



# MATERIAL TYPE: A1

## AVAILABLE PRODUCTS: GLASS BEADS

Data for bead curve: A1

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

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

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



# MATERIAL TYPE: A2

## AVAILABLE PRODUCTS: GLASS BEADS

Data for bead curve: A2

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

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

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



# MATERIAL TYPE: A3

## AVAILABLE PRODUCTS: GLASS BEADS

Data for bead curve: A3

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

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



# 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



# 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



# 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



# 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



# 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



# 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



# 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



# 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



# 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



# MATERIAL TYPE: B13

## AVAILABLE PRODUCTS: GLASS BEADS

Data for bead curve: B13

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

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

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



# MATERIAL TYPE: B14

## AVAILABLE PRODUCTS: GLASS BEADS

Data for bead curve: B14

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

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



# 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



# 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