2.751461	4.424026
105	0.070098	2.681322	4.478856
110	0.061409	2.613885	4.555118
115	0.053974	2.549010	4.651636
120	0.047591	2.486569	4.767294
125	0.042092	2.426442	4.901024
130	0.037338	2.368514	5.051813
135	0.033215	2.312679	5.218695
140	0.029628	2.258837	5.400751
145	0.026499	2.206894	5.597104
150	0.023761	2.156761	5.806925

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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	-17.2895	6660.0103	-550868.6740	30123392.0235
0 to 50	-17.4449	6969.1620	-676606.8663	44569465.7938
50 to 100	-15.1112	5489.7061	-399542.5984	30780084.7624
100 to 150	-12.7621	3455.4523	150495.7837	-13272328.7181

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
66.97 to 3.279	0.003357322	0.000250792	4.20708E-06	-6.46756E-08
3.279 to 0.3545	0.003354016	0.000254157	3.73516E-06	-7.86341E-08
0.3545 to 0.06880	0.003362363	0.000260059	1.65459E-06	-8.92962E-08
0.06880 to 0.0196	0.003349181	0.000249052	-2.20505E-07	5.90785E-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 ∝(%/°C)	β Deviation† (±%)
-50	66.974221	7.105340	8.962180
-45	47.251824	6.855243	8.176225
-40	33.743846	6.619839	7.413302
-35	24.374176	6.397955	6.672252
-30	17.796844	6.188540	5.951995
-25	13.127251	5.990640	5.251525
-20	9.776469	5.803394	4.569908
-15	7.347595	5.626022	3.906268
-10	5.570022	5.457815	3.259788
-5	4.257214	5.298125	2.629702
0	3.279236	5.103446	2.015294
5	2.550424	4.954659	1.574626
10	1.998029	4.813107	1.153932
15	1.576120	4.678312	0.751995
20	1.251506	4.549836	0.367696
25	1.000000	4.427275	0.000000
30	0.803834	4.310259	0.352049
35	0.649854	4.198446	0.689336
40	0.528248	4.091520	1.012684
45	0.431649	3.989189	1.322856
50	0.354484	3.736481	1.620560
55	0.294850	3.633733	1.933075
60	0.246483	3.535424	2.227981
65	0.207043	3.441298	2.506275
70	0.174717	3.351118	2.768880
75	0.148090	3.264662	3.016659
80	0.126053	3.181725	3.250412
85	0.107732	3.102115	3.470887
90	0.092434	3.025653	3.678781
95	0.079606	2.952172	3.874746
100	0.068805	2.856079	4.059393
105	0.059767	2.778815	4.152708
110	0.052112	2.704585	4.247523
115	0.045603	2.633234	4.343722
120	0.040048	2.564615	4.441194
125	0.035287	2.498591	4.539834
130	0.031193	2.435034	4.639547
135	0.027661	2.373822	4.740241
140	0.024602	2.314842	4.841831
145	0.021945	2.257988	4.944236
150	0.019629	2.203160	5.047383

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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	-16.4893	6285.1706	-499923.2332	27337520.2601
0 to 50	-16.6982	6563.5783	-606589.4514	39957276.7448
50 to 100	-15.3119	5610.5155	-419807.3651	32341248.0527
100 to 150	-16.0230	6315.6147	-651106.4508	57421534.5755

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
60.16 to 3.195	0.003354563	0.000259019	4.19853E-06	-7.22849E-08
3.195 to 0.3636	0.003354016	0.000260212	3.59423E-06	-8.62148E-08
0.3636 to 0.06933	0.003353143	0.000257436	1.70108E-06	-8.84053E-08
0.06933 to 0.0187	0.003354781	0.00025878	1.89304E-06	-1.19155E-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 ∝(%/°C)	β Deviation† (±%)
-50	60.163781	6.932516	8.962180
-45	42.812744	6.684549	8.176225
-40	30.834026	6.451252	7.413302
-35	22.459566	6.231451	6.672252
-30	16.535044	6.024091	5.951995
-25	12.296539	5.828218	5.251525
-20	9.231967	5.642970	4.569908
-15	6.993871	5.467563	3.906268
-10	5.343764	5.301288	3.259788
-5	4.116160	5.143500	2.629702
0	3.195030	4.998426	2.015294
5	2.497990	4.849958	1.574626
10	1.967201	4.708768	1.153932
15	1.559899	4.574374	0.751995
20	1.245063	4.446332	0.367696
25	1.000000	4.324235	0.000000
30	0.807974	4.207709	0.352049
35	0.656549	4.096408	0.689336
40	0.536412	3.990014	1.012684
45	0.440543	3.888233	1.322856
50	0.363614	3.775022	1.620560
55	0.301867	3.671629	1.933075
60	0.251875	3.572696	2.227981
65	0.211182	3.477967	2.506275
70	0.177885	3.387202	2.768880
75	0.150506	3.300179	3.016659
80	0.127884	3.216693	3.250412
85	0.109108	3.136550	3.470887
90	0.093455	3.059572	3.678781
95	0.080349	2.985590	3.874746
100	0.069333	2.918352	4.059393
105	0.060022	2.851298	4.152708
110	0.052133	2.786729	4.247523
115	0.045424	2.724519	4.343722
120	0.039700	2.664552	4.441194
125	0.034799	2.606719	4.539834
130	0.030590	2.550919	4.639547
135	0.026964	2.497053	4.740241
140	0.023831	2.445033	4.841831
145	0.021116	2.394772	4.944236
150	0.018756	2.346190	5.047383

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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 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	-15.1161	5301.3350	-290009.9735	15858741.9020
0 to 50	-15.7037	5780.0500	-420198.8267	27679348.4713
50 to 100	-15.8833	6011.3224	-512778.4949	39503586.3546
100 to 150	-16.2656	6437.9250	-671595.4691	59228475.4675

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
69.68 to 3.265	0.003353948	0.000256831	2.31222E-06	-5.60405E-08
3.265 to 0.3603	0.003354016	0.000256709	2.39213E-06	-7.68347E-08
0.3603 to 0.06748	0.003353864	0.000256243	2.06449E-06	-9.40687E-08
0.06748 to 0.0179	0.003353451	0.000255789	1.89541E-06	-1.15331E-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 ∝(%/°C)	β Deviation† (±%)
-50	69.682871	7.347138	0.865299
-45	48.619286	7.059070	1.057420
-40	34.399085	6.788696	1.208671
-35	24.658871	6.534572	1.322212
-30	17.895728	6.295398	1.400941
-25	13.139052	6.070004	1.447524
-20	9.752814	5.857333	1.464410
-15	7.314450	5.656428	1.453856
-10	5.539538	5.466421	1.417941
-5	4.234263	5.286522	1.358580
0	3.265000	5.116013	1.277541
5	2.538593	4.954238	0.971193
10	1.989412	4.800600	0.691993
15	1.570751	4.654551	0.438141
20	1.249056	4.515590	0.207984
25	1.000000	4.383256	0.000000
30	0.805790	4.257124	0.187213
35	0.653308	4.136806	0.354950
40	0.532802	4.021941	0.504406
45	0.436969	3.912197	0.636689
50	0.360300	3.804841	0.752823
55	0.298659	3.702936	0.957312
60	0.248800	3.605389	1.174473
65	0.208256	3.511951	1.403395
70	0.175118	3.422388	1.643226
75	0.147900	3.336485	1.893173
80	0.125439	3.254041	2.152490
85	0.106819	3.174869	2.420483
90	0.091317	3.098794	2.696503
95	0.078356	3.025652	2.979941
100	0.067477	2.955292	3.270228
105	0.058308	2.887571	3.392537
110	0.050553	2.822356	3.589040
115	0.043970	2.759521	3.855577
120	0.038363	2.698949	4.188133
125	0.033570	2.640531	4.582839
130	0.029460	2.584163	5.035973
135	0.025925	2.529748	5.543959
140	0.022876	2.477195	6.103363
145	0.020237	2.426416	6.710894
150	0.017947	2.377332	7.363403

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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:

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

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-16.4350	6102.2323	-440139.4349	24068336.7354
0 to 50	-15.4668	5599.4257	-378107.9210	24906735.1935
50 to 100	-14.8060	5153.6849	-296745.7239	22860787.7442
100 to 150	-14.8616	5266.5413	-353357.6133	31162855.7627

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
69.26 to 3.277	0.003357042	0.000252143	3.37742E-06	-6.54336E-08
3.277 t 0.3599	0.003354016	0.000256173	2.13941E-06	-7.25325E-08
0.3599 to 0.06816	0.003353045	0.0002542	1.14261E-06	-6.93803E-08
0.06816 to 0.0187	0.003353609	0.000253768	8.53411E-07	-8.79629E-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 ∝(%/°C)	β Deviation† (±%)
-50	69.265000	7.246066	8.962180
-45	48.547498	6.978200	8.176225
-40	34.471110	6.726405	7.413302
-35	24.776777	6.489385	6.672252
-30	18.014734	6.265976	5.951995
-25	13.241000	6.055125	5.251525
-20	9.832448	5.855882	4.569908
-15	7.372388	5.667385	3.906268
-10	5.578737	5.488852	3.259788
-5	4.258302	5.319572	2.629702
0	3.277300	5.137622	2.015294
5	2.545589	4.973018	1.574626
10	1.993156	4.816736	1.153932
15	1.572537	4.668214	0.751995
20	1.249696	4.526938	0.367696
25	1.000000	4.392434	0.000000
30	0.805462	4.264269	0.352049
35	0.652841	4.142044	0.689336
40	0.532305	4.025389	1.012684
45	0.436505	3.913964	1.322856
50	0.359900	3.806157	1.620560
55	0.298350	3.698658	1.933075
60	0.248629	3.595850	2.227981
65	0.208238	3.497462	2.506275
70	0.175250	3.403240	2.768880
75	0.148170	3.312949	3.016659
80	0.125829	3.226372	3.250412
85	0.107310	3.143305	3.470887
90	0.091890	3.063559	3.678781
95	0.078994	2.986956	3.874746
100	0.068163	2.904784	4.059393
105	0.059055	2.833686	4.152708
110	0.051343	2.765287	4.247523
115	0.044788	2.699450	4.343722
120	0.039197	2.636046	4.441194
125	0.034410	2.574955	4.539834
130	0.030299	2.516066	4.639547
135	0.026756	2.459273	4.740241
140	0.023693	2.404475	4.841831
145	0.021037	2.351579	4.944236
150	0.018728	2.300498	5.047383

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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	-16.8582	6223.6501	-438449.0792	23975902.2767
0 to 50	-14.3193	4632.7804	-139106.7669	9163244.7076
50 to 100	-13.5284	3988.2245	19622.5830	-1511690.5412
100 to 150	-12.6149	3069.6183	302691.1750	-26694547.0318

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
80.20 to 3.409	0.00335704	0.000244172	3.04972E-06	-5.87497E-08
3.409 to 0.3522	0.003354016	0.000249446	7.275E-07	-3.13764E-08
0.3522 to 0.06531	0.003351089	0.000245772	-6.54885E-08	5.62071E-09
0.06531 to 0.0179	0.003335628	0.000238591	-3.25945E-07	1.13596E-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 ∝(%/°C)	β Deviation† (±%)
-50	80.198230	7.509349	5.657896
-45	55.492248	7.229884	5.191183
-40	38.920517	6.967233	4.734772
-35	27.647378	6.720038	4.288274
-30	19.876348	6.487078	3.851318
-25	14.452066	6.267252	3.423553
-20	10.620870	6.059563	3.004647
-15	7.884492	5.863109	2.594281
-10	5.909301	5.677072	2.192154
-5	4.469197	5.500706	1.797979
0	3.409193	5.339415	1.411484
5	2.622718	5.155930	1.122556
10	2.035772	4.981963	0.836968
15	1.593620	4.816863	0.554698
20	1.257572	4.660034	0.275718
25	1.000000	4.510930	0.000000
30	0.800984	4.369047	0.272490
35	0.646031	4.233925	0.541787
40	0.524500	4.105137	0.807930
45	0.428517	3.982292	1.070957
50	0.352206	3.894787	1.330909
55	0.290760	3.776474	1.566719
60	0.241426	3.663456	1.797403
65	0.201572	3.555423	2.023159
70	0.169189	3.452086	2.244175
75	0.142727	3.353177	2.460628
80	0.120988	3.258446	2.672687
85	0.103037	3.167662	2.880512
90	0.088140	3.080609	3.084253
95	0.075719	2.997085	3.284056
100	0.065315	2.957194	3.480056
105	0.056455	2.875024	3.700101
110	0.048994	2.796108	3.893571
115	0.042684	2.720279	4.061890
120	0.037325	2.647378	4.206385
125	0.032756	2.577259	4.328290
130	0.028845	2.509783	4.428754
135	0.025485	2.444820	4.508849
140	0.022589	2.382248	4.569578
145	0.020083	2.321951	4.611877
150	0.017908	2.263823	4.636623

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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	-17.6313	6800.6124	-564653.7732	30877208.6155
0 to 50	-16.2931	6061.2476	-460567.9092	30338541.7656
50 to 100	-15.1730	5278.3754	-302866.9101	23332353.5560
100 to 150	-14.5560	4761.7178	-174761.3920	15412329.7326

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
72.50 to 3.363	0.003356492	0.00024621	4.08364E-06	-6.10786E-08
3.363 to 0.3507	0.003354016	0.000250275	2.42945E-06	-7.3121E-08
0.3507 to 0.06370	0.003353047	0.000247928	1.08179E-06	-6.41771E-08
0.06370 to 0.0169	0.003346715	0.000243428	3.34622E-07	-4.53927E-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 ∝(%/°C)	β Deviation† (±%)
-50	72.501432	7.230837	5.657896
-45	50.836786	6.976749	5.191183
-40	36.087664	6.737576	4.734772
-35	25.916613	6.512132	4.288274
-30	18.817007	6.299345	3.851318
-25	13.804217	6.098250	3.423553
-20	10.226286	5.907973	3.004647
-15	7.646155	5.727721	2.594281
-10	5.767369	5.556775	2.192154
-5	4.386591	5.394479	1.797979
0	3.362871	5.240068	1.411484
5	2.598690	5.075845	1.122556
10	2.024289	4.919854	0.836968
15	1.588882	4.771540	0.554698
20	1.256177	4.630398	0.275718
25	1.000000	4.495962	0.000000
30	0.801305	4.367804	0.272490
35	0.646120	4.245530	0.541787
40	0.524109	4.128777	0.807930
45	0.427570	4.017209	1.070957
50	0.350720	3.902295	1.330909
55	0.289366	3.792045	1.566719
60	0.240035	3.686607	1.797403
65	0.200144	3.585701	2.023159
70	0.167707	3.489069	2.244175
75	0.141194	3.396470	2.460628
80	0.119412	3.307680	2.672687
85	0.101430	3.222490	2.880512
90	0.086516	3.140706	3.084253
95	0.074091	3.062146	3.284056
100	0.063696	2.986040	3.480056
105	0.054968	2.910168	3.700101
110	0.047613	2.837214	3.893571
115	0.041390	2.767029	4.061890
120	0.036104	2.699475	4.206385
125	0.031598	2.634420	4.328290
130	0.027742	2.571743	4.428754
135	0.024432	2.511328	4.508849
140	0.021581	2.453066	4.569578
145	0.019118	2.396857	4.611877
150	0.016982	2.342603	4.636623

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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:

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

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-17.1509	6325.0037	-443766.2148	24266661.5194
0 to 50	-15.1941	5147.2925	-236189.0575	15558251.9849
50 to 100	-15.0355	5093.4693	-245821.8994	18937702.5930
100 to 150	-13.9827	4187.7815	-4852.3327	427930.6239

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
86.96 to 3.483	0.003357365	0.000239759	2.92092E-06	-5.54948E-08
3.483 to 0.3443	0.003354016	0.000244619	1.16438E-06	-4.49724E-08
0.3443 to 0.06164	0.003354698	0.000244921	8.39522E-07	-5.30286E-08
0.06164 to 0.0164	0.003348078	0.000239827	7.67973E-09	-1.40909E-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 ∝(%/°C)	β Deviation† (±%)
-50	86.956563	7.652462	4.858923
-45	59.748446	7.367349	4.384056
-40	41.624424	7.099398	3.942151
-35	29.377196	6.847222	3.530652
-30	20.988651	6.609576	3.147252
-25	15.169388	6.385334	2.789861
-20	11.083615	6.173479	2.456584
-15	8.182124	5.973090	2.145699
-10	6.099335	5.783332	1.855637
-5	4.588898	5.603444	1.584964
0	3.482871	5.420868	1.332372
5	2.668389	5.239227	1.069401
10	2.062531	5.066924	0.804322
15	1.607665	4.903324	0.537508
20	1.263142	4.747844	0.269298
25	1.000000	4.599949	0.000000
30	0.797407	4.459150	0.270108
35	0.640240	4.324995	0.540773
40	0.517427	4.197066	0.811765
45	0.420792	4.074982	1.082877
50	0.344252	3.942457	1.353919
55	0.283479	3.829525	1.523968
60	0.234727	3.721547	1.703674
65	0.195388	3.618235	1.892320
70	0.163465	3.519320	2.089237
75	0.137422	3.424556	2.293801
80	0.116065	3.333709	2.505428
85	0.098464	3.246566	2.723573
90	0.083889	3.162926	2.947724
95	0.071765	3.082602	3.177407
100	0.061635	2.996051	3.412173
105	0.053167	2.917405	3.524289
110	0.046039	2.841817	3.647611
115	0.040015	2.769132	3.781475
120	0.034903	2.699201	3.925253
125	0.030549	2.631888	4.078350
130	0.026827	2.567064	4.240206
135	0.023633	2.504607	4.410286
140	0.020883	2.444404	4.588090
145	0.018508	2.386346	4.773140
150	0.016450	2.330335	4.964985

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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	-17.7968	6684.6553	-505540.0381	27644666.4522
0 to 50	-15.5546	5360.4478	-276633.4058	18222403.1884
50 to 100	-15.0539	5047.3058	-224977.9179	17331917.5736
100 to 150	-14.8423	4933.7286	-216851.9369	19124324.4151

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
89.53 to 3.513	0.003359046	0.000236385	3.20516E-06	-5.4732E-08
3.513 to 0.3411	0.003354016	0.000242733	1.33224E-06	-4.90828E-08
0.3411 to 0.06022	0.003354522	0.000242569	7.44477E-07	-4.78663E-08
0.06022 to 0.0159	0.003357176	0.000242633	4.15905E-07	-5.3208E-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 ∝(%/°C)	β Deviation† (±%)
-50	89.534570	7.671380	4.233238
-45	61.452805	7.391955	3.885773
-40	42.753547	7.129191	3.552330
-35	30.125586	6.881750	3.232008
-30	21.483880	6.648427	2.923983
-25	15.495642	6.428135	2.627501
-20	11.296769	6.219891	2.341868
-15	8.319462	6.022804	2.066448
-10	6.185851	5.836065	1.800652
-5	4.641416	5.658938	1.543939
0	3.512750	5.453205	1.295808
5	2.686879	5.272389	1.022905
10	2.073344	5.100834	0.757195
15	1.613329	4.937910	0.498345
20	1.265384	4.783040	0.246044
25	1.000000	4.635696	0.000000
30	0.795973	4.495392	0.240061
35	0.637925	4.361681	0.474395
40	0.514607	4.234150	0.703244
45	0.417720	4.112420	0.926835
50	0.341097	3.977634	1.145381
55	0.280399	3.863102	1.363804
60	0.231796	3.753604	1.576955
65	0.192646	3.648845	1.785055
70	0.160931	3.548555	1.988309
75	0.135098	3.452480	2.186911
80	0.113947	3.360386	2.381046
85	0.096541	3.272053	2.570886
90	0.082148	3.187278	2.756596
95	0.070193	3.105871	2.938332
100	0.060216	3.004992	3.116241
105	0.051916	2.929244	3.308018
110	0.044926	2.856401	3.493048
115	0.039017	2.786316	3.671636
120	0.034001	2.718850	3.844072
125	0.029728	2.653872	4.010628
130	0.026076	2.591263	4.171558
135	0.022942	2.530906	4.327107
140	0.020245	2.472694	4.477502
145	0.017916	2.416527	4.622960
150	0.015899	2.362308	4.763685

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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	-17.7951	6659.6200	-496302.5248	27139527.4780
0 to 50	-15.7074	5427.2974	-284777.6864	18758883.4584
50 to 100	-15.1653	5087.7112	-227951.7658	17561017.7774
100 to 150	-14.7341	4752.7125	-151797.1947	13387101.0662

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
92.22 to 3.545	0.003358407	0.000235273	3.09974E-06	-5.37763E-08
3.545 to 0.3384	0.003354016	0.00024096	1.34159E-06	-4.87554E-08
0.3384 to 0.05902	0.003354687	0.000240924	7.39088E-07	-4.7124E-08
0.05902 to 0.0154	0.003353121	0.000238957	2.66743E-07	-3.75888E-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 ∝(%/°C)	β Deviation† (±%)
-50	92.220153	7.726326	4.233238
-45	63.127923	7.443544	3.885773
-40	43.809355	7.177658	3.552330
-35	30.797148	6.927309	3.232008
-30	21.914366	6.691273	2.923983
-25	15.773346	6.468449	2.627501
-20	11.476770	6.257837	2.341868
-15	8.436486	6.058533	2.066448
-10	6.262002	5.869717	1.800652
-5	4.690891	5.690642	1.543939
0	3.544738	5.491804	1.295808
5	2.706188	5.310011	1.022905
10	2.084370	5.137522	0.757195
15	1.618975	4.973706	0.498345
20	1.267569	4.817984	0.246044
25	1.000000	4.669824	0.000000
30	0.794632	4.528738	0.240061
35	0.635802	4.394278	0.474395
40	0.512068	4.266028	0.703244
45	0.415005	4.143608	0.926835
50	0.338358	4.005015	1.145381
55	0.277772	3.889731	1.363804
60	0.229323	3.779513	1.576955
65	0.190348	3.674066	1.785055
70	0.158813	3.573116	1.988309
75	0.133159	3.476408	2.186911
80	0.112179	3.383707	2.381046
85	0.094934	3.294792	2.570886
90	0.080690	3.209457	2.756596
95	0.068871	3.127512	2.938332
100	0.059020	3.036651	3.116241
105	0.050806	2.959110	3.308018
110	0.043902	2.884556	3.493048
115	0.038075	2.812837	3.671636
120	0.033138	2.743811	3.844072
125	0.028939	2.677343	4.010628
130	0.025354	2.613309	4.171558
135	0.022284	2.551590	4.327107
140	0.019644	2.492075	4.477502
145	0.017368	2.434660	4.622960
150	0.015399	2.379248	4.763685

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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	-18.0002	6761.5921	-511244.2297	27956591.2478
0 to 50	-15.8641	5501.1524	-295161.7720	19442904.2284
50 to 100	-15.3654	5191.2575	-245453.8101	18909345.6131
100 to 150	-14.9967	4926.4198	-192876.5148	17009915.1214

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

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

Rt/R25 range	a	b	c	d
94.59 to 3.573	0.003358462	0.00023365	3.13106E-06	-5.28619E-08
3.573 to 0.3359	0.003354016	0.000239386	1.36339E-06	-4.879E-08
0.3359 to 0.05771	0.003354404	0.000239103	7.79561E-07	-4.84194E-08
0.05771 to 0.0148	0.003354449	0.000237847	3.43321E-07	-4.49968E-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 ∝(%/°C)	β Deviation† (±%)
-50	94.588185	7.761011	4.233238
-45	64.636694	7.478298	3.885773
-40	44.778543	7.212444	3.552330
-35	31.423801	6.962093	3.232008
-30	22.321460	6.726027	2.923983
-25	16.038506	6.503146	2.627501
-20	11.649510	6.292454	2.341868
-15	8.548685	6.093052	2.066448
-10	6.334365	5.904119	1.800652
-5	4.736963	5.724912	1.543939
0	3.573441	5.525758	1.295808
5	2.723524	5.343262	1.022905
10	2.094276	5.170099	0.757195
15	1.624049	5.005635	0.498345
20	1.269535	4.849290	0.246044
25	1.000000	4.700530	0.000000
30	0.793425	4.558867	0.240061
35	0.633890	4.423850	0.474395
40	0.509781	4.295064	0.703244
45	0.412558	4.172126	0.926835
50	0.335888	4.037543	1.145381
55	0.275300	3.921725	1.363804
60	0.226922	3.810990	1.576955
65	0.188061	3.705042	1.785055
70	0.156665	3.603607	1.988309
75	0.131159	3.506429	2.186911
80	0.110329	3.413272	2.381046
85	0.093232	3.323915	2.570886
90	0.079129	3.238151	2.756596
95	0.067443	3.155789	2.938332
100	0.057714	3.059336	3.116241
105	0.049626	2.981806	3.308018
110	0.042834	2.907255	3.493048
115	0.037107	2.835531	3.671636
120	0.032258	2.766492	3.844072
125	0.028139	2.700006	4.010628
130	0.024625	2.635947	4.171558
135	0.021619	2.574198	4.327107
140	0.019037	2.514648	4.477502
145	0.016812	2.457193	4.622960
150	0.014889	2.401736	4.763685

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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 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	-18.8418	7184.9662	-573897.9929	31382714.3143
0 to 50	-16.5494	5817.5348	-338052.4515	22268200.2242
50 to 100	-16.0575	5520.3262	-294729.7484	22705480.4028
100 to 150	-16.5607	6103.9065	-499678.2473	44066975.1025

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
105.30 to 3.708	0.003357722	0.00022727	3.25109E-06	-4.87371E-08
3.708 to 0.3247	0.003354016	0.000232484	1.43011E-06	-4.79784E-08
0.3247 to 0.05265	0.003354289	0.000232087	8.60076E-07	-4.94258E-08
0.05265 to 0.0129	0.003365669	0.00023671	1.02059E-06	-8.22206E-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 ∝(%/°C)	β Deviation† (±%)
-50	105.146986	7.897976	3.104220
-45	71.360794	7.615923	2.948754
-40	49.097426	7.350547	2.779829
-35	34.217404	7.100512	2.598797
-30	24.138215	6.864620	2.406887
-25	17.224167	6.641786	2.205209
-20	12.424356	6.431031	1.994775
-15	9.054405	6.231464	1.776500
-10	6.662887	6.042280	1.551218
-5	4.948396	5.862744	1.319689
0	3.707354	5.681198	1.082602
5	2.803967	5.495259	0.863603
10	2.139995	5.318797	0.645768
15	1.647348	5.151169	0.429178
20	1.278514	4.991788	0.213902
25	1.000000	4.840112	0.000000
30	0.787966	4.695646	0.212476
35	0.625282	4.557934	0.423482
40	0.499533	4.426553	0.632982
45	0.401641	4.301117	0.840943
50	0.324918	4.165089	1.047340
55	0.264634	4.046680	1.206399
60	0.216786	3.933450	1.369181
65	0.178575	3.825099	1.535362
70	0.147881	3.721348	1.704639
75	0.123086	3.621937	1.876734
80	0.102948	3.526625	2.051386
85	0.086507	3.435187	2.228353
90	0.073018	3.347413	2.407411
95	0.061898	3.263109	2.588350
100	0.052689	3.142657	2.770975
105	0.045114	3.067471	2.943675
110	0.038771	2.995115	3.112593
115	0.033438	2.925445	3.277867
120	0.028937	2.858329	3.439630
125	0.025125	2.793640	3.598009
130	0.021884	2.731261	3.753124
135	0.019120	2.671082	3.905087
140	0.016755	2.612999	4.054009
145	0.014724	2.556914	4.199992
150	0.012975	2.502735	4.343134

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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:

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

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-17.9032	6807.2315	-534786.0116	29243936.7753
0 to 50	-18.4129	7218.8125	-661700.0718	43587525.0237
50 to 100	-16.8748	6144.3277	-446701.5369	34413129.4755
100 to 150	-16.5310	5835.3271	-375889.3264	33149943.3428

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
89.49 to 3.615	0.003350539	0.00023721	3.45389E-06	-5.56669E-08
3.615 to 0.3266	0.003354016	0.000235234	2.89669E-06	-6.37989E-08
0.3266 to 0.05210	0.003352513	0.000232132	1.32555E-06	-6.35511E-08
0.05210 to 0.0122	0.003340135	0.000225903	6.45321E-07	-6.01247E-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 ∝(%/°C)	β Deviation† (±%)
-50	89.487974	7.584477	3.104220
-45	61.677375	7.311903	2.948754
-40	43.074823	7.055488	2.779829
-35	30.459399	6.813939	2.598797
-30	21.792639	6.586090	2.406887
-25	15.765342	6.370891	2.205209
-20	11.524927	6.167389	1.994775
-15	8.508831	5.974724	1.776500
-10	6.341211	5.792111	1.551218
-5	4.767983	5.618839	1.319689
0	3.615448	5.531678	1.082602
5	2.753489	5.366898	0.863603
10	2.113935	5.210206	0.645768
15	1.635377	5.061065	0.429178
20	1.274393	4.918982	0.213902
25	1.000000	4.783504	0.000000
30	0.789894	4.654216	0.212476
35	0.627886	4.530734	0.423482
40	0.502125	4.412702	0.632982
45	0.403877	4.299795	0.840943
50	0.326651	4.183978	1.047340
55	0.265773	4.068904	1.206399
60	0.217460	3.958803	1.369181
65	0.178890	3.853387	1.535362
70	0.147922	3.752390	1.704639
75	0.122921	3.655564	1.876734
80	0.102631	3.562679	2.051386
85	0.086081	3.473521	2.228353
90	0.072515	3.387889	2.407411
95	0.061345	3.305597	2.588350
100	0.052104	3.257404	2.770975
105	0.044364	3.177374	2.943675
110	0.037922	3.100385	3.112593
115	0.032537	3.026284	3.277867
120	0.028019	2.954925	3.439630
125	0.024213	2.886174	3.598009
130	0.020995	2.819905	3.753124
135	0.018264	2.755996	3.905087
140	0.015938	2.694337	4.054009
145	0.013950	2.634822	4.199992
150	0.012246	2.577351	4.343134

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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	-20.3464	8135.0523	-756119.9291	41347235.9470
0 to 50	-19.8327	8007.9873	-801714.5333	52810561.4150
50 to 100	-18.8295	7381.4742	-709802.8595	54682009.5506
100 to 150	-18.6880	7354.2733	-750088.6703	66150845.9377

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
104.13 to 3.783	0.003356014	0.000223767	4.14653E-06	-3.74357E-08
3.783 to 0.3122	0.003354016	0.000226639	3.13801E-06	-5.43185E-08
0.3122 to 0.04535	0.003352675	0.000224094	1.9287E-06	-6.54034E-08
0.04535 to 0.0098	0.003347193	0.00022063	1.35597E-06	-7.37729E-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 ∝(%/°C)	β Deviation† (±%)
-50	104.129820	7.731045	2.622235
-45	71.214537	7.475432	2.353188
-40	49.311462	7.234404	2.110299
-35	34.546900	7.006818	1.891493
-30	24.472149	6.791643	1.694896
-25	17.517737	6.587949	1.518813
-20	12.664470	6.394893	1.361705
-15	9.242233	6.211707	1.222175
-10	6.805204	6.037696	1.098950
-5	5.053448	5.872225	0.990869
0	3.783014	5.712363	0.896870
5	2.855177	5.547990	0.697978
10	2.172242	5.391564	0.509447
15	1.665315	5.242561	0.330653
20	1.286004	5.100502	0.161015
25	1.000000	4.964945	0.000000
30	0.782767	4.835483	0.152890
35	0.616613	4.711742	0.298115
40	0.488674	4.593377	0.436103
45	0.389528	4.480067	0.567251
50	0.312224	4.366945	0.691931
55	0.251714	4.253100	0.883794
60	0.204064	4.144071	1.073175
65	0.166319	4.039585	1.260127
70	0.136250	3.939385	1.444701
75	0.112167	3.843234	1.626948
80	0.092776	3.750911	1.806917
85	0.077086	3.662210	1.984655
90	0.064328	3.576939	2.160208
95	0.053906	3.494918	2.333624
100	0.045355	3.418512	2.504944
105	0.038306	3.339778	2.645585
110	0.032478	3.263964	2.781715
115	0.027639	3.190923	2.913529
120	0.023605	3.120519	3.041209
125	0.020230	3.052623	3.164926
130	0.017396	2.987115	3.284845
135	0.015006	2.923881	3.401118
140	0.012986	2.862815	3.513894
145	0.011271	2.803816	3.623311
150	0.009811	2.746791	3.729499

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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	-21.1446	8419.0788	-775006.0198	42379992.2832
0 to 50	-18.6967	7050.3746	-564852.0338	37207948.4447
50 to 100	-16.9922	5807.3180	-296757.6449	22861706.1123
100 to 150	-16.7212	5583.2073	-248272.3355	21895311.4007

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
125.71 to 3.934	0.003360016	0.000214673	3.74054E-06	-3.41124E-08
3.934 to 0.3056	0.003354016	0.000221385	2.06197E-06	-5.19592E-08
0.3056 to 0.4414	0.00335188	0.000217972	7.17625E-07	-3.93806E-08
0.4414 to 0.0098	0.003345969	0.000214871	3.37404E-07	-3.73716E-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 ∝(%/°C)	β Deviation† (±%)
-50	125.708891	8.086688	2.348738
-45	84.487104	7.817639	2.211057
-40	57.528485	7.563988	2.068264
-35	39.657281	7.324526	1.920949
-30	27.657612	7.098164	1.769643
-25	19.502259	6.883918	1.614824
-20	13.895708	6.680896	1.456924
-15	9.999251	6.488287	1.296332
-10	7.263192	6.305356	1.133400
-5	5.323022	6.131432	0.968448
0	3.934333	5.912876	0.801763
5	2.941173	5.729771	0.652860
10	2.218418	5.555799	0.497684
15	1.687516	5.390350	0.336807
20	1.294064	5.232861	0.170751
25	1.000000	5.082817	0.000000
30	0.778438	4.939746	0.175003
35	0.610213	4.803209	0.353849
40	0.481543	4.672806	0.536162
45	0.382433	4.548165	0.721594
50	0.305578	4.432319	0.909826
55	0.245630	4.305877	1.070433
60	0.198667	4.184973	1.223937
65	0.161635	4.069285	1.370703
70	0.132252	3.958514	1.511073
75	0.108799	3.852384	1.645367
80	0.089971	3.750635	1.773884
85	0.074772	3.653028	1.896906
90	0.062439	3.559338	2.014697
95	0.052380	3.469356	2.127505
100	0.044136	3.393494	2.235562
105	0.037329	3.308002	2.432669
110	0.031705	3.225788	2.613595
115	0.027037	3.146685	2.779174
120	0.023146	3.070537	2.930187
125	0.019889	2.997199	3.067365
130	0.017152	2.926532	3.191393
135	0.014843	2.858408	3.302914
140	0.012888	2.792704	3.402531
145	0.011226	2.729307	3.490811
150	0.009809	2.668110	3.568287

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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	-22.1634	8963.6083	-863831.4175	47237270.2555
0 to 50	-20.1284	7946.4346	-744415.0208	49036126.3794
50 to 100	-17.5866	6090.7966	-339358.8837	26143633.3660
100 to 150	-17.9886	6494.1762	-476442.3896	42017788.5068

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
135.45 to 4.024	0.003361702	0.000209606	3.89034E-06	-2.56132E-08
4.024 to 0.2972	0.003354016	0.000217026	2.55898E-06	-4.98296E-08
0.2972 to 0.04085	0.003351716	0.000212943	7.67891E-07	-3.96457E-08
0.04085 to 0.00867	0.003350548	0.000212502	6.9436E-07	-5.52962E-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 ∝(%/°C)	β Deviation† (±%)
-50	135.455417	8.168928	2.293725
-45	90.650956	7.905670	2.091074
-40	61.446485	7.657243	1.901496
-35	42.156199	7.422493	1.724039
-30	29.253674	7.200381	1.557837
-25	20.520609	6.989965	1.402102
-20	14.542753	6.790394	1.256113
-15	10.406937	6.600892	1.119213
-10	7.516375	6.420754	0.990799
-5	5.476551	6.249339	0.870315
0	4.023800	5.988999	0.757255
5	2.996173	5.811962	0.615412
10	2.250320	5.643587	0.468295
15	1.704067	5.483299	0.316394
20	1.300544	5.330571	0.160158
25	1.000000	5.184920	0.000000
30	0.774396	5.045900	0.163699
35	0.603776	4.913100	0.330590
40	0.473812	4.786142	0.500351
45	0.374138	4.664677	0.672685
50	0.297192	4.541619	0.847318
55	0.237601	4.412965	0.964832
60	0.191157	4.289932	1.089185
65	0.154720	4.172194	1.219886
70	0.125951	4.059447	1.356478
75	0.103099	3.951410	1.498534
80	0.084840	3.847822	1.645653
85	0.070170	3.748438	1.797464
90	0.058319	3.653032	1.953618
95	0.048698	3.561392	2.113788
100	0.040846	3.480799	2.277669
105	0.034396	3.396384	2.341921
110	0.029084	3.315163	2.419220
115	0.024691	3.236972	2.508839
120	0.021042	3.161662	2.610090
125	0.017998	3.089091	2.722321
130	0.015450	3.019125	2.844912
135	0.013308	2.951640	2.977276
140	0.011501	2.886518	3.118858
145	0.009971	2.823648	3.269129
150	0.008672	2.762926	3.427589

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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 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	-22.9529	9409.4716	-941476.7148	51483181.9251
0 to 50	-20.6871	8288.5005	-811578.4318	53460316.4051
50 to 100	-18.0535	6371.1340	-395954.4485	30503659.7778
100 to 150	-18.7581	7087.0183	-632787.0080	55805930.0636

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
139.78 to 4.066	0.003363142	0.000206659	4.06912E-06	-1.7119E-08
4.066 to 0.2936	0.003354016	0.00021512	2.71662E-06	-4.73914E-08
0.2936 to 0.03931	0.003351505	0.000210804	8.73597E-07	-4.21992E-08
0.03931 to 0.0081	0.003355044	0.000212425	9.70764E-07	-6.25164E-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 ∝(%/°C)	β Deviation† (±%)
-50	139.781166	8.180261	2.293725
-45	93.474668	7.924692	2.091074
-40	63.289014	7.683291	1.901496
-35	43.356742	7.454966	1.724039
-30	30.033512	7.238734	1.557837
-25	21.024434	7.033702	1.402102
-20	14.865422	6.839063	1.256113
-15	10.610785	6.654083	1.119213
-10	7.642458	6.478091	0.990799
-5	5.551950	6.310477	0.870315
0	4.066395	6.026733	0.757255
5	3.022037	5.851636	0.615412
10	2.265147	5.685042	0.468295
15	1.711675	5.526388	0.316394
20	1.303490	5.375159	0.160158
25	1.000000	5.230883	0.000000
30	0.772595	5.093123	0.163699
35	0.600933	4.961479	0.330590
40	0.470430	4.835580	0.500351
45	0.370542	4.715083	0.672685
50	0.293588	4.594598	0.847318
55	0.234100	4.465796	0.964832
60	0.187845	4.342600	1.089185
65	0.151640	4.224685	1.219886
70	0.123121	4.111750	1.356478
75	0.100519	4.003514	1.498534
80	0.082503	3.899716	1.645653
85	0.068060	3.800114	1.797464
90	0.056421	3.704483	1.953618
95	0.046991	3.612610	2.113788
100	0.039314	3.518088	2.277669
105	0.033043	3.435004	2.341921
110	0.027885	3.355032	2.419220
115	0.023625	3.278014	2.508839
120	0.020092	3.203804	2.610090
125	0.017149	3.132265	2.722321
130	0.014689	3.063267	2.844912
135	0.012625	2.996690	2.977276
140	0.010886	2.932420	3.118858
145	0.009416	2.870348	3.269129
150	0.008170	2.810375	3.427589

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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:

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

where T = temperature in K

Temp Range (°C)	A	B	C	D
-50 to 0	-27.1750	11243.1745	-1150716.8031	62925148.9540
0 to 50	-23.2068	8964.5964	-782808.0319	51565151.8431
50 to 100	-21.8990	8122.5269	-640358.4009	49332126.1332
100 to 150	-21.4208	7784.3725	-587373.8368	51800910.6420

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

$I/T=a+b(\text{Ln } Rt/R25)+c(\text{Ln } Rt/R25)^2+d(\text{Ln } Rt/R25)^3$

Rt/R25 range	a	b	c	d
318.30 to 5.211	0.003360856	0.000176692	3.11595E-06	-6.92969E-09
5.211 to 0.2384	0.003354016	0.000183362	1.62324E-06	-3.02506E-08
0.2384 to 0.02280	0.003353745	0.000182171	9.21875E-07	-3.23876E-08
0.02280 to 0.0036	0.00334828	0.000179223	5.18903E-07	-3.38571E-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 ∝(%/°C)	β Deviation† (±%)
-50	318.304000	9.481525	2.293725
-45	199.633049	9.191559	2.091074
-40	126.980935	8.917483	1.901496
-35	81.851980	8.658082	1.724039
-30	53.431617	8.412260	1.557837
-25	35.299000	8.179023	1.402102
-20	23.586226	7.957471	1.256113
-15	15.930967	7.746782	1.119213
-10	10.871414	7.546210	0.990799
-5	7.491664	7.355074	0.870315
0	5.211000	7.113885	0.757255
5	3.671639	6.898627	0.615412
10	2.614286	6.694005	0.468295
15	1.880084	6.499310	0.316394
20	1.364974	6.313893	0.160158
25	1.000000	6.137156	0.000000
30	0.738961	5.968549	0.163699
35	0.550578	5.807567	0.330590
40	0.413457	5.653743	0.500351
45	0.312829	5.506645	0.672685
50	0.238400	5.341521	0.847318
55	0.183205	5.196405	0.964832
60	0.141791	5.057530	1.089185
65	0.110487	4.924538	1.219886
70	0.086656	4.797093	1.356478
75	0.068390	4.674888	1.498534
80	0.054298	4.557631	1.645653
85	0.043358	4.445056	1.797464
90	0.034814	4.336911	1.953618
95	0.028102	4.232962	2.113788
100	0.022800	4.132009	2.277669
105	0.018592	4.032121	2.341921
110	0.015235	3.936007	2.419220
115	0.012543	3.843475	2.508839
120	0.010374	3.754348	2.610090
125	0.008617	3.668459	2.722321
130	0.007188	3.585649	2.844912
135	0.006021	3.505772	2.977276
140	0.005063	3.428688	3.118858
145	0.004273	3.354267	3.269129
150	0.003620	3.282385	3.427589

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