



NTC thermistors for temperature measurement

Glass-encapsulated sensors,
standard type

Series/Type: **B57540**
Date: March 2006

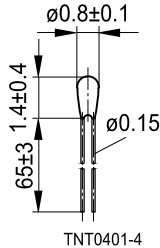
Applications

- Automotive electronics
- Industrial electronics
- Home appliances

Features

- Glass-encapsulated, heat-resistive and highly stable
- For temperature measurement up to 250 °C
- Fast response
- Small dimensions
- Leads: dumet wires (copper-clad FeNi)

Dimensional drawing



TNT0401-4

Options

Leads: nickel-plated dumet wires.
Alternative dimensions available on request.

Dimensions in mm

Delivery mode

Bulk

General technical data

Climatic category	(IEC 60068-1)		55/250/56	
Max. power	(at 25 °C)	P_{25}	18	mW
Resistance tolerance		$\Delta R_R/R_R$	$\pm 1, \pm 2, \pm 3, \pm 5$	%
Rated temperature		T_R	25	°C
Dissipation factor	(in air)	δ_{th}	approx. 0.4	mW/K
Thermal cooling time constant	(in air)	τ_c	approx. 3	s
Heat capacity		C_{th}	approx. 1.3	mJ/K

Electrical specification and ordering codes

R_{25} Ω	No. of R/T characteristic	$B_{25/85}$ K	$B_{0/100}$ K	$B_{25/100}$ K	Ordering code
5 k	8402	3480	$3450 \pm 1\%$	3497	B57540G0502+00*
10 k	8407	3480	$3450 \pm 1\%$	3497	B57540G0103+00*
20 k	8415	3992	$3970 \pm 1\%$	4006	B57540G0203+00*
30 k	8415	3992	$3970 \pm 1\%$	4006	B57540G0303+00*
50 k	8403	3992	$3970 \pm 1\%$	4006	B57540G0503+00*
100 k	8404	4066	$4036 \pm 1\%$	4085	B57540G0104+00*
230 k	8405	4240	$4537 \pm 2^{1)}\%$	4264	B57540G0234+00*
1400 k	8406	4557	$5133 \pm 2^{2)}\%$	4581	B57540G0145+00*

+ = Resistance tolerance

F = $\pm 1\%$

G = $\pm 2\%$

H = $\pm 3\%$

J = $\pm 5\%$

* = Leads

0 = dumet wires

2 = nickel-plated wires

Reliability data

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 60068-2-2	Storage at upper category temperature T: 250 °C t: 1000 h	< 3%	No visible damage
Storage in damp heat, steady state	IEC 60068-2-67	Temperature of air: 85 °C Relative humidity of air: 85% Duration: 56 days	< 2%	No visible damage
Rapid temperature cycling	IEC 60068-2-14	Lower test temperature: -55 °C Upper test temperature: 200 °C Number of cycles: 1000	< 2%	No visible damage

1) $B_{100/200}$

2) $B_{200/300}$

R/T characteristics

	B57540G0502F000					
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
-55.0	259960	245980	273940	5.4	0.8	6.4
-50.0	189950	180440	199450	5.0	0.8	6.2
-45.0	140350	133820	146880	4.7	0.8	5.9
-40.0	104800	100280	109320	4.3	0.8	5.7
-35.0	79044	75892	82196	4.0	0.7	5.5
-30.0	60186	57972	62400	3.7	0.7	5.4
-25.0	46242	44678	47806	3.4	0.7	5.2
-20.0	35834	34724	36945	3.1	0.6	5.0
-15.0	27996	27205	28788	2.8	0.6	4.9
-10.0	22043	21478	22609	2.6	0.5	4.7
-5.0	17485	17080	17890	2.3	0.5	4.6
0.0	13968	13678	14258	2.1	0.5	4.4
5.0	11234	11027	11441	1.8	0.4	4.3
10.0	9094	8946	9241	1.6	0.4	4.2
15.0	7407	7302	7511	1.4	0.3	4.0
20.0	6068	5995	6141	1.2	0.3	3.9
25.0	5000	4950	5050	1.0	0.3	3.8
30.0	4142	4093	4192	1.2	0.3	3.7
35.0	3450	3402	3497	1.4	0.4	3.6
40.0	2887	2842	2932	1.6	0.4	3.5
45.0	2428	2386	2470	1.7	0.5	3.4
50.0	2051	2012	2090	1.9	0.6	3.3
55.0	1741	1705	1777	2.1	0.6	3.2
60.0	1484	1450	1517	2.2	0.7	3.2
65.0	1270	1239	1300	2.4	0.8	3.1
70.0	1091	1063	1119	2.5	0.8	3.0
75.0	940.8	915.5	966.2	2.7	0.9	2.9
80.0	814.4	791.3	837.5	2.8	1.0	2.8
85.0	707.5	686.5	728.6	3.0	1.1	2.8
90.0	616.8	597.5	636.0	3.1	1.1	2.7
95.0	539.4	521.9	556.9	3.2	1.2	2.6
100.0	473.3	457.3	489.3	3.4	1.3	2.6
105.0	416.6	402.0	431.2	3.5	1.4	2.5
110.0	367.7	354.4	381.1	3.6	1.5	2.5
115.0	325.6	313.4	337.8	3.7	1.6	2.4
120.0	289.0	277.9	300.2	3.9	1.6	2.4
125.0	257.3	247.1	267.6	4.0	1.7	2.3
130.0	229.7	220.3	239.1	4.1	1.8	2.2
135.0	205.5	196.9	214.2	4.2	1.9	2.2

B57540G0502F000						
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm\text{°C}]$	$\alpha \text{ (%/K)}$
140.0	184.4	176.4	192.3	4.3	2.0	2.1
145.0	165.8	158.5	173.1	4.4	2.1	2.1
150.0	149.4	142.7	156.2	4.5	2.2	2.1
155.0	135.0	128.8	141.2	4.6	2.3	2.0
160.0	122.2	116.5	128.0	4.7	2.4	2.0
165.0	110.9	105.5	116.2	4.8	2.5	1.9
170.0	100.8	95.86	105.7	4.9	2.6	1.9
175.0	91.82	87.24	96.40	5.0	2.7	1.8
180.0	83.81	79.55	88.06	5.1	2.8	1.8
185.0	76.64	72.68	80.60	5.2	2.9	1.8
190.0	70.21	66.53	73.90	5.3	3.0	1.7
195.0	64.44	61.00	67.88	5.3	3.1	1.7
200.0	59.25	56.04	62.46	5.4	3.3	1.7
205.0	54.56	51.56	57.56	5.5	3.4	1.6
210.0	50.33	47.53	53.14	5.6	3.5	1.6
215.0	46.51	43.88	49.14	5.7	3.6	1.6
220.0	43.04	40.57	45.50	5.7	3.7	1.5
225.0	39.89	37.57	42.20	5.8	3.9	1.5
230.0	37.02	34.85	39.20	5.9	4.0	1.5
235.0	34.42	32.37	36.46	5.9	4.1	1.4
240.0	32.04	30.11	33.97	6.0	4.2	1.4
245.0	29.86	28.05	31.68	6.1	4.4	1.4
250.0	27.88	26.16	29.59	6.2	4.5	1.4

B57540G0502G000						
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm\text{°C}]$	$\alpha \text{ (%/K)}$
−55.0	259960	243260	276650	6.4	1.0	6.4
−50.0	189950	178460	201430	6.0	1.0	6.2
−45.0	140350	132370	148330	5.7	1.0	5.9
−40.0	104800	99201	110400	5.3	0.9	5.7
−35.0	79044	75078	83010	5.0	0.9	5.5
−30.0	60186	57354	63018	4.7	0.9	5.4
−25.0	46242	44204	48279	4.4	0.8	5.2
−20.0	35834	34358	37310	4.1	0.8	5.0
−15.0	27996	26920	29073	3.8	0.8	4.9
−10.0	22043	21254	22833	3.6	0.8	4.7
−5.0	17485	16903	18067	3.3	0.7	4.6

	B57540G0502G000					
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
0.0	13968	13537	14399	3.1	0.7	4.4
5.0	11234	10914	11554	2.9	0.7	4.3
10.0	9094	8855	9332	2.6	0.6	4.2
15.0	7407	7228	7585	2.4	0.6	4.0
20.0	6068	5935	6202	2.2	0.6	3.9
25.0	5000	4900	5100	2.0	0.5	3.8
30.0	4142	4051	4233	2.2	0.6	3.7
35.0	3450	3367	3532	2.4	0.7	3.6
40.0	2887	2813	2961	2.6	0.7	3.5
45.0	2428	2361	2495	2.7	0.8	3.4
50.0	2051	1991	2111	2.9	0.9	3.3
55.0	1741	1687	1795	3.1	1.0	3.2
60.0	1484	1435	1532	3.2	1.0	3.2
65.0	1270	1226	1313	3.4	1.1	3.1
70.0	1091	1052	1130	3.6	1.2	3.0
75.0	940.8	905.9	975.7	3.7	1.3	2.9
80.0	814.4	783.0	845.8	3.9	1.4	2.8
85.0	707.5	679.2	735.8	4.0	1.4	2.8
90.0	616.8	591.3	642.3	4.1	1.5	2.7
95.0	539.4	516.4	562.4	4.3	1.6	2.6
100.0	473.3	452.5	494.1	4.4	1.7	2.6
105.0	416.6	397.7	435.4	4.5	1.8	2.5
110.0	367.7	350.6	384.8	4.7	1.9	2.5
115.0	325.6	310.0	341.1	4.8	2.0	2.4
120.0	289.0	274.9	303.2	4.9	2.1	2.4
125.0	257.3	244.4	270.2	5.0	2.2	2.3
130.0	229.7	217.9	241.4	5.1	2.3	2.2
135.0	205.5	194.8	216.3	5.2	2.4	2.2
140.0	184.4	174.5	194.2	5.3	2.5	2.1
145.0	165.8	156.8	174.8	5.4	2.6	2.1
150.0	149.4	141.1	157.7	5.5	2.7	2.1
155.0	135.0	127.4	142.6	5.6	2.8	2.0
160.0	122.2	115.2	129.2	5.7	2.9	2.0
165.0	110.9	104.4	117.4	5.8	3.0	1.9
170.0	100.8	94.82	106.8	5.9	3.1	1.9
175.0	91.82	86.29	97.36	6.0	3.3	1.8
180.0	83.81	78.68	88.94	6.1	3.4	1.8
185.0	76.64	71.88	81.40	6.2	3.5	1.8
190.0	70.21	65.80	74.63	6.3	3.6	1.7
195.0	64.44	60.33	68.55	6.4	3.8	1.7

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0502G000						
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
200.0	59.25	55.42	63.07	6.5	3.9	1.7
205.0	54.56	50.99	58.13	6.5	4.0	1.6
210.0	50.33	47.00	53.67	6.6	4.1	1.6
215.0	46.51	43.39	49.62	6.7	4.3	1.6
220.0	43.04	40.12	45.95	6.8	4.4	1.5
225.0	39.89	37.16	42.62	6.9	4.6	1.5
230.0	37.02	34.46	39.59	6.9	4.7	1.5
235.0	34.42	32.01	36.82	7.0	4.8	1.4
240.0	32.04	29.77	34.30	7.1	5.0	1.4
245.0	29.86	27.73	32.00	7.1	5.1	1.4
250.0	27.88	25.87	29.88	7.2	5.3	1.4

B57540G0502H000						
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	259960	240550	279360	7.5	1.2	6.4
−50.0	189950	176490	203400	7.1	1.1	6.2
−45.0	140350	130910	149780	6.7	1.1	5.9
−40.0	104800	98118	111480	6.4	1.1	5.7
−35.0	79044	74264	83824	6.0	1.1	5.5
−30.0	60186	56736	63636	5.7	1.1	5.4
−25.0	46242	43731	48753	5.4	1.0	5.2
−20.0	35834	33992	37676	5.1	1.0	5.0
−15.0	27996	26635	29358	4.9	1.0	4.9
−10.0	22043	21030	23057	4.6	1.0	4.7
−5.0	17485	16726	18245	4.3	1.0	4.6
0.0	13968	13396	14540	4.1	0.9	4.4
5.0	11234	10800	11668	3.9	0.9	4.3
10.0	9094	8763	9424	3.6	0.9	4.2
15.0	7407	7154	7659	3.4	0.8	4.0
20.0	6068	5874	6263	3.2	0.8	3.9
25.0	5000	4850	5150	3.0	0.8	3.8
30.0	4142	4010	4275	3.2	0.9	3.7
35.0	3450	3333	3566	3.4	0.9	3.6
40.0	2887	2784	2990	3.6	1.0	3.5
45.0	2428	2337	2519	3.8	1.1	3.4
50.0	2051	1971	2132	3.9	1.2	3.3
55.0	1741	1670	1812	4.1	1.3	3.2

	B57540G0502H000					
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
60.0	1484	1420	1547	4.3	1.3	3.2
65.0	1270	1214	1326	4.4	1.4	3.1
70.0	1091	1041	1141	4.6	1.5	3.0
75.0	940.8	896.4	985.3	4.7	1.6	2.9
80.0	814.4	774.7	854.1	4.9	1.7	2.8
85.0	707.5	672.0	743.0	5.0	1.8	2.8
90.0	616.8	585.0	648.5	5.2	1.9	2.7
95.0	539.4	510.9	568.0	5.3	2.0	2.6
100.0	473.3	447.6	499.0	5.4	2.1	2.6
105.0	416.6	393.4	439.7	5.6	2.2	2.5
110.0	367.7	346.9	388.6	5.7	2.3	2.5
115.0	325.6	306.7	344.5	5.8	2.4	2.4
120.0	289.0	271.9	306.2	5.9	2.5	2.4
125.0	257.3	241.8	272.9	6.0	2.6	2.3
130.0	229.7	215.6	243.8	6.2	2.7	2.2
135.0	205.5	192.7	218.4	6.3	2.9	2.2
140.0	184.4	172.6	196.1	6.4	3.0	2.1
145.0	165.8	155.1	176.5	6.5	3.1	2.1
150.0	149.4	139.6	159.3	6.6	3.2	2.1
155.0	135.0	126.0	144.0	6.7	3.3	2.0
160.0	122.2	113.9	130.5	6.8	3.4	2.0
165.0	110.9	103.2	118.5	6.9	3.6	1.9
170.0	100.8	93.77	107.8	7.0	3.7	1.9
175.0	91.82	85.33	98.31	7.1	3.8	1.8
180.0	83.81	77.81	89.81	7.2	4.0	1.8
185.0	76.64	71.09	82.19	7.2	4.1	1.8
190.0	70.21	65.06	75.36	7.3	4.2	1.7
195.0	64.44	59.66	69.22	7.4	4.4	1.7
200.0	59.25	54.80	63.69	7.5	4.5	1.7
205.0	54.56	50.42	58.70	7.6	4.7	1.6
210.0	50.33	46.48	54.19	7.7	4.8	1.6
215.0	46.51	42.90	50.11	7.7	4.9	1.6
220.0	43.04	39.67	46.40	7.8	5.1	1.5
225.0	39.89	36.74	43.04	7.9	5.2	1.5
230.0	37.02	34.07	39.98	8.0	5.4	1.5
235.0	34.42	31.65	37.19	8.0	5.6	1.4
240.0	32.04	29.44	34.64	8.1	5.7	1.4
245.0	29.86	27.42	32.31	8.2	5.9	1.4
250.0	27.88	25.57	30.18	8.3	6.0	1.4

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0502J000						
R/T No.	8402					
T (°C)	B _{0/100} = 3450 K, R ₂₅ = 5000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	259960	235130	284790	9.6	1.5	6.4
-50.0	189950	172540	207350	9.2	1.5	6.2
-45.0	140350	128010	152690	8.8	1.5	5.9
-40.0	104800	95953	113650	8.4	1.5	5.7
-35.0	79044	72637	85452	8.1	1.5	5.5
-30.0	60186	55501	64871	7.8	1.5	5.4
-25.0	46242	42784	49699	7.5	1.4	5.2
-20.0	35834	33260	38408	7.2	1.4	5.0
-15.0	27996	26065	29928	6.9	1.4	4.9
-10.0	22043	20582	23505	6.6	1.4	4.7
-5.0	17485	16372	18599	6.4	1.4	4.6
0.0	13968	13114	14823	6.1	1.4	4.4
5.0	11234	10574	11894	5.9	1.4	4.3
10.0	9094	8580	9607	5.6	1.4	4.2
15.0	7407	7005	7808	5.4	1.3	4.0
20.0	6068	5752	6384	5.2	1.3	3.9
25.0	5000	4750	5250	5.0	1.3	3.8
30.0	4142	3927	4358	5.2	1.4	3.7
35.0	3450	3263	3636	5.4	1.5	3.6
40.0	2887	2726	3048	5.6	1.6	3.5
45.0	2428	2288	2568	5.8	1.7	3.4
50.0	2051	1929	2173	5.9	1.8	3.3
55.0	1741	1634	1847	6.1	1.9	3.2
60.0	1484	1390	1577	6.3	2.0	3.2
65.0	1270	1188	1352	6.4	2.1	3.1
70.0	1091	1019	1163	6.6	2.2	3.0
75.0	940.8	877.2	1004	6.8	2.3	2.9
80.0	814.4	758.2	870.7	6.9	2.4	2.8
85.0	707.5	657.6	757.4	7.1	2.5	2.8
90.0	616.8	572.4	661.1	7.2	2.7	2.7
95.0	539.4	499.8	579.0	7.3	2.8	2.6
100.0	473.3	437.9	508.7	7.5	2.9	2.6
105.0	416.6	384.9	448.2	7.6	3.0	2.5
110.0	367.7	339.3	396.2	7.7	3.1	2.5
115.0	325.6	300.0	351.1	7.9	3.3	2.4
120.0	289.0	266.0	312.1	8.0	3.4	2.4
125.0	257.3	236.5	278.2	8.1	3.5	2.3
130.0	229.7	210.8	248.5	8.2	3.7	2.2
135.0	205.5	188.4	222.6	8.3	3.8	2.2

B57540G0502J000						
R/T No.	8402					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 5000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
140.0	184.4	168.8	199.9	8.4	3.9	2.1
145.0	165.8	151.6	180.0	8.5	4.1	2.1
150.0	149.4	136.5	162.4	8.7	4.2	2.1
155.0	135.0	123.2	146.8	8.8	4.4	2.0
160.0	122.2	111.4	133.0	8.9	4.5	2.0
165.0	110.9	100.9	120.8	9.0	4.6	1.9
170.0	100.8	91.67	109.9	9.1	4.8	1.9
175.0	91.82	83.42	100.2	9.1	5.0	1.8
180.0	83.81	76.07	91.55	9.2	5.1	1.8
185.0	76.64	69.49	83.79	9.3	5.3	1.8
190.0	70.21	63.60	76.83	9.4	5.4	1.7
195.0	64.44	58.32	70.57	9.5	5.6	1.7
200.0	59.25	53.56	64.93	9.6	5.8	1.7
205.0	54.56	49.28	59.84	9.7	5.9	1.6
210.0	50.33	45.42	55.24	9.8	6.1	1.6
215.0	46.51	41.93	51.08	9.8	6.3	1.6
220.0	43.04	38.77	47.31	9.9	6.5	1.5
225.0	39.89	35.90	43.87	10.0	6.6	1.5
230.0	37.02	33.30	40.75	10.1	6.8	1.5
235.0	34.42	30.93	37.91	10.1	7.0	1.4
240.0	32.04	28.76	35.31	10.2	7.2	1.4
245.0	29.86	26.79	32.94	10.3	7.4	1.4
250.0	27.88	24.99	30.76	10.4	7.6	1.4

B57540G0103F000						
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	519910	491950	547870	5.4	0.8	6.4
−50.0	379890	360880	398910	5.0	0.8	6.2
−45.0	280700	267640	293750	4.7	0.8	5.9
−40.0	209600	200570	218640	4.3	0.8	5.7
−35.0	158090	151780	164390	4.0	0.7	5.5
−30.0	120370	115940	124800	3.7	0.7	5.4
−25.0	92484	89355	95612	3.4	0.7	5.2
−20.0	71668	69447	73889	3.1	0.6	5.0
−15.0	55993	54410	57576	2.8	0.6	4.9
−10.0	44087	42955	45218	2.6	0.5	4.7
−5.0	34971	34161	35780	2.3	0.5	4.6

	B57540G0103F000					
R/T No.	8407					
T (°C)	B _{0/100} = 3450 K, R ₂₅ = 10000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	27936	27356	28516	2.1	0.5	4.4
5.0	22468	22054	22882	1.8	0.4	4.3
10.0	18187	17892	18482	1.6	0.4	4.2
15.0	14813	14605	15021	1.4	0.3	4.0
20.0	12136	11991	12282	1.2	0.3	3.9
25.0	10000	9900	10100	1.0	0.3	3.8
30.0	8284	8186	8383	1.2	0.3	3.7
35.0	6899	6804	6994	1.4	0.4	3.6
40.0	5774	5684	5864	1.6	0.4	3.5
45.0	4856	4772	4940	1.7	0.5	3.4
50.0	4103	4024	4181	1.9	0.6	3.3
55.0	3482	3409	3554	2.1	0.6	3.2
60.0	2967	2901	3034	2.2	0.7	3.2
65.0	2539	2479	2600	2.4	0.8	3.1
70.0	2182	2126	2237	2.5	0.8	3.0
75.0	1882	1831	1932	2.7	0.9	2.9
80.0	1629	1583	1675	2.8	1.0	2.8
85.0	1415	1373	1457	3.0	1.1	2.8
90.0	1234	1195	1272	3.1	1.1	2.7
95.0	1079	1044	1114	3.2	1.2	2.6
100.0	946.6	914.6	978.6	3.4	1.3	2.6
105.0	833.1	803.9	862.3	3.5	1.4	2.5
110.0	735.5	708.8	762.1	3.6	1.5	2.5
115.0	651.1	626.7	675.5	3.7	1.6	2.4
120.0	578.1	555.8	600.4	3.9	1.6	2.4
125.0	514.6	494.2	535.1	4.0	1.7	2.3
130.0	459.4	440.6	478.1	4.1	1.8	2.2
135.0	411.1	393.8	428.3	4.2	1.9	2.2
140.0	368.8	352.9	384.6	4.3	2.0	2.1
145.0	331.6	317.0	346.2	4.4	2.1	2.1
150.0	298.9	285.4	312.3	4.5	2.2	2.1
155.0	270.0	257.5	282.4	4.6	2.3	2.0
160.0	244.4	232.9	255.9	4.7	2.4	2.0
165.0	221.7	211.1	232.4	4.8	2.5	1.9
170.0	201.6	191.7	211.5	4.9	2.6	1.9
175.0	183.6	174.5	192.8	5.0	2.7	1.8
180.0	167.6	159.1	176.1	5.1	2.8	1.8
185.0	153.3	145.4	161.2	5.2	2.9	1.8
190.0	140.4	133.1	147.8	5.3	3.0	1.7
195.0	128.9	122.0	135.8	5.3	3.1	1.7

	B57540G0103F000					
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
200.0	118.5	112.1	124.9	5.4	3.3	1.7
205.0	109.1	103.1	115.1	5.5	3.4	1.6
210.0	100.7	95.05	106.3	5.6	3.5	1.6
215.0	93.01	87.76	98.27	5.7	3.6	1.6
220.0	86.08	81.14	91.01	5.7	3.7	1.5
225.0	79.78	75.15	84.41	5.8	3.9	1.5
230.0	74.05	69.70	78.40	5.9	4.0	1.5
235.0	68.83	64.74	72.93	5.9	4.1	1.4
240.0	64.08	60.22	67.93	6.0	4.2	1.4
245.0	59.73	56.09	63.36	6.1	4.4	1.4
250.0	55.75	52.32	59.18	6.2	4.5	1.4

	B57540G0103G000					
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
−55.0	519910	486530	553300	6.4	1.0	6.4
−50.0	379890	356930	402860	6.0	1.0	6.2
−45.0	280700	264740	296660	5.7	1.0	5.9
−40.0	209600	198400	220800	5.3	0.9	5.7
−35.0	158090	150160	166020	5.0	0.9	5.5
−30.0	120370	114710	126040	4.7	0.9	5.4
−25.0	92484	88409	96559	4.4	0.8	5.2
−20.0	71668	68716	74621	4.1	0.8	5.0
−15.0	55993	53839	58146	3.8	0.8	4.9
−10.0	44087	42508	45666	3.6	0.8	4.7
−5.0	34971	33806	36135	3.3	0.7	4.6
0.0	27936	27074	28798	3.1	0.7	4.4
5.0	22468	21827	23109	2.9	0.7	4.3
10.0	18187	17709	18665	2.6	0.6	4.2
15.0	14813	14456	15170	2.4	0.6	4.0
20.0	12136	11869	12404	2.2	0.6	3.9
25.0	10000	9800	10200	2.0	0.5	3.8
30.0	8284	8103	8466	2.2	0.6	3.7
35.0	6899	6735	7064	2.4	0.7	3.6
40.0	5774	5626	5922	2.6	0.7	3.5
45.0	4856	4723	4989	2.7	0.8	3.4
50.0	4103	3983	4222	2.9	0.9	3.3
55.0	3482	3374	3589	3.1	1.0	3.2

	B57540G0103G000					
R/T No.	8407					
T (°C)	B _{0/100} = 3450 K, R ₂₅ = 10000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	2967	2871	3064	3.2	1.0	3.2
65.0	2539	2453	2626	3.4	1.1	3.1
70.0	2182	2104	2259	3.6	1.2	3.0
75.0	1882	1812	1951	3.7	1.3	2.9
80.0	1629	1566	1692	3.9	1.4	2.8
85.0	1415	1358	1472	4.0	1.4	2.8
90.0	1234	1183	1285	4.1	1.5	2.7
95.0	1079	1033	1125	4.3	1.6	2.6
100.0	946.6	904.9	988.2	4.4	1.7	2.6
105.0	833.1	795.4	870.9	4.5	1.8	2.5
110.0	735.5	701.3	769.7	4.7	1.9	2.5
115.0	651.1	620.1	682.2	4.8	2.0	2.4
120.0	578.1	549.8	606.4	4.9	2.1	2.4
125.0	514.6	488.9	540.4	5.0	2.2	2.3
130.0	459.4	435.8	482.9	5.1	2.3	2.2
135.0	411.1	389.6	432.6	5.2	2.4	2.2
140.0	368.8	349.1	388.4	5.3	2.5	2.1
145.0	331.6	313.5	349.6	5.4	2.6	2.1
150.0	298.9	282.3	315.4	5.5	2.7	2.1
155.0	270.0	254.7	285.2	5.6	2.8	2.0
160.0	244.4	230.4	258.5	5.7	2.9	2.0
165.0	221.7	208.8	234.7	5.8	3.0	1.9
170.0	201.6	189.6	213.6	5.9	3.1	1.9
175.0	183.6	172.6	194.7	6.0	3.3	1.8
180.0	167.6	157.4	177.9	6.1	3.4	1.8
185.0	153.3	143.8	162.8	6.2	3.5	1.8
190.0	140.4	131.6	149.3	6.3	3.6	1.7
195.0	128.9	120.7	137.1	6.4	3.8	1.7
200.0	118.5	110.8	126.1	6.5	3.9	1.7
205.0	109.1	102.0	116.3	6.5	4.0	1.6
210.0	100.7	94.00	107.3	6.6	4.1	1.6
215.0	93.01	86.78	99.24	6.7	4.3	1.6
220.0	86.08	80.24	91.91	6.8	4.4	1.5
225.0	79.78	74.31	85.24	6.9	4.6	1.5
230.0	74.05	68.92	79.18	6.9	4.7	1.5
235.0	68.83	64.02	73.65	7.0	4.8	1.4
240.0	64.08	59.55	68.60	7.1	5.0	1.4
245.0	59.73	55.47	63.99	7.1	5.1	1.4
250.0	55.75	51.73	59.77	7.2	5.3	1.4

	B57540G0103H000					
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
-55.0	519910	481100	558720	7.5	1.2	6.4
-50.0	379890	352980	406810	7.1	1.1	6.2
-45.0	280700	261830	299570	6.7	1.1	5.9
-40.0	209600	196240	222970	6.4	1.1	5.7
-35.0	158090	148530	167650	6.0	1.1	5.5
-30.0	120370	113470	127270	5.7	1.1	5.4
-25.0	92484	87462	97505	5.4	1.0	5.2
-20.0	71668	67984	75352	5.1	1.0	5.0
-15.0	55993	53269	58716	4.9	1.0	4.9
-10.0	44087	42060	46114	4.6	1.0	4.7
-5.0	34971	33452	36489	4.3	1.0	4.6
0.0	27936	26792	29081	4.1	0.9	4.4
5.0	22468	21601	23335	3.9	0.9	4.3
10.0	18187	17526	18848	3.6	0.9	4.2
15.0	14813	14307	15319	3.4	0.8	4.0
20.0	12136	11748	12525	3.2	0.8	3.9
25.0	10000	9700	10300	3.0	0.8	3.8
30.0	8284	8020	8549	3.2	0.9	3.7
35.0	6899	6665	7133	3.4	0.9	3.6
40.0	5774	5568	5980	3.6	1.0	3.5
45.0	4856	4674	5038	3.8	1.1	3.4
50.0	4103	3942	4264	3.9	1.2	3.3
55.0	3482	3339	3624	4.1	1.3	3.2
60.0	2967	2841	3094	4.3	1.3	3.2
65.0	2539	2427	2652	4.4	1.4	3.1
70.0	2182	2082	2282	4.6	1.5	3.0
75.0	1882	1793	1971	4.7	1.6	2.9
80.0	1629	1549	1708	4.9	1.7	2.8
85.0	1415	1344	1486	5.0	1.8	2.8
90.0	1234	1170	1297	5.2	1.9	2.7
95.0	1079	1022	1136	5.3	2.0	2.6
100.0	946.6	895.3	997.9	5.4	2.1	2.6
105.0	833.1	786.9	879.4	5.6	2.2	2.5
110.0	735.5	693.7	777.2	5.7	2.3	2.5
115.0	651.1	613.4	688.9	5.8	2.4	2.4
120.0	578.1	543.9	612.3	5.9	2.5	2.4
125.0	514.6	483.6	545.7	6.0	2.6	2.3
130.0	459.4	431.1	487.6	6.2	2.7	2.2
135.0	411.1	385.3	436.8	6.3	2.9	2.2

B57540G0103H000						
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
140.0	368.8	345.3	392.2	6.4	3.0	2.1
145.0	331.6	310.1	353.1	6.5	3.1	2.1
150.0	298.9	279.2	318.5	6.6	3.2	2.1
155.0	270.0	251.9	288.0	6.7	3.3	2.0
160.0	244.4	227.8	261.0	6.8	3.4	2.0
165.0	221.7	206.5	237.0	6.9	3.6	1.9
170.0	201.6	187.5	215.7	7.0	3.7	1.9
175.0	183.6	170.7	196.6	7.1	3.8	1.8
180.0	167.6	155.6	179.6	7.2	4.0	1.8
185.0	153.3	142.2	164.4	7.2	4.1	1.8
190.0	140.4	130.1	150.7	7.3	4.2	1.7
195.0	128.9	119.3	138.4	7.4	4.4	1.7
200.0	118.5	109.6	127.4	7.5	4.5	1.7
205.0	109.1	100.8	117.4	7.6	4.7	1.6
210.0	100.7	92.95	108.4	7.7	4.8	1.6
215.0	93.01	85.81	100.2	7.7	4.9	1.6
220.0	86.08	79.34	92.81	7.8	5.1	1.5
225.0	79.78	73.48	86.08	7.9	5.2	1.5
230.0	74.05	68.15	79.95	8.0	5.4	1.5
235.0	68.83	63.30	74.37	8.0	5.6	1.4
240.0	64.08	58.87	69.28	8.1	5.7	1.4
245.0	59.73	54.84	64.62	8.2	5.9	1.4
250.0	55.75	51.15	60.35	8.3	6.0	1.4

B57540G0103J000						
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
−55.0	519910	470250	569570	9.6	1.5	6.4
−50.0	379890	345080	414710	9.2	1.5	6.2
−45.0	280700	256010	305380	8.8	1.5	5.9
−40.0	209600	191910	227300	8.4	1.5	5.7
−35.0	158090	145270	170900	8.1	1.5	5.5
−30.0	120370	111000	129740	7.8	1.5	5.4
−25.0	92484	85569	99399	7.5	1.4	5.2
−20.0	71668	66521	76816	7.2	1.4	5.0
−15.0	55993	52129	59856	6.9	1.4	4.9
−10.0	44087	41164	47009	6.6	1.4	4.7
−5.0	34971	32744	37198	6.4	1.4	4.6

	B57540G0103J000					
R/T No.	8407					
T (°C)	$B_{0/100} = 3450 \text{ K}$, $R_{25} = 10000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
0.0	27936	26227	29645	6.1	1.4	4.4
5.0	22468	21147	23788	5.9	1.4	4.3
10.0	18187	17160	19214	5.6	1.4	4.2
15.0	14813	14010	15616	5.4	1.3	4.0
20.0	12136	11504	12768	5.2	1.3	3.9
25.0	10000	9500	10500	5.0	1.3	3.8
30.0	8284	7854	8715	5.2	1.4	3.7
35.0	6899	6527	7271	5.4	1.5	3.6
40.0	5774	5452	6097	5.6	1.6	3.5
45.0	4856	4576	5136	5.8	1.7	3.4
50.0	4103	3859	4347	5.9	1.8	3.3
55.0	3482	3269	3695	6.1	1.9	3.2
60.0	2967	2781	3154	6.3	2.0	3.2
65.0	2539	2376	2703	6.4	2.1	3.1
70.0	2182	2038	2326	6.6	2.2	3.0
75.0	1882	1754	2009	6.8	2.3	2.9
80.0	1629	1516	1741	6.9	2.4	2.8
85.0	1415	1315	1515	7.1	2.5	2.8
90.0	1234	1145	1322	7.2	2.7	2.7
95.0	1079	999.7	1158	7.3	2.8	2.6
100.0	946.6	875.9	1017	7.5	2.9	2.6
105.0	833.1	769.8	896.5	7.6	3.0	2.5
110.0	735.5	678.6	792.3	7.7	3.1	2.5
115.0	651.1	600.0	702.3	7.9	3.3	2.4
120.0	578.1	532.0	624.2	8.0	3.4	2.4
125.0	514.6	473.0	556.3	8.1	3.5	2.3
130.0	459.4	421.6	497.1	8.2	3.7	2.2
135.0	411.1	376.8	445.3	8.3	3.8	2.2
140.0	368.8	337.6	399.9	8.4	3.9	2.1
145.0	331.6	303.3	359.9	8.5	4.1	2.1
150.0	298.9	273.0	324.7	8.7	4.2	2.1
155.0	270.0	246.3	293.6	8.8	4.4	2.0
160.0	244.4	222.8	266.1	8.9	4.5	2.0
165.0	221.7	201.9	241.6	9.0	4.6	1.9
170.0	201.6	183.3	219.8	9.1	4.8	1.9
175.0	183.6	166.8	200.4	9.1	5.0	1.8
180.0	167.6	152.1	183.1	9.2	5.1	1.8
185.0	153.3	139.0	167.6	9.3	5.3	1.8
190.0	140.4	127.2	153.7	9.4	5.4	1.7
195.0	128.9	116.6	141.1	9.5	5.6	1.7

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0103J000						
R/T No.	8407					
T (°C)	B _{0/100} = 3450 K, R ₂₅ = 10000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
200.0	118.5	107.1	129.9	9.6	5.8	1.7
205.0	109.1	98.57	119.7	9.7	5.9	1.6
210.0	100.7	90.85	110.5	9.8	6.1	1.6
215.0	93.01	83.86	102.2	9.8	6.3	1.6
220.0	86.08	77.54	94.61	9.9	6.5	1.5
225.0	79.78	71.80	87.75	10.0	6.6	1.5
230.0	74.05	66.59	81.51	10.1	6.8	1.5
235.0	68.83	61.85	75.82	10.1	7.0	1.4
240.0	64.08	57.53	70.62	10.2	7.2	1.4
245.0	59.73	53.58	65.87	10.3	7.4	1.4
250.0	55.75	49.98	61.53	10.4	7.6	1.4

B57540G0203F000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 20000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	2065700	1940700	2190800	6.1	0.8	7.6
-50.0	1421600	1341700	1501500	5.6	0.8	7.3
-45.0	992390	940670	1044100	5.2	0.7	7.1
-40.0	702160	668310	736000	4.8	0.7	6.8
-35.0	503150	480790	525520	4.4	0.7	6.5
-30.0	364900	349980	379820	4.1	0.6	6.3
-25.0	267660	257630	277680	3.7	0.6	6.1
-20.0	198440	191660	205230	3.4	0.6	5.9
-15.0	148630	144020	153250	3.1	0.5	5.7
-10.0	112400	109250	115560	2.8	0.5	5.5
-5.0	85788	83630	87947	2.5	0.5	5.3
0.0	66048	64570	67526	2.2	0.4	5.2
5.0	51214	50204	52223	2.0	0.4	5.0
10.0	40034	39347	40720	1.7	0.4	4.8
15.0	31537	31074	32000	1.5	0.3	4.7
20.0	25027	24719	25334	1.2	0.3	4.6
25.0	20000	19800	20200	1.0	0.2	4.4
30.0	16090	15894	16287	1.2	0.3	4.3
35.0	13028	12840	13215	1.4	0.3	4.2
40.0	10613	10438	10787	1.6	0.4	4.0
45.0	8696	8535	8857	1.8	0.5	3.9
50.0	7166	7019	7312	2.0	0.5	3.8
55.0	5936	5803	6069	2.2	0.6	3.7

	B57540G0203F000					
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 20000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
60.0	4943	4823	5063	2.4	0.7	3.6
65.0	4136	4029	4244	2.6	0.7	3.5
70.0	3478	3381	3574	2.8	0.8	3.4
75.0	2937	2851	3024	3.0	0.9	3.3
80.0	2492	2414	2569	3.1	1.0	3.2
85.0	2123	2053	2192	3.3	1.0	3.2
90.0	1816	1753	1878	3.4	1.1	3.1
95.0	1559	1503	1615	3.6	1.2	3.0
100.0	1344	1293	1394	3.7	1.3	2.9
105.0	1162	1117	1207	3.9	1.4	2.9
110.0	1009	968.2	1049	4.0	1.4	2.8
115.0	878.6	842.0	915.3	4.2	1.5	2.7
120.0	767.7	734.7	800.8	4.3	1.6	2.7
125.0	672.9	643.1	702.7	4.4	1.7	2.6
130.0	591.6	564.6	618.6	4.6	1.8	2.5
135.0	521.6	497.1	546.1	4.7	1.9	2.5
140.0	461.2	439.0	483.4	4.8	2.0	2.4
145.0	408.9	388.7	429.1	4.9	2.1	2.4
150.0	363.5	345.2	381.9	5.1	2.2	2.3
155.0	324.0	307.2	340.7	5.2	2.3	2.3
160.0	289.5	274.2	304.7	5.3	2.4	2.2
165.0	259.2	245.3	273.2	5.4	2.5	2.2
170.0	232.7	219.9	245.5	5.5	2.6	2.1
175.0	209.4	197.6	221.1	5.6	2.7	2.1
180.0	188.8	178.0	199.6	5.7	2.8	2.0
185.0	170.6	160.7	180.5	5.8	2.9	2.0
190.0	154.5	145.3	163.6	5.9	3.0	2.0
195.0	140.1	131.7	148.5	6.0	3.1	1.9
200.0	127.4	119.6	135.2	6.1	3.2	1.9
205.0	116.0	108.8	123.2	6.2	3.3	1.9
210.0	105.8	99.20	112.5	6.3	3.5	1.8
215.0	96.75	90.58	102.9	6.4	3.6	1.8
220.0	88.58	82.86	94.30	6.5	3.7	1.7
225.0	81.24	75.92	86.56	6.5	3.8	1.7
230.0	74.63	69.68	79.58	6.6	3.9	1.7
235.0	68.67	64.06	73.28	6.7	4.1	1.6
240.0	63.28	58.98	67.58	6.8	4.2	1.6
245.0	58.40	54.38	62.41	6.9	4.3	1.6
250.0	53.98	50.22	57.73	7.0	4.5	1.6

B57540G0203G000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 20000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	2065700	1919000	2212500	7.1	0.9	7.6
-50.0	1421600	1326800	1516400	6.7	0.9	7.3
-45.0	992390	930330	1054400	6.3	0.9	7.1
-40.0	702160	661030	743290	5.9	0.9	6.8
-35.0	503150	475580	530730	5.5	0.8	6.5
-30.0	364900	346220	383580	5.1	0.8	6.3
-25.0	267660	254880	280430	4.8	0.8	6.1
-20.0	198440	189630	207260	4.4	0.8	5.9
-15.0	148630	142500	154770	4.1	0.7	5.7
-10.0	112400	108110	116700	3.8	0.7	5.5
-5.0	85788	82759	88817	3.5	0.7	5.3
0.0	66048	63901	68195	3.3	0.6	5.2
5.0	51214	49687	52740	3.0	0.6	5.0
10.0	40034	38944	41124	2.7	0.6	4.8
15.0	31537	30757	32317	2.5	0.5	4.7
20.0	25027	24468	25585	2.2	0.5	4.6
25.0	20000	19600	20400	2.0	0.5	4.4
30.0	16090	15732	16448	2.2	0.5	4.3
35.0	13028	12710	13346	2.4	0.6	4.2
40.0	10613	10331	10894	2.7	0.7	4.0
45.0	8696	8448	8945	2.9	0.7	3.9
50.0	7166	6947	7385	3.1	0.8	3.8
55.0	5936	5743	6129	3.2	0.9	3.7
60.0	4943	4773	5113	3.4	1.0	3.6
65.0	4136	3987	4286	3.6	1.0	3.5
70.0	3478	3346	3610	3.8	1.1	3.4
75.0	2937	2821	3054	4.0	1.2	3.3
80.0	2492	2389	2595	4.1	1.3	3.2
85.0	2123	2031	2214	4.3	1.4	3.2
90.0	1816	1735	1897	4.5	1.4	3.1
95.0	1559	1487	1631	4.6	1.5	3.0
100.0	1344	1280	1408	4.8	1.6	2.9
105.0	1162	1105	1219	4.9	1.7	2.9
110.0	1009	957.8	1060	5.1	1.8	2.8
115.0	878.6	833.0	924.3	5.2	1.9	2.7
120.0	767.7	726.8	808.7	5.3	2.0	2.7
125.0	672.9	636.1	709.7	5.5	2.1	2.6
130.0	591.6	558.5	624.7	5.6	2.2	2.5
135.0	521.6	491.7	551.5	5.7	2.3	2.5

B57540G0203G000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 20000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
140.0	461.2	434.2	488.2	5.9	2.4	2.4
145.0	408.9	384.5	433.3	6.0	2.5	2.4
150.0	363.5	341.4	385.7	6.1	2.6	2.3
155.0	324.0	303.9	344.1	6.2	2.7	2.3
160.0	289.5	271.2	307.8	6.3	2.8	2.2
165.0	259.2	242.6	275.9	6.4	2.9	2.2
170.0	232.7	217.5	247.9	6.5	3.1	2.1
175.0	209.4	195.5	223.3	6.6	3.2	2.1
180.0	188.8	176.0	201.5	6.8	3.3	2.0
185.0	170.6	158.9	182.3	6.9	3.4	2.0
190.0	154.5	143.7	165.2	7.0	3.5	2.0
195.0	140.1	130.2	150.0	7.1	3.7	1.9
200.0	127.4	118.3	136.5	7.1	3.8	1.9
205.0	116.0	107.6	124.4	7.2	3.9	1.9
210.0	105.8	98.08	113.6	7.3	4.0	1.8
215.0	96.75	89.56	103.9	7.4	4.2	1.8
220.0	88.58	81.92	95.24	7.5	4.3	1.7
225.0	81.24	75.06	87.42	7.6	4.4	1.7
230.0	74.63	68.89	80.37	7.7	4.6	1.7
235.0	68.67	63.33	74.00	7.8	4.7	1.6
240.0	63.28	58.31	68.25	7.9	4.8	1.6
245.0	58.40	53.77	63.03	7.9	5.0	1.6
250.0	53.98	49.65	58.30	8.0	5.1	1.6

B57540G0203H000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 20000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
−55.0	2065700	1897300	2234200	8.2	1.1	7.6
−50.0	1421600	1311900	1531300	7.7	1.1	7.3
−45.0	992390	919990	1064800	7.3	1.0	7.1
−40.0	702160	653740	750570	6.9	1.0	6.8
−35.0	503150	470380	535930	6.5	1.0	6.5
−30.0	364900	342460	387340	6.1	1.0	6.3
−25.0	267660	252130	283180	5.8	1.0	6.1
−20.0	198440	187590	209290	5.5	0.9	5.9
−15.0	148630	140980	156280	5.1	0.9	5.7
−10.0	112400	106960	117840	4.8	0.9	5.5
−5.0	85788	81888	89688	4.5	0.9	5.3

	B57540G0203H000					
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 20000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	66048	63232	68864	4.3	0.8	5.2
5.0	51214	49170	53257	4.0	0.8	5.0
10.0	40034	38541	41527	3.7	0.8	4.8
15.0	31537	30440	32634	3.5	0.7	4.7
20.0	25027	24217	25836	3.2	0.7	4.6
25.0	20000	19400	20600	3.0	0.7	4.4
30.0	16090	15571	16609	3.2	0.8	4.3
35.0	13028	12579	13477	3.4	0.8	4.2
40.0	10613	10224	11001	3.7	0.9	4.0
45.0	8696	8360	9032	3.9	1.0	3.9
50.0	7166	6874	7457	4.1	1.1	3.8
55.0	5936	5683	6189	4.3	1.1	3.7
60.0	4943	4723	5163	4.5	1.2	3.6
65.0	4136	3945	4328	4.6	1.3	3.5
70.0	3478	3310	3645	4.8	1.4	3.4
75.0	2937	2791	3084	5.0	1.5	3.3
80.0	2492	2363	2620	5.2	1.6	3.2
85.0	2123	2010	2236	5.3	1.7	3.2
90.0	1816	1716	1915	5.5	1.8	3.1
95.0	1559	1471	1647	5.6	1.9	3.0
100.0	1344	1266	1422	5.8	2.0	2.9
105.0	1162	1093	1231	5.9	2.1	2.9
110.0	1009	947.4	1070	6.1	2.2	2.8
115.0	878.6	823.9	933.4	6.2	2.3	2.7
120.0	767.7	718.8	816.6	6.4	2.4	2.7
125.0	672.9	629.1	716.7	6.5	2.5	2.6
130.0	591.6	552.3	630.8	6.6	2.6	2.5
135.0	521.6	486.3	556.9	6.8	2.7	2.5
140.0	461.2	429.4	493.0	6.9	2.8	2.4
145.0	408.9	380.2	437.6	7.0	2.9	2.4
150.0	363.5	337.6	389.4	7.1	3.1	2.3
155.0	324.0	300.5	347.5	7.2	3.2	2.3
160.0	289.5	268.1	310.8	7.4	3.3	2.2
165.0	259.2	239.9	278.6	7.5	3.4	2.2
170.0	232.7	215.1	250.4	7.6	3.6	2.1
175.0	209.4	193.3	225.5	7.7	3.7	2.1
180.0	188.8	174.1	203.5	7.8	3.8	2.0
185.0	170.6	157.1	184.1	7.9	3.9	2.0
190.0	154.5	142.1	166.8	8.0	4.1	2.0
195.0	140.1	128.8	151.5	8.1	4.2	1.9

B57540G0203H000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 20000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{nom}[Ω]$	$R_{min}[Ω]$	$R_{max}[Ω]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm\text{°C}]$	$\alpha \text{ (‰/K)}$
200.0	127.4	116.9	137.8	8.2	4.3	1.9
205.0	116.0	106.4	125.6	8.3	4.5	1.9
210.0	105.8	96.97	114.7	8.4	4.6	1.8
215.0	96.75	88.54	104.9	8.5	4.8	1.8
220.0	88.58	80.99	96.17	8.6	4.9	1.7
225.0	81.24	74.21	88.27	8.7	5.1	1.7
230.0	74.63	68.11	81.15	8.7	5.2	1.7
235.0	68.67	62.61	74.73	8.8	5.3	1.6
240.0	63.28	57.64	68.92	8.9	5.5	1.6
245.0	58.40	53.15	63.65	9.0	5.7	1.6
250.0	53.98	49.08	58.87	9.1	5.8	1.6

B57540G0203J000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 20000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{nom}[Ω]$	$R_{min}[Ω]$	$R_{max}[Ω]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm\text{°C}]$	$\alpha \text{ (‰/K)}$
−55.0	2065700	1853900	2277600	10.3	1.3	7.6
−50.0	1421600	1282200	1561000	9.8	1.3	7.3
−45.0	992390	899320	1085500	9.4	1.3	7.1
−40.0	702160	639170	765150	9.0	1.3	6.8
−35.0	503150	459970	546340	8.6	1.3	6.5
−30.0	364900	334940	394860	8.2	1.3	6.3
−25.0	267660	246630	288680	7.9	1.3	6.1
−20.0	198440	183530	213360	7.5	1.3	5.9
−15.0	148630	137950	159320	7.2	1.3	5.7
−10.0	112400	104670	120130	6.9	1.3	5.5
−5.0	85788	80147	91430	6.6	1.2	5.3
0.0	66048	61895	70201	6.3	1.2	5.2
5.0	51214	48136	54292	6.0	1.2	5.0
10.0	40034	37735	42333	5.7	1.2	4.8
15.0	31537	29807	33267	5.5	1.2	4.7
20.0	25027	23716	26338	5.2	1.2	4.6
25.0	20000	19000	21000	5.0	1.1	4.4
30.0	16090	15249	16932	5.2	1.2	4.3
35.0	13028	12317	13738	5.5	1.3	4.2
40.0	10613	10011	11215	5.7	1.4	4.0
45.0	8696	8185	9208	5.9	1.5	3.9
50.0	7166	6729	7602	6.1	1.6	3.8
55.0	5936	5563	6309	6.3	1.7	3.7

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0203J000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 20000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	4943	4623	5263	6.5	1.8	3.6
65.0	4136	3861	4412	6.7	1.9	3.5
70.0	3478	3240	3716	6.8	2.0	3.4
75.0	2937	2731	3144	7.0	2.1	3.3
80.0	2492	2312	2671	7.2	2.2	3.2
85.0	2123	1966	2279	7.4	2.3	3.2
90.0	1816	1679	1952	7.5	2.4	3.1
95.0	1559	1439	1679	7.7	2.6	3.0
100.0	1344	1238	1449	7.8	2.7	2.9
105.0	1162	1069	1255	8.0	2.8	2.9
110.0	1009	926.7	1091	8.1	2.9	2.8
115.0	878.6	805.8	951.5	8.3	3.0	2.7
120.0	767.7	703.0	832.5	8.4	3.2	2.7
125.0	672.9	615.2	730.6	8.6	3.3	2.6
130.0	591.6	540.1	643.1	8.7	3.4	2.5
135.0	521.6	475.5	567.7	8.8	3.5	2.5
140.0	461.2	419.9	502.6	9.0	3.7	2.4
145.0	408.9	371.7	446.1	9.1	3.8	2.4
150.0	363.5	330.0	397.0	9.2	4.0	2.3
155.0	324.0	293.7	354.2	9.3	4.1	2.3
160.0	289.5	262.1	316.8	9.4	4.2	2.2
165.0	259.2	234.5	284.0	9.6	4.4	2.2
170.0	232.7	210.2	255.2	9.7	4.5	2.1
175.0	209.4	188.9	229.9	9.8	4.7	2.1
180.0	188.8	170.1	207.5	9.9	4.8	2.0
185.0	170.6	153.5	187.6	10.0	5.0	2.0
190.0	154.5	138.9	170.1	10.1	5.1	2.0
195.0	140.1	125.8	154.4	10.2	5.3	1.9
200.0	127.4	114.3	140.5	10.3	5.5	1.9
205.0	116.0	103.9	128.1	10.4	5.6	1.9
210.0	105.8	94.74	117.0	10.5	5.8	1.8
215.0	96.75	86.51	107.0	10.6	5.9	1.8
220.0	88.58	79.12	98.04	10.7	6.1	1.7
225.0	81.24	72.49	89.99	10.8	6.3	1.7
230.0	74.63	66.53	82.73	10.9	6.5	1.7
235.0	68.67	61.15	76.18	10.9	6.6	1.6
240.0	63.28	56.30	70.25	11.0	6.8	1.6
245.0	58.40	51.91	64.89	11.1	7.0	1.6
250.0	53.98	47.94	60.02	11.2	7.2	1.6

	B57540G0303F000					
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
-55.0	3098600	2911000	3286200	6.1	0.8	7.6
-50.0	2132400	2012500	2252300	5.6	0.8	7.3
-45.0	1488600	1411000	1566200	5.2	0.7	7.1
-40.0	1053200	1002500	1104000	4.8	0.7	6.8
-35.0	754730	721180	788290	4.4	0.7	6.5
-30.0	547350	524980	569730	4.1	0.6	6.3
-25.0	401480	386440	416520	3.7	0.6	6.1
-20.0	297660	287490	307840	3.4	0.6	5.9
-15.0	222950	216020	229870	3.1	0.5	5.7
-10.0	168610	163880	173330	2.8	0.5	5.5
-5.0	128680	125450	131920	2.5	0.5	5.3
0.0	99072	96854	101290	2.2	0.4	5.2
5.0	76820	75306	78335	2.0	0.4	5.0
10.0	60051	59021	61081	1.7	0.4	4.8
15.0	47305	46611	48000	1.5	0.3	4.7
20.0	37540	37078	38002	1.2	0.3	4.6
25.0	30000	29700	30300	1.0	0.2	4.4
30.0	24135	23840	24430	1.2	0.3	4.3
35.0	19542	19261	19823	1.4	0.3	4.2
40.0	15919	15657	16181	1.6	0.4	4.0
45.0	13044	12803	13285	1.8	0.5	3.9
50.0	10748	10529	10968	2.0	0.5	3.8
55.0	8904	8705	9104	2.2	0.6	3.7
60.0	7415	7235	7594	2.4	0.7	3.6
65.0	6205	6043	6366	2.6	0.7	3.5
70.0	5217	5072	5362	2.8	0.8	3.4
75.0	4406	4276	4536	3.0	0.9	3.3
80.0	3738	3621	3854	3.1	1.0	3.2
85.0	3184	3080	3288	3.3	1.0	3.2
90.0	2723	2630	2817	3.4	1.1	3.1
95.0	2338	2255	2422	3.6	1.2	3.0
100.0	2015	1940	2091	3.7	1.3	2.9
105.0	1743	1676	1811	3.9	1.4	2.9
110.0	1513	1452	1574	4.0	1.4	2.8
115.0	1318	1263	1373	4.2	1.5	2.7
120.0	1152	1102	1201	4.3	1.6	2.7
125.0	1009	964.6	1054	4.4	1.7	2.6
130.0	887.4	846.9	927.9	4.6	1.8	2.5
135.0	782.4	745.7	819.1	4.7	1.9	2.5

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0303F000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
140.0	691.8	658.5	725.1	4.8	2.0	2.4
145.0	613.4	583.1	643.6	4.9	2.1	2.4
150.0	545.3	517.7	572.8	5.1	2.2	2.3
155.0	486.0	460.9	511.1	5.2	2.3	2.3
160.0	434.2	411.3	457.1	5.3	2.4	2.2
165.0	388.9	367.9	409.8	5.4	2.5	2.2
170.0	349.1	329.9	368.3	5.5	2.6	2.1
175.0	314.1	296.5	331.7	5.6	2.7	2.1
180.0	283.2	267.0	299.3	5.7	2.8	2.0
185.0	255.9	241.0	270.7	5.8	2.9	2.0
190.0	231.7	218.0	245.4	5.9	3.0	2.0
195.0	210.2	197.6	222.8	6.0	3.1	1.9
200.0	191.1	179.4	202.7	6.1	3.2	1.9
205.0	174.0	163.2	184.8	6.2	3.3	1.9
210.0	158.8	148.8	168.7	6.3	3.5	1.8
215.0	145.1	135.9	154.4	6.4	3.6	1.8
220.0	132.9	124.3	141.5	6.5	3.7	1.7
225.0	121.9	113.9	129.8	6.5	3.8	1.7
230.0	111.9	104.5	119.4	6.6	3.9	1.7
235.0	103.0	96.08	109.9	6.7	4.1	1.6
240.0	94.92	88.47	101.4	6.8	4.2	1.6
245.0	87.60	81.58	93.62	6.9	4.3	1.6
250.0	80.96	75.34	86.59	7.0	4.5	1.6

B57540G0303G000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
−55.0	3098600	2878500	3318700	7.1	0.9	7.6
−50.0	2132400	1990200	2274600	6.7	0.9	7.3
−45.0	1488600	1395500	1581700	6.3	0.9	7.1
−40.0	1053200	991540	1114900	5.9	0.9	6.8
−35.0	754730	713370	796090	5.5	0.8	6.5
−30.0	547350	519330	575370	5.1	0.8	6.3
−25.0	401480	382320	420650	4.8	0.8	6.1
−20.0	297660	284440	310890	4.4	0.8	5.9
−15.0	222950	213750	232150	4.1	0.7	5.7
−10.0	168610	162160	175050	3.8	0.7	5.5
−5.0	128680	124140	133230	3.5	0.7	5.3

	B57540G0303G000					
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
0.0	99072	95851	102290	3.3	0.6	5.2
5.0	76820	74530	79111	3.0	0.6	5.0
10.0	60051	58416	61685	2.7	0.6	4.8
15.0	47305	46136	48475	2.5	0.5	4.7
20.0	37540	36702	38378	2.2	0.5	4.6
25.0	30000	29400	30600	2.0	0.5	4.4
30.0	24135	23599	24672	2.2	0.5	4.3
35.0	19542	19064	20019	2.4	0.6	4.2
40.0	15919	15497	16341	2.7	0.7	4.0
45.0	13044	12672	13417	2.9	0.7	3.9
50.0	10748	10420	11077	3.1	0.8	3.8
55.0	8904	8615	9194	3.2	0.9	3.7
60.0	7415	7160	7669	3.4	1.0	3.6
65.0	6205	5980	6429	3.6	1.0	3.5
70.0	5217	5019	5415	3.8	1.1	3.4
75.0	4406	4231	4581	4.0	1.2	3.3
80.0	3738	3583	3892	4.1	1.3	3.2
85.0	3184	3047	3321	4.3	1.4	3.2
90.0	2723	2602	2845	4.5	1.4	3.1
95.0	2338	2231	2446	4.6	1.5	3.0
100.0	2015	1919	2112	4.8	1.6	2.9
105.0	1743	1658	1829	4.9	1.7	2.9
110.0	1513	1437	1590	5.1	1.8	2.8
115.0	1318	1249	1386	5.2	1.9	2.7
120.0	1152	1090	1213	5.3	2.0	2.7
125.0	1009	954.2	1065	5.5	2.1	2.6
130.0	887.4	837.7	937.1	5.6	2.2	2.5
135.0	782.4	737.6	827.2	5.7	2.3	2.5
140.0	691.8	651.3	732.3	5.9	2.4	2.4
145.0	613.4	576.7	650.0	6.0	2.5	2.4
150.0	545.3	512.1	578.5	6.1	2.6	2.3
155.0	486.0	455.8	516.1	6.2	2.7	2.3
160.0	434.2	406.7	461.6	6.3	2.8	2.2
165.0	388.9	363.8	413.9	6.4	2.9	2.2
170.0	349.1	326.2	371.9	6.5	3.1	2.1
175.0	314.1	293.2	334.9	6.6	3.2	2.1
180.0	283.2	264.1	302.3	6.8	3.3	2.0
185.0	255.9	238.3	273.4	6.9	3.4	2.0
190.0	231.7	215.6	247.8	7.0	3.5	2.0
195.0	210.2	195.4	225.0	7.1	3.7	1.9

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0303G000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 30000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
200.0	191.1	177.4	204.7	7.1	3.8	1.9
205.0	174.0	161.4	186.6	7.2	3.9	1.9
210.0	158.8	147.1	170.4	7.3	4.0	1.8
215.0	145.1	134.3	155.9	7.4	4.2	1.8
220.0	132.9	122.9	142.9	7.5	4.3	1.7
225.0	121.9	112.6	131.1	7.6	4.4	1.7
230.0	111.9	103.3	120.5	7.7	4.6	1.7
235.0	103.0	95.00	111.0	7.8	4.7	1.6
240.0	94.92	87.46	102.4	7.9	4.8	1.6
245.0	87.60	80.65	94.55	7.9	5.0	1.6
250.0	80.96	74.48	87.45	8.0	5.1	1.6

B57540G0303H000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 30000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	3098600	2845900	3351300	8.2	1.1	7.6
-50.0	2132400	1967900	2296900	7.7	1.1	7.3
-45.0	1488600	1380000	1597200	7.3	1.0	7.1
-40.0	1053200	980610	1125900	6.9	1.0	6.8
-35.0	754730	705570	803890	6.5	1.0	6.5
-30.0	547350	513690	581010	6.1	1.0	6.3
-25.0	401480	378190	424770	5.8	1.0	6.1
-20.0	297660	281390	313940	5.5	0.9	5.9
-15.0	222950	211470	234420	5.1	0.9	5.7
-10.0	168610	160440	176770	4.8	0.9	5.5
-5.0	128680	122830	134530	4.5	0.9	5.3
0.0	99072	94849	103300	4.3	0.8	5.2
5.0	76820	73754	79886	4.0	0.8	5.0
10.0	60051	57811	62290	3.7	0.8	4.8
15.0	47305	45661	48950	3.5	0.7	4.7
20.0	37540	36326	38754	3.2	0.7	4.6
25.0	30000	29100	30900	3.0	0.7	4.4
30.0	24135	23357	24914	3.2	0.8	4.3
35.0	19542	18868	20215	3.4	0.8	4.2
40.0	15919	15337	16502	3.7	0.9	4.0
45.0	13044	12540	13548	3.9	1.0	3.9
50.0	10748	10311	11186	4.1	1.1	3.8
55.0	8904	8525	9284	4.3	1.1	3.7

	B57540G0303H000					
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
60.0	7415	7085	7745	4.5	1.2	3.6
65.0	6205	5917	6492	4.6	1.3	3.5
70.0	5217	4966	5468	4.8	1.4	3.4
75.0	4406	4186	4626	5.0	1.5	3.3
80.0	3738	3545	3931	5.2	1.6	3.2
85.0	3184	3015	3354	5.3	1.7	3.2
90.0	2723	2574	2873	5.5	1.8	3.1
95.0	2338	2207	2470	5.6	1.9	3.0
100.0	2015	1899	2132	5.8	2.0	2.9
105.0	1743	1640	1847	5.9	2.1	2.9
110.0	1513	1421	1605	6.1	2.2	2.8
115.0	1318	1236	1400	6.2	2.3	2.7
120.0	1152	1078	1225	6.4	2.4	2.7
125.0	1009	943.7	1075	6.5	2.5	2.6
130.0	887.4	828.5	946.2	6.6	2.6	2.5
135.0	782.4	729.5	835.3	6.8	2.7	2.5
140.0	691.8	644.2	739.5	6.9	2.8	2.4
145.0	613.4	570.4	656.4	7.0	2.9	2.4
150.0	545.3	506.4	584.2	7.1	3.1	2.3
155.0	486.0	450.7	521.2	7.2	3.2	2.3
160.0	434.2	402.2	466.2	7.4	3.3	2.2
165.0	388.9	359.8	417.9	7.5	3.4	2.2
170.0	349.1	322.6	375.6	7.6	3.6	2.1
175.0	314.1	289.9	338.2	7.7	3.7	2.1
180.0	283.2	261.1	305.3	7.8	3.8	2.0
185.0	255.9	235.7	276.1	7.9	3.9	2.0
190.0	231.7	213.1	250.2	8.0	4.1	2.0
195.0	210.2	193.2	227.2	8.1	4.2	1.9
200.0	191.1	175.4	206.7	8.2	4.3	1.9
205.0	174.0	159.6	188.5	8.3	4.5	1.9
210.0	158.8	145.5	172.1	8.4	4.6	1.8
215.0	145.1	132.8	157.4	8.5	4.8	1.8
220.0	132.9	121.5	144.3	8.6	4.9	1.7
225.0	121.9	111.3	132.4	8.7	5.1	1.7
230.0	111.9	102.2	121.7	8.7	5.2	1.7
235.0	103.0	93.91	112.1	8.8	5.3	1.6
240.0	94.92	86.46	103.4	8.9	5.5	1.6
245.0	87.60	79.72	95.48	9.0	5.7	1.6
250.0	80.96	73.62	88.31	9.1	5.8	1.6

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0303J000						
R/T No.	8415					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 30000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	3098600	2780800	3416300	10.3	1.3	7.6
-50.0	2132400	1923300	2341500	9.8	1.3	7.3
-45.0	1488600	1349000	1628200	9.4	1.3	7.1
-40.0	1053200	958750	1147700	9.0	1.3	6.8
-35.0	754730	689960	819500	8.6	1.3	6.5
-30.0	547350	502410	592290	8.2	1.3	6.3
-25.0	401480	369950	433020	7.9	1.3	6.1
-20.0	297660	275290	320030	7.5	1.3	5.9
-15.0	222950	206920	238980	7.2	1.3	5.7
-10.0	168610	157010	180200	6.9	1.3	5.5
-5.0	128680	120220	137140	6.6	1.2	5.3
0.0	99072	92843	105300	6.3	1.2	5.2
5.0	76820	72203	81437	6.0	1.2	5.0
10.0	60051	56602	63500	5.7	1.2	4.8
15.0	47305	44710	49901	5.5	1.2	4.7
20.0	37540	35573	39507	5.2	1.2	4.6
25.0	30000	28500	31500	5.0	1.1	4.4
30.0	24135	22873	25398	5.2	1.2	4.3
35.0	19542	18476	20608	5.5	1.3	4.2
40.0	15919	15016	16822	5.7	1.4	4.0
45.0	13044	12277	13812	5.9	1.5	3.9
50.0	10748	10094	11403	6.1	1.6	3.8
55.0	8904	8345	9464	6.3	1.7	3.7
60.0	7415	6934	7895	6.5	1.8	3.6
65.0	6205	5791	6618	6.7	1.9	3.5
70.0	5217	4859	5574	6.8	2.0	3.4
75.0	4406	4096	4716	7.0	2.1	3.3
80.0	3738	3469	4007	7.2	2.2	3.2
85.0	3184	2949	3419	7.4	2.3	3.2
90.0	2723	2518	2929	7.5	2.4	3.1
95.0	2338	2159	2518	7.7	2.6	3.0
100.0	2015	1857	2174	7.8	2.7	2.9
105.0	1743	1604	1883	8.0	2.8	2.9
110.0	1513	1390	1637	8.1	2.9	2.8
115.0	1318	1209	1427	8.3	3.0	2.7
120.0	1152	1054	1249	8.4	3.2	2.7
125.0	1009	922.8	1096	8.6	3.3	2.6
130.0	887.4	810.1	964.6	8.7	3.4	2.5
135.0	782.4	713.3	851.5	8.8	3.5	2.5

B57540G0303J000						
R/T No.	8415					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 30000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
140.0	691.8	629.8	753.8	9.0	3.7	2.4
145.0	613.4	557.6	669.1	9.1	3.8	2.4
150.0	545.3	495.0	595.5	9.2	4.0	2.3
155.0	486.0	440.6	531.3	9.3	4.1	2.3
160.0	434.2	393.2	475.2	9.4	4.2	2.2
165.0	388.9	351.7	426.1	9.6	4.4	2.2
170.0	349.1	315.3	382.9	9.7	4.5	2.1
175.0	314.1	283.3	344.8	9.8	4.7	2.1
180.0	283.2	255.2	311.2	9.9	4.8	2.0
185.0	255.9	230.3	281.5	10.0	5.0	2.0
190.0	231.7	208.3	255.1	10.1	5.1	2.0
195.0	210.2	188.8	231.6	10.2	5.3	1.9
200.0	191.1	171.4	210.8	10.3	5.5	1.9
205.0	174.0	155.9	192.1	10.4	5.6	1.9
210.0	158.8	142.1	175.4	10.5	5.8	1.8
215.0	145.1	129.8	160.5	10.6	5.9	1.8
220.0	132.9	118.7	147.1	10.7	6.1	1.7
225.0	121.9	108.7	135.0	10.8	6.3	1.7
230.0	111.9	99.79	124.1	10.9	6.5	1.7
235.0	103.0	91.73	114.3	10.9	6.6	1.6
240.0	94.92	84.45	105.4	11.0	6.8	1.6
245.0	87.60	77.87	97.33	11.1	7.0	1.6
250.0	80.96	71.91	90.02	11.2	7.2	1.6

B57540G0503F000						
R/T No.	8403					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 50000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	5164300	4851600	5477000	6.1	0.8	7.6
−50.0	3554000	3354100	3753800	5.6	0.8	7.3
−45.0	2481000	2351700	2610300	5.2	0.7	7.1
−40.0	1755400	1670800	1840000	4.8	0.7	6.8
−35.0	1257900	1202000	1313800	4.4	0.7	6.5
−30.0	912250	874960	949550	4.1	0.6	6.3
−25.0	669140	644070	694210	3.7	0.6	6.1
−20.0	496110	479140	513070	3.4	0.6	5.9
−15.0	371580	360040	383120	3.1	0.5	5.7
−10.0	281010	273130	288890	2.8	0.5	5.5
−5.0	214470	209080	219870	2.5	0.5	5.3

	B57540G0503F000					
R/T No.	8403					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 50000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	165120	161420	168820	2.2	0.4	5.2
5.0	128030	125510	130560	2.0	0.4	5.0
10.0	100090	98368	101800	1.7	0.4	4.8
15.0	78842	77685	80000	1.5	0.3	4.7
20.0	62567	61797	63336	1.2	0.3	4.6
25.0	50000	49500	50500	1.0	0.2	4.4
30.0	40226	39734	40717	1.2	0.3	4.3
35.0	32569	32101	33038	1.4	0.3	4.2
40.0	26532	26095	26969	1.6	0.4	4.0
45.0	21740	21338	22142	1.8	0.5	3.9
50.0	17914	17548	18281	2.0	0.5	3.8
55.0	14841	14509	15173	2.2	0.6	3.7
60.0	12358	12058	12657	2.4	0.7	3.6
65.0	10341	10072	10610	2.6	0.7	3.5
70.0	8695	8453	8936	2.8	0.8	3.4
75.0	7344	7127	7560	3.0	0.9	3.3
80.0	6230	6035	6424	3.1	1.0	3.2
85.0	5307	5133	5481	3.3	1.0	3.2
90.0	4539	4383	4695	3.4	1.1	3.1
95.0	3897	3758	4037	3.6	1.2	3.0
100.0	3359	3234	3485	3.7	1.3	2.9
105.0	2906	2793	3019	3.9	1.4	2.9
110.0	2522	2421	2624	4.0	1.4	2.8
115.0	2197	2105	2288	4.2	1.5	2.7
120.0	1919	1837	2002	4.3	1.6	2.7
125.0	1682	1608	1757	4.4	1.7	2.6
130.0	1479	1411	1546	4.6	1.8	2.5
135.0	1304	1243	1365	4.7	1.9	2.5
140.0	1153	1098	1209	4.8	2.0	2.4
145.0	1022	971.9	1073	4.9	2.1	2.4
150.0	908.8	862.9	954.7	5.1	2.2	2.3
155.0	810.0	768.1	851.8	5.2	2.3	2.3
160.0	723.7	685.5	761.9	5.3	2.4	2.2
165.0	648.1	613.2	683.0	5.4	2.5	2.2
170.0	581.8	549.8	613.8	5.5	2.6	2.1
175.0	523.4	494.1	552.8	5.6	2.7	2.1
180.0	472.0	445.0	498.9	5.7	2.8	2.0
185.0	426.5	401.7	451.2	5.8	2.9	2.0
190.0	386.1	363.3	409.0	5.9	3.0	2.0
195.0	350.3	329.3	371.4	6.0	3.1	1.9

	B57540G0503F000					
R/T No.	8403					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 50000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
200.0	318.5	299.0	337.9	6.1	3.2	1.9
205.0	290.0	272.1	308.0	6.2	3.3	1.9
210.0	264.6	248.0	281.2	6.3	3.5	1.8
215.0	241.9	226.5	257.3	6.4	3.6	1.8
220.0	221.5	207.1	235.8	6.5	3.7	1.7
225.0	203.1	189.8	216.4	6.5	3.8	1.7
230.0	186.6	174.2	198.9	6.6	3.9	1.7
235.0	171.7	160.1	183.2	6.7	4.1	1.6
240.0	158.2	147.4	168.9	6.8	4.2	1.6
245.0	146.0	136.0	156.0	6.9	4.3	1.6
250.0	134.9	125.6	144.3	7.0	4.5	1.6

	B57540G0503G000					
R/T No.	8403					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 50000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	5164300	4797400	5531200	7.1	0.9	7.6
−50.0	3554000	3317000	3791000	6.7	0.9	7.3
−45.0	2481000	2325800	2636100	6.3	0.9	7.1
−40.0	1755400	1652600	1858200	5.9	0.9	6.8
−35.0	1257900	1189000	1326800	5.5	0.8	6.5
−30.0	912250	865560	958950	5.1	0.8	6.3
−25.0	669140	637190	701080	4.8	0.8	6.1
−20.0	496110	474060	518150	4.4	0.8	5.9
−15.0	371580	356250	386910	4.1	0.7	5.7
−10.0	281010	270270	291750	3.8	0.7	5.5
−5.0	214470	206900	222040	3.5	0.7	5.3
0.0	165120	159750	170490	3.3	0.6	5.2
5.0	128030	124220	131850	3.0	0.6	5.0
10.0	100090	97360	102810	2.7	0.6	4.8
15.0	78842	76893	80792	2.5	0.5	4.7
20.0	62567	61170	63963	2.2	0.5	4.6
25.0	50000	49000	51000	2.0	0.5	4.4
30.0	40226	39331	41120	2.2	0.5	4.3
35.0	32569	31774	33365	2.4	0.6	4.2
40.0	26532	25828	27236	2.7	0.7	4.0
45.0	21740	21119	22362	2.9	0.7	3.9
50.0	17914	17367	18462	3.1	0.8	3.8
55.0	14841	14358	15323	3.2	0.9	3.7

	B57540G0503G000					
R/T No.	8403					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 50000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	12358	11933	12782	3.4	1.0	3.6
65.0	10341	9967	10715	3.6	1.0	3.5
70.0	8695	8364	9025	3.8	1.1	3.4
75.0	7344	7052	7635	4.0	1.2	3.3
80.0	6230	5972	6487	4.1	1.3	3.2
85.0	5307	5079	5535	4.3	1.4	3.2
90.0	4539	4337	4741	4.5	1.4	3.1
95.0	3897	3718	4077	4.6	1.5	3.0
100.0	3359	3199	3519	4.8	1.6	2.9
105.0	2906	2763	3048	4.9	1.7	2.9
110.0	2522	2395	2650	5.1	1.8	2.8
115.0	2197	2082	2311	5.2	1.9	2.7
120.0	1919	1817	2022	5.3	2.0	2.7
125.0	1682	1590	1774	5.5	2.1	2.6
130.0	1479	1396	1562	5.6	2.2	2.5
135.0	1304	1229	1379	5.7	2.3	2.5
140.0	1153	1086	1220	5.9	2.4	2.4
145.0	1022	961.2	1083	6.0	2.5	2.4
150.0	908.8	853.4	964.2	6.1	2.6	2.3
155.0	810.0	759.7	860.2	6.2	2.7	2.3
160.0	723.7	677.9	769.4	6.3	2.8	2.2
165.0	648.1	606.4	689.8	6.4	2.9	2.2
170.0	581.8	543.7	619.9	6.5	3.1	2.1
175.0	523.4	488.6	558.2	6.6	3.2	2.1
180.0	472.0	440.1	503.8	6.8	3.3	2.0
185.0	426.5	397.2	455.7	6.9	3.4	2.0
190.0	386.1	359.3	413.0	7.0	3.5	2.0
195.0	350.3	325.6	375.0	7.1	3.7	1.9
200.0	318.5	295.7	341.2	7.1	3.8	1.9
205.0	290.0	269.0	311.0	7.2	3.9	1.9
210.0	264.6	245.2	284.0	7.3	4.0	1.8
215.0	241.9	223.9	259.8	7.4	4.2	1.8
220.0	221.5	204.8	238.1	7.5	4.3	1.7
225.0	203.1	187.7	218.5	7.6	4.4	1.7
230.0	186.6	172.2	200.9	7.7	4.6	1.7
235.0	171.7	158.3	185.0	7.8	4.7	1.6
240.0	158.2	145.8	170.6	7.9	4.8	1.6
245.0	146.0	134.4	157.6	7.9	5.0	1.6
250.0	134.9	124.1	145.8	8.0	5.1	1.6

	B57540G0503H000					
R/T No.	8403					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 50000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nomL}}[\Omega]$	$R_{\text{minL}}[\Omega]$	$R_{\text{maxL}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
-55.0	5164300	4743200	5585400	8.2	1.1	7.6
-50.0	3554000	3279800	3828100	7.7	1.1	7.3
-45.0	2481000	2300000	2662000	7.3	1.0	7.1
-40.0	1755400	1634300	1876400	6.9	1.0	6.8
-35.0	1257900	1175900	1339800	6.5	1.0	6.5
-30.0	912250	856160	968350	6.1	1.0	6.3
-25.0	669140	630320	707950	5.8	1.0	6.1
-20.0	496110	468980	523230	5.5	0.9	5.9
-15.0	371580	352450	390710	5.1	0.9	5.7
-10.0	281010	267410	294610	4.8	0.9	5.5
-5.0	214470	204720	224220	4.5	0.9	5.3
0.0	165120	158080	172160	4.3	0.8	5.2
5.0	128030	122920	133140	4.0	0.8	5.0
10.0	100090	96352	103820	3.7	0.8	4.8
15.0	78842	76101	81584	3.5	0.7	4.7
20.0	62567	60543	64590	3.2	0.7	4.6
25.0	50000	48500	51500	3.0	0.7	4.4
30.0	40226	38928	41523	3.2	0.8	4.3
35.0	32569	31447	33692	3.4	0.8	4.2
40.0	26532	25561	27503	3.7	0.9	4.0
45.0	21740	20900	22581	3.9	1.0	3.9
50.0	17914	17186	18643	4.1	1.1	3.8
55.0	14841	14208	15473	4.3	1.1	3.7
60.0	12358	11808	12908	4.5	1.2	3.6
65.0	10341	9862	10820	4.6	1.3	3.5
70.0	8695	8276	9113	4.8	1.4	3.4
75.0	7344	6977	7710	5.0	1.5	3.3
80.0	6230	5908	6551	5.2	1.6	3.2
85.0	5307	5024	5589	5.3	1.7	3.2
90.0	4539	4290	4788	5.5	1.8	3.1
95.0	3897	3678	4117	5.6	1.9	3.0
100.0	3359	3165	3554	5.8	2.0	2.9
105.0	2906	2733	3078	5.9	2.1	2.9
110.0	2522	2369	2676	6.1	2.2	2.8
115.0	2197	2060	2333	6.2	2.3	2.7
120.0	1919	1797	2042	6.4	2.4	2.7
125.0	1682	1573	1792	6.5	2.5	2.6
130.0	1479	1381	1577	6.6	2.6	2.5
135.0	1304	1216	1392	6.8	2.7	2.5

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0503H000						
R/T No.	8403					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 50000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
140.0	1153	1074	1232	6.9	2.8	2.4
145.0	1022	950.6	1094	7.0	2.9	2.4
150.0	908.8	844.0	973.6	7.1	3.1	2.3
155.0	810.0	751.2	868.7	7.2	3.2	2.3
160.0	723.7	670.4	777.0	7.4	3.3	2.2
165.0	648.1	599.7	696.6	7.5	3.4	2.2
170.0	581.8	537.7	625.9	7.6	3.6	2.1
175.0	523.4	483.2	563.7	7.7	3.7	2.1
180.0	472.0	435.2	508.8	7.8	3.8	2.0
185.0	426.5	392.8	460.2	7.9	3.9	2.0
190.0	386.1	355.2	417.1	8.0	4.1	2.0
195.0	350.3	321.9	378.7	8.1	4.2	1.9
200.0	318.5	292.3	344.6	8.2	4.3	1.9
205.0	290.0	266.0	314.1	8.3	4.5	1.9
210.0	264.6	242.4	286.8	8.4	4.6	1.8
215.0	241.9	221.4	262.4	8.5	4.8	1.8
220.0	221.5	202.5	240.4	8.6	4.9	1.7
225.0	203.1	185.5	220.7	8.7	5.1	1.7
230.0	186.6	170.3	202.9	8.7	5.2	1.7
235.0	171.7	156.5	186.8	8.8	5.3	1.6
240.0	158.2	144.1	172.3	8.9	5.5	1.6
245.0	146.0	132.9	159.1	9.0	5.7	1.6
250.0	134.9	122.7	147.2	9.1	5.8	1.6

B57540G0503J000						
R/T No.	8403					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 50000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	5164300	4634700	5693900	10.3	1.3	7.6
-50.0	3554000	3205500	3902500	9.8	1.3	7.3
-45.0	2481000	2248300	2713600	9.4	1.3	7.1
-40.0	1755400	1597900	1912900	9.0	1.3	6.8
-35.0	1257900	1149900	1365800	8.6	1.3	6.5
-30.0	912250	837350	987160	8.2	1.3	6.3
-25.0	669140	616570	721700	7.9	1.3	6.1
-20.0	496110	458820	533390	7.5	1.3	5.9
-15.0	371580	344870	398290	7.2	1.3	5.7
-10.0	281010	261690	300330	6.9	1.3	5.5
-5.0	214470	200370	228570	6.6	1.2	5.3

	B57540G0503J000					
R/T No.	8403					
T (°C)	$B_{0/100} = 3970 \text{ K}$, $R_{25} = 50000 \Omega$, $T_R = 25 \text{ °C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
0.0	165120	154740	175500	6.3	1.2	5.2
5.0	128030	120340	135730	6.0	1.2	5.0
10.0	100090	94337	105830	5.7	1.2	4.8
15.0	78842	74517	83168	5.5	1.2	4.7
20.0	62567	59289	65844	5.2	1.2	4.6
25.0	50000	47500	52500	5.0	1.1	4.4
30.0	40226	38121	42330	5.2	1.2	4.3
35.0	32569	30793	34346	5.5	1.3	4.2
40.0	26532	25027	28037	5.7	1.4	4.0
45.0	21740	20461	23019	5.9	1.5	3.9
50.0	17914	16824	19005	6.1	1.6	3.8
55.0	14841	13908	15773	6.3	1.7	3.7
60.0	12358	11557	13158	6.5	1.8	3.6
65.0	10341	9652	11030	6.7	1.9	3.5
70.0	8695	8099	9290	6.8	2.0	3.4
75.0	7344	6827	7860	7.0	2.1	3.3
80.0	6230	5781	6678	7.2	2.2	3.2
85.0	5307	4916	5698	7.4	2.3	3.2
90.0	4539	4197	4881	7.5	2.4	3.1
95.0	3897	3598	4197	7.7	2.6	3.0
100.0	3359	3096	3623	7.8	2.7	2.9
105.0	2906	2673	3138	8.0	2.8	2.9
110.0	2522	2317	2728	8.1	2.9	2.8
115.0	2197	2014	2379	8.3	3.0	2.7
120.0	1919	1757	2081	8.4	3.2	2.7
125.0	1682	1538	1826	8.6	3.3	2.6
130.0	1479	1350	1608	8.7	3.4	2.5
135.0	1304	1189	1419	8.8	3.5	2.5
140.0	1153	1050	1256	9.0	3.7	2.4
145.0	1022	929.4	1115	9.1	3.8	2.4
150.0	908.8	825.1	992.5	9.2	4.0	2.3
155.0	810.0	734.4	885.5	9.3	4.1	2.3
160.0	723.7	655.3	792.0	9.4	4.2	2.2
165.0	648.1	586.1	710.1	9.6	4.4	2.2
170.0	581.8	525.5	638.1	9.7	4.5	2.1
175.0	523.4	472.2	574.7	9.8	4.7	2.1
180.0	472.0	425.3	518.7	9.9	4.8	2.0
185.0	426.5	383.8	469.1	10.0	5.0	2.0
190.0	386.1	347.1	425.2	10.1	5.1	2.0
195.0	350.3	314.6	386.1	10.2	5.3	1.9

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0503J000						
R/T No.	8403					
T (°C)	B _{0/100} = 3970 K, R ₂₅ = 50000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
200.0	318.5	285.7	351.3	10.3	5.5	1.9
205.0	290.0	259.9	320.2	10.4	5.6	1.9
210.0	264.6	236.9	292.4	10.5	5.8	1.8
215.0	241.9	216.3	267.5	10.6	5.9	1.8
220.0	221.5	197.8	245.1	10.7	6.1	1.7
225.0	203.1	181.2	225.0	10.8	6.3	1.7
230.0	186.6	166.3	206.8	10.9	6.5	1.7
235.0	171.7	152.9	190.4	10.9	6.6	1.6
240.0	158.2	140.8	175.6	11.0	6.8	1.6
245.0	146.0	129.8	162.2	11.1	7.0	1.6
250.0	134.9	119.8	150.0	11.2	7.2	1.6

B57540G0104F000						
R/T No.	8404					
T (°C)	B _{0/100} = 4036 K, R ₂₅ = 100000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	9877500	9271000	10484000	6.1	0.8	7.4
-50.0	6864800	6473400	7256200	5.7	0.8	7.1
-45.0	4833700	4578300	5089000	5.3	0.8	6.9
-40.0	3445800	3277400	3614100	4.9	0.7	6.7
-35.0	2485200	2373300	2597100	4.5	0.7	6.4
-30.0	1812400	1737300	1887400	4.1	0.7	6.2
-25.0	1335600	1285000	1386300	3.8	0.6	6.0
-20.0	994130	959740	1028500	3.5	0.6	5.8
-15.0	747000	723540	770460	3.1	0.6	5.6
-10.0	566390	550330	582440	2.8	0.5	5.4
-5.0	433140	422130	444150	2.5	0.5	5.3
0.0	333960	326420	341510	2.3	0.4	5.2
5.0	258500	253360	263640	2.0	0.4	5.0
10.0	201660	198180	205140	1.7	0.4	4.9
15.0	158500	156160	160840	1.5	0.3	4.7
20.0	125470	123920	127020	1.2	0.3	4.6
25.0	100000	99000	101000	1.0	0.2	4.5
30.0	80223	79239	81206	1.2	0.3	4.3
35.0	64759	63823	65695	1.4	0.3	4.2
40.0	52589	51718	53460	1.7	0.4	4.1
45.0	42951	42151	43751	1.9	0.5	4.0
50.0	35272	34544	36000	2.1	0.5	3.9
55.0	29119	28462	29776	2.3	0.6	3.8

	B57540G0104F000					
R/T No.	8404					
T (°C)	$B_{0/100} = 4036 \text{ K}$, $R_{25} = 100000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 1\%$					
	$R_{nomL}[\Omega]$	$R_{minL}[\Omega]$	$R_{maxL}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
60.0	24161	23570	24752	2.4	0.7	3.7
65.0	20144	19615	20674	2.6	0.7	3.6
70.0	16874	16400	17348	2.8	0.8	3.5
75.0	14198	13775	14622	3.0	0.9	3.4
80.0	11998	11620	12376	3.2	0.9	3.3
85.0	10181	9844	10519	3.3	1.0	3.2
90.0	8674	8373	8976	3.5	1.1	3.2
95.0	7419	7149	7688	3.6	1.2	3.1
100.0	6369	6128	6610	3.8	1.3	3.0
105.0	5487	5271	5703	3.9	1.3	2.9
110.0	4744	4550	4937	4.1	1.4	2.9
115.0	4115	3941	4288	4.2	1.5	2.8
120.0	3581	3425	3737	4.4	1.6	2.7
125.0	3126	2985	3266	4.5	1.7	2.7
130.0	2737	2610	2864	4.6	1.8	2.6
135.0	2404	2289	2518	4.8	1.8	2.6
140.0	2117	2013	2220	4.9	1.9	2.5
145.0	1869	1776	1963	5.0	2.0	2.5
150.0	1655	1570	1740	5.1	2.1	2.4
155.0	1469	1392	1546	5.2	2.2	2.4
160.0	1307	1237	1377	5.4	2.3	2.3
165.0	1166	1102	1230	5.5	2.4	2.3
170.0	1043	984.6	1101	5.6	2.5	2.2
175.0	934.5	881.4	987.5	5.7	2.6	2.2
180.0	839.3	790.7	887.8	5.8	2.7	2.1
185.0	755.4	710.9	799.9	5.9	2.8	2.1
190.0	681.3	640.5	722.2	6.0	2.9	2.0
195.0	615.8	578.3	653.3	6.1	3.0	2.0
200.0	557.6	523.1	592.1	6.2	3.1	2.0
205.0	505.9	474.1	537.7	6.3	3.3	1.9
210.0	459.9	430.6	489.2	6.4	3.4	1.9
215.0	418.8	391.7	445.8	6.5	3.5	1.9
220.0	382.0	357.0	407.0	6.6	3.6	1.8
225.0	349.1	325.9	372.2	6.6	3.7	1.8
230.0	319.5	298.0	341.0	6.7	3.8	1.8
235.0	292.9	273.0	312.9	6.8	4.0	1.7
240.0	269.0	250.4	287.5	6.9	4.1	1.7
245.0	247.3	230.1	264.6	7.0	4.2	1.7
250.0	227.8	211.7	243.9	7.1	4.3	1.6

	B57540G0104G000					
R/T No.	8404					
T (°C)	B _{0/100} = 4036 K, R ₂₅ = 100000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	9877500	9167200	10588000	7.2	1.0	7.4
-50.0	6864800	6401600	7328000	6.7	0.9	7.1
-45.0	4833700	4527900	5139400	6.3	0.9	6.9
-40.0	3445800	3241700	3649800	5.9	0.9	6.7
-35.0	2485200	2347600	2622800	5.5	0.9	6.4
-30.0	1812400	1718600	1906100	5.2	0.8	6.2
-25.0	1335600	1271200	1400000	4.8	0.8	6.0
-20.0	994130	949550	1038700	4.5	0.8	5.8
-15.0	747000	715910	778090	4.2	0.7	5.6
-10.0	566390	544560	588210	3.9	0.7	5.4
-5.0	433140	417740	448550	3.6	0.7	5.3
0.0	333960	323040	344890	3.3	0.6	5.2
5.0	258500	250750	266250	3.0	0.6	5.0
10.0	201660	196150	207170	2.7	0.6	4.9
15.0	158500	154570	162430	2.5	0.5	4.7
20.0	125470	122660	128270	2.2	0.5	4.6
25.0	100000	98000	102000	2.0	0.4	4.5
30.0	80223	78435	82010	2.2	0.5	4.3
35.0	64759	63173	66345	2.4	0.6	4.2
40.0	52589	51188	53990	2.7	0.6	4.1
45.0	42951	41718	44184	2.9	0.7	4.0
50.0	35272	34188	36356	3.1	0.8	3.9
55.0	29119	28167	30071	3.3	0.9	3.8
60.0	24161	23325	24997	3.5	0.9	3.7
65.0	20144	19410	20879	3.6	1.0	3.6
70.0	16874	16228	17520	3.8	1.1	3.5
75.0	14198	13630	14766	4.0	1.2	3.4
80.0	11998	11498	12499	4.2	1.3	3.3
85.0	10181	9740	10623	4.3	1.3	3.2
90.0	8674	8284	9065	4.5	1.4	3.2
95.0	7419	7073	7765	4.7	1.5	3.1
100.0	6369	6062	6675	4.8	1.6	3.0
105.0	5487	5215	5759	5.0	1.7	2.9
110.0	4744	4501	4986	5.1	1.8	2.9
115.0	4115	3899	4331	5.3	1.9	2.8
120.0	3581	3388	3774	5.4	2.0	2.7
125.0	3126	2953	3299	5.5	2.1	2.7
130.0	2737	2582	2892	5.7	2.2	2.6
135.0	2404	2264	2543	5.8	2.3	2.6

B57540G0104G000						
R/T No.	8404					
T (°C)	$B_{0/100} = 4036 \text{ K}$, $R_{25} = 100000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
140.0	2117	1991	2242	5.9	2.4	2.5
145.0	1869	1756	1982	6.0	2.5	2.5
150.0	1655	1553	1757	6.2	2.6	2.4
155.0	1469	1377	1561	6.3	2.7	2.4
160.0	1307	1224	1391	6.4	2.8	2.3
165.0	1166	1090	1242	6.5	2.9	2.3
170.0	1043	973.7	1112	6.6	3.0	2.2
175.0	934.5	871.6	997.3	6.7	3.1	2.2
180.0	839.3	781.9	896.6	6.8	3.2	2.1
185.0	755.4	703.0	807.8	6.9	3.3	2.1
190.0	681.3	633.4	729.3	7.0	3.4	2.0
195.0	615.8	571.8	659.7	7.1	3.6	2.0
200.0	557.6	517.3	598.0	7.2	3.7	2.0
205.0	505.9	468.8	543.0	7.3	3.8	1.9
210.0	459.9	425.7	494.0	7.4	3.9	1.9
215.0	418.8	387.3	450.2	7.5	4.1	1.9
220.0	382.0	352.9	411.1	7.6	4.2	1.8
225.0	349.1	322.2	375.9	7.7	4.3	1.8
230.0	319.5	294.6	344.4	7.8	4.4	1.8
235.0	292.9	269.9	315.9	7.9	4.6	1.7
240.0	269.0	247.6	290.3	8.0	4.7	1.7
245.0	247.3	227.5	267.2	8.0	4.8	1.7
250.0	227.8	209.3	246.3	8.1	5.0	1.6

B57540G0104H000						
R/T No.	8404					
T (°C)	$B_{0/100} = 4036 \text{ K}$, $R_{25} = 100000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	9877500	9063300	10692000	8.2	1.1	7.4
−50.0	6864800	6329700	7399900	7.8	1.1	7.1
−45.0	4833700	4477500	5189800	7.4	1.1	6.9
−40.0	3445800	3205900	3685600	7.0	1.0	6.7
−35.0	2485200	2321800	2648600	6.6	1.0	6.4
−30.0	1812400	1699900	1924800	6.2	1.0	6.2
−25.0	1335600	1257500	1413700	5.8	1.0	6.0
−20.0	994130	939370	1048900	5.5	0.9	5.8
−15.0	747000	708280	785720	5.2	0.9	5.6
−10.0	566390	538800	593980	4.9	0.9	5.4
−5.0	433140	413340	452940	4.6	0.9	5.3

	B57540G0104H000					
R/T No.	8404					
T (°C)	B _{0/100} = 4036 K, R ₂₅ = 100000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	333960	319660	348270	4.3	0.8	5.2
5.0	258500	248140	268860	4.0	0.8	5.0
10.0	201660	194120	209200	3.7	0.8	4.9
15.0	158500	152980	164020	3.5	0.7	4.7
20.0	125470	121410	129530	3.2	0.7	4.6
25.0	100000	97000	103000	3.0	0.7	4.5
30.0	80223	77631	82814	3.2	0.7	4.3
35.0	64759	62523	66995	3.5	0.8	4.2
40.0	52589	50659	54519	3.7	0.9	4.1
45.0	42951	41284	44618	3.9	1.0	4.0
50.0	35272	33832	36713	4.1	1.1	3.9
55.0	29119	27872	30366	4.3	1.1	3.8
60.0	24161	23080	25242	4.5	1.2	3.7
65.0	20144	19205	21084	4.7	1.3	3.6
70.0	16874	16057	17692	4.8	1.4	3.5
75.0	14198	13485	14911	5.0	1.5	3.4
80.0	11998	11375	12622	5.2	1.6	3.3
85.0	10181	9635	10727	5.4	1.7	3.2
90.0	8674	8195	9154	5.5	1.7	3.2
95.0	7419	6997	7841	5.7	1.8	3.1
100.0	6369	5997	6741	5.8	1.9	3.0
105.0	5487	5158	5816	6.0	2.0	2.9
110.0	4744	4452	5035	6.1	2.1	2.9
115.0	4115	3856	4373	6.3	2.2	2.8
120.0	3581	3351	3811	6.4	2.3	2.7
125.0	3126	2921	3331	6.6	2.4	2.7
130.0	2737	2554	2920	6.7	2.5	2.6
135.0	2404	2239	2568	6.8	2.7	2.6
140.0	2117	1969	2264	7.0	2.8	2.5
145.0	1869	1737	2001	7.1	2.9	2.5
150.0	1655	1536	1774	7.2	3.0	2.4
155.0	1469	1362	1577	7.3	3.1	2.4
160.0	1307	1210	1405	7.4	3.2	2.3
165.0	1166	1078	1254	7.6	3.3	2.3
170.0	1043	962.8	1123	7.7	3.5	2.2
175.0	934.5	861.8	1007	7.8	3.6	2.2
180.0	839.3	773.1	905.4	7.9	3.7	2.1
185.0	755.4	695.1	815.7	8.0	3.8	2.1
190.0	681.3	626.2	736.5	8.1	4.0	2.0
195.0	615.8	565.4	666.2	8.2	4.1	2.0

B57540G0104H000						
R/T No.	8404					
T (°C)	$B_{0/100} = 4036 \text{ K}$, $R_{25} = 100000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
200.0	557.6	511.4	603.8	8.3	4.2	2.0
205.0	505.9	463.5	548.3	8.4	4.4	1.9
210.0	459.9	420.9	498.9	8.5	4.5	1.9
215.0	418.8	382.9	454.7	8.6	4.6	1.9
220.0	382.0	348.9	415.1	8.7	4.8	1.8
225.0	349.1	318.5	379.6	8.8	4.9	1.8
230.0	319.5	291.2	347.7	8.8	5.0	1.8
235.0	292.9	266.8	319.0	8.9	5.2	1.7
240.0	269.0	244.7	293.2	9.0	5.3	1.7
245.0	247.3	224.8	269.8	9.1	5.5	1.7
250.0	227.8	206.9	248.7	9.2	5.6	1.6

B57540G0104J000						
R/T No.	8404					
T (°C)	$B_{0/100} = 4036 \text{ K}$, $R_{25} = 100000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{nom}[\Omega]$	$R_{min}[\Omega]$	$R_{max}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ (}\%/\text{K)}$
−55.0	9877500	8855700	10899000	10.3	1.4	7.4
−50.0	6864800	6186000	7543500	9.9	1.4	7.1
−45.0	4833700	4376800	5290600	9.5	1.4	6.9
−40.0	3445800	3134300	3757200	9.0	1.4	6.7
−35.0	2485200	2270400	2700000	8.6	1.3	6.4
−30.0	1812400	1662600	1962100	8.3	1.3	6.2
−25.0	1335600	1230100	1441200	7.9	1.3	6.0
−20.0	994130	919000	1069300	7.6	1.3	5.8
−15.0	747000	693030	800980	7.2	1.3	5.6
−10.0	566390	527260	605510	6.9	1.3	5.4
−5.0	433140	404540	461740	6.6	1.3	5.3
0.0	333960	312890	355030	6.3	1.2	5.2
5.0	258500	242920	274080	6.0	1.2	5.0
10.0	201660	190050	213270	5.8	1.2	4.9
15.0	158500	149790	167210	5.5	1.2	4.7
20.0	125470	118890	132050	5.2	1.1	4.6
25.0	100000	95000	105000	5.0	1.1	4.5
30.0	80223	76023	84422	5.2	1.2	4.3
35.0	64759	61222	68296	5.5	1.3	4.2
40.0	52589	49600	55578	5.7	1.4	4.1
45.0	42951	40418	45484	5.9	1.5	4.0
50.0	35272	33119	37426	6.1	1.6	3.9
55.0	29119	27282	30956	6.3	1.7	3.8

	B57540G0104J000					
R/T No.	8404					
T (°C)	B _{0/100} = 4036 K, R ₂₅ = 100000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	24161	22589	25732	6.5	1.8	3.7
65.0	20144	18796	21493	6.7	1.9	3.6
70.0	16874	15713	18035	6.9	2.0	3.5
75.0	14198	13196	15201	7.1	2.1	3.4
80.0	11998	11130	12867	7.2	2.2	3.3
85.0	10181	9427	10936	7.4	2.3	3.2
90.0	8674	8017	9331	7.6	2.4	3.2
95.0	7419	6845	7993	7.7	2.5	3.1
100.0	6369	5866	6872	7.9	2.6	3.0
105.0	5487	5045	5929	8.1	2.7	2.9
110.0	4744	4355	5133	8.2	2.9	2.9
115.0	4115	3771	4458	8.3	3.0	2.8
120.0	3581	3277	3885	8.5	3.1	2.7
125.0	3126	2856	3396	8.6	3.2	2.7
130.0	2737	2497	2977	8.8	3.3	2.6
135.0	2404	2190	2617	8.9	3.5	2.6
140.0	2117	1925	2308	9.0	3.6	2.5
145.0	1869	1698	2040	9.2	3.7	2.5
150.0	1655	1501	1809	9.3	3.9	2.4
155.0	1469	1331	1607	9.4	4.0	2.4
160.0	1307	1183	1432	9.5	4.1	2.3
165.0	1166	1054	1279	9.6	4.3	2.3
170.0	1043	941.0	1144	9.8	4.4	2.2
175.0	934.5	842.3	1027	9.9	4.5	2.2
180.0	839.3	755.6	923.0	10.0	4.7	2.1
185.0	755.4	679.2	831.6	10.1	4.8	2.1
190.0	681.3	611.9	750.8	10.2	5.0	2.0
195.0	615.8	552.4	679.1	10.3	5.1	2.0
200.0	557.6	499.7	615.6	10.4	5.3	2.0
205.0	505.9	452.9	559.0	10.5	5.4	1.9
210.0	459.9	411.2	508.5	10.6	5.6	1.9
215.0	418.8	374.0	463.5	10.7	5.8	1.9
220.0	382.0	340.8	423.1	10.8	5.9	1.8
225.0	349.1	311.1	387.0	10.9	6.1	1.8
230.0	319.5	284.5	354.5	11.0	6.2	1.8
235.0	292.9	260.6	325.2	11.0	6.4	1.7
240.0	269.0	239.0	298.9	11.1	6.6	1.7
245.0	247.3	219.6	275.1	11.2	6.8	1.7
250.0	227.8	202.1	253.5	11.3	6.9	1.6

	B57540G0234F000					
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	28088000	24457000	31718000	12.9	1.7	7.8
-50.0	19160000	16884000	21436000	11.9	1.6	7.5
-45.0	13253000	11810000	14695000	10.9	1.5	7.2
-40.0	9286900	8363400	10210000	9.9	1.4	7.0
-35.0	6588800	5992600	7185000	9.0	1.3	6.7
-30.0	4729500	4341800	5117200	8.2	1.3	6.5
-25.0	3432700	3179100	3686300	7.4	1.2	6.3
-20.0	2517800	2351300	2684400	6.6	1.1	6.1
-15.0	1865300	1755700	1974900	5.9	1.0	5.9
-10.0	1395100	1322900	1467200	5.2	0.9	5.7
-5.0	1052900	1005500	1100200	4.5	0.8	5.5
0.0	801440	770560	832320	3.9	0.7	5.4
5.0	615090	595200	634990	3.2	0.6	5.2
10.0	475780	463220	488350	2.6	0.5	5.1
15.0	370790	363100	378470	2.1	0.4	4.9
20.0	291030	286590	295470	1.5	0.3	4.8
25.0	230000	227700	232300	1.0	0.2	4.6
30.0	182960	180200	185720	1.5	0.3	4.5
35.0	146460	143520	149390	2.0	0.5	4.4
40.0	117940	115010	120870	2.5	0.6	4.3
45.0	95528	92709	98347	3.0	0.7	4.2
50.0	77804	75154	80454	3.4	0.8	4.1
55.0	63706	61253	66158	3.8	1.0	3.9
60.0	52429	50184	54674	4.3	1.1	3.8
65.0	43361	41322	45400	4.7	1.3	3.7
70.0	36032	34190	37874	5.1	1.4	3.7
75.0	30078	28420	31736	5.5	1.5	3.6
80.0	25218	23730	26707	5.9	1.7	3.5
85.0	21233	19899	22567	6.3	1.8	3.4
90.0	17951	16757	19146	6.7	2.0	3.3
95.0	15236	14167	16305	7.0	2.2	3.2
100.0	12981	12024	13938	7.4	2.3	3.2
105.0	11100	10244	11957	7.7	2.5	3.1
110.0	9526	8758	10293	8.1	2.7	3.0
115.0	8203	7515	8890	8.4	2.8	3.0
120.0	7087	6470	7704	8.7	3.0	2.9
125.0	6142	5588	6696	9.0	3.2	2.8
130.0	5340	4842	5838	9.3	3.4	2.8
135.0	4657	4208	5105	9.6	3.6	2.7

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0234F000						
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
140.0	4073	3668	4477	9.9	3.7	2.7
145.0	3572	3207	3937	10.2	3.9	2.6
150.0	3141	2811	3471	10.5	4.1	2.5
155.0	2770	2471	3069	10.8	4.3	2.5
160.0	2449	2178	2719	11.0	4.5	2.4
165.0	2170	1925	2416	11.3	4.7	2.4
170.0	1928	1705	2151	11.6	4.9	2.3
175.0	1717	1514	1920	11.8	5.2	2.3
180.0	1532	1347	1718	12.1	5.4	2.3
185.0	1371	1202	1540	12.3	5.6	2.2
190.0	1229	1074	1383	12.6	5.8	2.2
195.0	1104	962.6	1245	12.8	6.0	2.1
200.0	993.8	864.3	1123	13.0	6.3	2.1
205.0	896.4	777.5	1015	13.3	6.5	2.0
210.0	810.0	700.8	919.3	13.5	6.7	2.0
215.0	733.4	632.9	833.9	13.7	7.0	2.0
220.0	665.3	572.7	757.9	13.9	7.2	1.9
225.0	604.5	519.1	689.9	14.1	7.4	1.9
230.0	550.3	471.4	629.2	14.3	7.7	1.9
235.0	501.8	428.8	574.7	14.5	7.9	1.8
240.0	458.3	390.7	525.8	14.7	8.2	1.8
245.0	419.2	356.6	481.8	14.9	8.5	1.8
250.0	384.1	326.0	442.2	15.1	8.7	1.7

B57540G0234G000						
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	28088000	24143000	32032000	14.0	1.8	7.8
-50.0	19160000	16672000	21648000	13.0	1.7	7.5
-45.0	13253000	11664000	14841000	12.0	1.7	7.2
-40.0	9286900	8262300	10311000	11.0	1.6	7.0
-35.0	6588800	5921400	7256100	10.1	1.5	6.7
-30.0	4729500	4291100	5167900	9.3	1.4	6.5
-25.0	3432700	3142600	3722800	8.5	1.3	6.3
-20.0	2517800	2324700	2711000	7.7	1.3	6.1
-15.0	1865300	1736100	1994500	6.9	1.2	5.9
-10.0	1395100	1308400	1481800	6.2	1.1	5.7
-5.0	1052900	994600	1111100	5.5	1.0	5.5

	B57540G0234G000					
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nomL} [Ω]	R _{minL} [Ω]	R _{maxL} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	801440	762320	840560	4.9	0.9	5.4
5.0	615090	588910	641280	4.3	0.8	5.2
10.0	475780	458380	493190	3.7	0.7	5.1
15.0	370790	359360	382220	3.1	0.6	4.9
20.0	291030	283670	298400	2.5	0.5	4.8
25.0	230000	225400	234600	2.0	0.4	4.6
30.0	182960	178360	187560	2.5	0.6	4.5
35.0	146460	142040	150870	3.0	0.7	4.4
40.0	117940	113820	122070	3.5	0.8	4.3
45.0	95528	91736	99321	4.0	1.0	4.2
50.0	77804	74357	81251	4.4	1.1	4.1
55.0	63706	60598	66813	4.9	1.2	3.9
60.0	52429	49643	55215	5.3	1.4	3.8
65.0	43361	40873	45850	5.7	1.5	3.7
70.0	36032	33815	38249	6.2	1.7	3.7
75.0	30078	28106	32050	6.6	1.8	3.6
80.0	25218	23465	26971	7.0	2.0	3.5
85.0	21233	19676	22791	7.3	2.2	3.4
90.0	17951	16567	19335	7.7	2.3	3.3
95.0	15236	14006	16467	8.1	2.5	3.2
100.0	12981	11886	14076	8.4	2.7	3.2
105.0	11100	10125	12075	8.8	2.8	3.1
110.0	9526	8656	10395	9.1	3.0	3.0
115.0	8203	7427	8978	9.5	3.2	3.0
120.0	7087	6393	7780	9.8	3.4	2.9
125.0	6142	5522	6763	10.1	3.6	2.8
130.0	5340	4784	5896	10.4	3.8	2.8
135.0	4657	4158	5156	10.7	4.0	2.7
140.0	4073	3624	4521	11.0	4.2	2.7
145.0	3572	3168	3976	11.3	4.4	2.6
150.0	3141	2777	3506	11.6	4.6	2.5
155.0	2770	2441	3099	11.9	4.8	2.5
160.0	2449	2151	2746	12.1	5.0	2.4
165.0	2170	1901	2440	12.4	5.2	2.4
170.0	1928	1684	2173	12.7	5.4	2.3
175.0	1717	1495	1939	12.9	5.6	2.3
180.0	1532	1330	1735	13.2	5.9	2.3
185.0	1371	1187	1555	13.4	6.1	2.2
190.0	1229	1061	1397	13.7	6.3	2.2
195.0	1104	950.3	1258	13.9	6.6	2.1

Temperature measurement
B57540
Glass-encapsulated sensors
G540

	B57540G0234G000					
R/T No.	8405					
T (°C)	$B_{100/200} = 4537 \text{ K}$, $R_{25} = 230000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 2\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
200.0	993.8	853.1	1134	14.2	6.8	2.1
205.0	896.4	767.4	1025	14.4	7.0	2.0
210.0	810.0	691.7	928.4	14.6	7.3	2.0
215.0	733.4	624.7	842.2	14.8	7.5	2.0
220.0	665.3	565.2	765.4	15.0	7.8	1.9
225.0	604.5	512.3	696.8	15.3	8.0	1.9
230.0	550.3	465.2	635.4	15.5	8.3	1.9
235.0	501.8	423.1	580.4	15.7	8.6	1.8
240.0	458.3	385.5	531.0	15.9	8.8	1.8
245.0	419.2	351.9	486.6	16.1	9.1	1.8
250.0	384.1	321.6	446.6	16.3	9.4	1.7

	B57540G0234H000					
R/T No.	8405					
T (°C)	$B_{100/200} = 4537 \text{ K}$, $R_{25} = 230000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
-55.0	28088000	23829000	32346000	15.2	1.9	7.8
-50.0	19160000	16460000	21861000	14.1	1.9	7.5
-45.0	13253000	11519000	14986000	13.1	1.8	7.2
-40.0	9286900	8161200	10413000	12.1	1.7	7.0
-35.0	6588800	5850300	7327300	11.2	1.7	6.7
-30.0	4729500	4240500	5218600	10.3	1.6	6.5
-25.0	3432700	3106100	3759300	9.5	1.5	6.3
-20.0	2517800	2298100	2737500	8.7	1.4	6.1
-15.0	1865300	1716600	2014000	8.0	1.4	5.9
-10.0	1395100	1293900	1496300	7.3	1.3	5.7
-5.0	1052900	983710	1122000	6.6	1.2	5.5
0.0	801440	754080	848800	5.9	1.1	5.4
5.0	615090	582620	647560	5.3	1.0	5.2
10.0	475780	453540	498020	4.7	0.9	5.1
15.0	370790	355610	385970	4.1	0.8	4.9
20.0	291030	280740	301320	3.5	0.7	4.8
25.0	230000	223100	236900	3.0	0.6	4.6
30.0	182960	176520	189400	3.5	0.8	4.5
35.0	146460	140570	152350	4.0	0.9	4.4
40.0	117940	112620	123260	4.5	1.1	4.3
45.0	95528	90762	100300	5.0	1.2	4.2
50.0	77804	73560	82047	5.5	1.3	4.1
55.0	63706	59943	67468	5.9	1.5	3.9

	B57540G0234H000					
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nomL} [Ω]	R _{minL} [Ω]	R _{maxL} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	52429	49102	55757	6.3	1.6	3.8
65.0	43361	40423	46299	6.8	1.8	3.7
70.0	36032	33440	38624	7.2	2.0	3.7
75.0	30078	27792	32365	7.6	2.1	3.6
80.0	25218	23201	27236	8.0	2.3	3.5
85.0	21233	19452	23014	8.4	2.5	3.4
90.0	17951	16377	19525	8.8	2.6	3.3
95.0	15236	13844	16628	9.1	2.8	3.2
100.0	12981	11748	14214	9.5	3.0	3.2
105.0	11100	10007	12194	9.8	3.2	3.1
110.0	9526	8555	10497	10.2	3.4	3.0
115.0	8203	7339	9066	10.5	3.6	3.0
120.0	7087	6317	7856	10.9	3.8	2.9
125.0	6142	5455	6829	11.2	4.0	2.8
130.0	5340	4726	5954	11.5	4.2	2.8
135.0	4657	4107	5206	11.8	4.4	2.7
140.0	4073	3580	4566	12.1	4.6	2.7
145.0	3572	3129	4015	12.4	4.8	2.6
150.0	3141	2743	3540	12.7	5.0	2.5
155.0	2770	2411	3129	13.0	5.2	2.5
160.0	2449	2124	2773	13.2	5.4	2.4
165.0	2170	1877	2464	13.5	5.7	2.4
170.0	1928	1662	2194	13.8	5.9	2.3
175.0	1717	1476	1958	14.0	6.1	2.3
180.0	1532	1313	1752	14.3	6.4	2.3
185.0	1371	1171	1570	14.6	6.6	2.2
190.0	1229	1047	1411	14.8	6.8	2.2
195.0	1104	938.0	1270	15.0	7.1	2.1
200.0	993.8	842.0	1146	15.3	7.3	2.1
205.0	896.4	757.4	1035	15.5	7.6	2.0
210.0	810.0	682.6	937.5	15.7	7.8	2.0
215.0	733.4	616.4	850.4	16.0	8.1	2.0
220.0	665.3	557.7	772.9	16.2	8.4	1.9
225.0	604.5	505.5	703.6	16.4	8.6	1.9
230.0	550.3	459.0	641.6	16.6	8.9	1.9
235.0	501.8	417.4	586.1	16.8	9.2	1.8
240.0	458.3	380.3	536.2	17.0	9.5	1.8
245.0	419.2	347.1	491.4	17.2	9.7	1.8
250.0	384.1	317.3	451.0	17.4	10.0	1.7

B57540G0234J000						
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	28088000	23201000	32974000	17.4	2.2	7.8
-50.0	19160000	16036000	22285000	16.3	2.2	7.5
-45.0	13253000	11228000	15277000	15.3	2.1	7.2
-40.0	9286900	7959100	10615000	14.3	2.0	7.0
-35.0	6588800	5708000	7469500	13.4	2.0	6.7
-30.0	4729500	4139100	5319900	12.5	1.9	6.5
-25.0	3432700	3033100	3832300	11.6	1.8	6.3
-20.0	2517800	2245000	2790700	10.8	1.8	6.1
-15.0	1865300	1677500	2053200	10.1	1.7	5.9
-10.0	1395100	1264800	1525300	9.3	1.6	5.7
-5.0	1052900	961920	1143800	8.6	1.6	5.5
0.0	801440	737600	865290	8.0	1.5	5.4
5.0	615090	570050	660140	7.3	1.4	5.2
10.0	475780	443870	507690	6.7	1.3	5.1
15.0	370790	348110	393460	6.1	1.2	4.9
20.0	291030	274890	307170	5.5	1.2	4.8
25.0	230000	218500	241500	5.0	1.1	4.6
30.0	182960	172850	193080	5.5	1.2	4.5
35.0	146460	137610	155310	6.0	1.4	4.4
40.0	117940	110230	125660	6.5	1.5	4.3
45.0	95528	88814	102240	7.0	1.7	4.2
50.0	77804	71967	83640	7.5	1.9	4.1
55.0	63706	58633	68778	8.0	2.0	3.9
60.0	52429	48019	56839	8.4	2.2	3.8
65.0	43361	39524	47199	8.8	2.4	3.7
70.0	36032	32690	39374	9.3	2.5	3.7
75.0	30078	27163	32993	9.7	2.7	3.6
80.0	25218	22672	27765	10.1	2.9	3.5
85.0	21233	19005	23461	10.5	3.1	3.4
90.0	17951	15998	19904	10.9	3.3	3.3
95.0	15236	13521	16951	11.3	3.5	3.2
100.0	12981	11472	14490	11.6	3.7	3.2
105.0	11100	9770	12430	12.0	3.9	3.1
110.0	9526	8351	10701	12.3	4.1	3.0
115.0	8203	7163	9242	12.7	4.3	3.0
120.0	7087	6164	8009	13.0	4.5	2.9
125.0	6142	5323	6962	13.3	4.7	2.8
130.0	5340	4611	6070	13.7	4.9	2.8
135.0	4657	4006	5308	14.0	5.2	2.7

Temperature measurement
B57540
Glass-encapsulated sensors
G540

B57540G0234J000						
R/T No.	8405					
T (°C)	B _{100/200} = 4537 K, R ₂₅ = 230000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
140.0	4073	3491	4654	14.3	5.4	2.7
145.0	3572	3051	4093	14.6	5.6	2.6
150.0	3141	2674	3609	14.9	5.9	2.5
155.0	2770	2350	3190	15.2	6.1	2.5
160.0	2449	2071	2827	15.4	6.3	2.4
165.0	2170	1829	2512	15.7	6.6	2.4
170.0	1928	1620	2237	16.0	6.8	2.3
175.0	1717	1438	1996	16.3	7.1	2.3
180.0	1532	1279	1786	16.5	7.3	2.3
185.0	1371	1141	1601	16.8	7.6	2.2
190.0	1229	1020	1438	17.0	7.9	2.2
195.0	1104	913.3	1295	17.3	8.1	2.1
200.0	993.8	819.8	1168	17.5	8.4	2.1
205.0	896.4	737.3	1055	17.7	8.7	2.0
210.0	810.0	664.4	955.7	18.0	9.0	2.0
215.0	733.4	599.9	866.9	18.2	9.2	2.0
220.0	665.3	542.7	787.9	18.4	9.5	1.9
225.0	604.5	491.8	717.3	18.6	9.8	1.9
230.0	550.3	446.5	654.1	18.9	10.1	1.9
235.0	501.8	406.1	597.5	19.1	10.4	1.8
240.0	458.3	369.9	546.6	19.3	10.7	1.8
245.0	419.2	337.5	500.9	19.5	11.0	1.8
250.0	384.1	308.5	459.7	19.7	11.3	1.7

B57540G0145F000						
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	256620000	219170000	294060000	14.6	1.7	8.5
-50.0	168960000	146340000	191590000	13.4	1.6	8.2
-45.0	113010000	99161000	126860000	12.3	1.6	7.9
-40.0	76708000	68136000	85281000	11.2	1.5	7.6
-35.0	52798000	47437000	58158000	10.2	1.4	7.3
-30.0	36821000	33441000	40202000	9.2	1.3	7.1
-25.0	26000000	23854000	28147000	8.3	1.2	6.8
-20.0	18576000	17206000	19946000	7.4	1.1	6.6
-15.0	13421000	12544000	14298000	6.5	1.0	6.4
-10.0	9799500	9237700	10361000	5.7	0.9	6.2
-5.0	7227500	6868500	7586400	5.0	0.8	6.0

	B57540G0145F000					
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1 %					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [± %]	ΔT[± °C]	α (%/K)
0.0	5381600	5153800	5609400	4.2	0.7	5.8
5.0	4043700	3900900	4186500	3.5	0.6	5.6
10.0	3064800	2977200	3152500	2.9	0.5	5.5
15.0	2342200	2290300	2394000	2.2	0.4	5.3
20.0	1804000	1775200	1832800	1.6	0.3	5.1
25.0	1400000	1386000	1414000	1.0	0.2	5.0
30.0	1094300	1077100	1111500	1.6	0.3	4.9
35.0	861230	842850	879620	2.1	0.5	4.7
40.0	682280	663990	700560	2.7	0.6	4.6
45.0	543920	526460	561380	3.2	0.7	4.5
50.0	436240	419980	452500	3.7	0.9	4.4
55.0	351910	337030	366800	4.2	1.0	4.2
60.0	285460	271990	298940	4.7	1.1	4.1
65.0	232800	220700	244900	5.2	1.3	4.0
70.0	190830	180020	201640	5.7	1.4	3.9
75.0	157190	147570	166810	6.1	1.6	3.8
80.0	130100	121560	138640	6.6	1.8	3.7
85.0	108180	100610	115750	7.0	1.9	3.6
90.0	90338	83635	97042	7.4	2.1	3.6
95.0	75763	69828	81698	7.8	2.3	3.5
100.0	63799	58544	69054	8.2	2.4	3.4
105.0	53936	49280	58592	8.6	2.6	3.3
110.0	45772	41644	49899	9.0	2.8	3.2
115.0	38986	35323	42648	9.4	3.0	3.2
120.0	33324	30071	36577	9.8	3.1	3.1
125.0	28582	25689	31476	10.1	3.3	3.0
130.0	24596	22020	27173	10.5	3.5	3.0
135.0	21234	18937	23532	10.8	3.7	2.9
140.0	18389	16337	20441	11.2	3.9	2.8
145.0	15972	14137	17808	11.5	4.1	2.8
150.0	13914	12270	15558	11.8	4.3	2.7
155.0	12155	10680	13629	12.1	4.5	2.7
160.0	10647	9323	11972	12.4	4.7	2.6
165.0	9351	8159	10543	12.7	5.0	2.6
170.0	8234	7160	9308	13.0	5.2	2.5
175.0	7269	6299	8238	13.3	5.4	2.5
180.0	6432	5556	7308	13.6	5.6	2.4
185.0	5705	4912	6498	13.9	5.9	2.4
190.0	5071	4352	5791	14.2	6.1	2.3
195.0	4518	3865	5171	14.5	6.3	2.3

Temperature measurement

B57540

Glass-encapsulated sensors

G540

	B57540G0145F000					
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 1%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
200.0	4034	3441	4628	14.7	6.6	2.2
205.0	3610	3069	4150	15.0	6.8	2.2
210.0	3236	2743	3729	15.2	7.0	2.2
215.0	2907	2457	3357	15.5	7.3	2.1
220.0	2617	2205	3028	15.7	7.5	2.1
225.0	2360	1983	2736	16.0	7.8	2.0
230.0	2132	1786	2477	16.2	8.0	2.0
235.0	1929	1612	2246	16.4	8.3	2.0
240.0	1749	1457	2041	16.7	8.6	1.9
245.0	1588	1320	1857	16.9	8.8	1.9
250.0	1445	1197	1692	17.1	9.1	1.9

	B57540G0145G000					
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	256620000	216250000	296980000	15.7	1.8	8.5
-50.0	168960000	144440000	193490000	14.5	1.8	8.2
-45.0	113010000	97905000	128110000	13.4	1.7	7.9
-40.0	76708000	67291000	86126000	12.3	1.6	7.6
-35.0	52798000	46861000	58734000	11.2	1.5	7.3
-30.0	36821000	33043000	40600000	10.3	1.4	7.1
-25.0	26000000	23575000	28425000	9.3	1.4	6.8
-20.0	18576000	17009000	20144000	8.4	1.3	6.6
-15.0	13421000	12402000	14440000	7.6	1.2	6.4
-10.0	9799500	9135100	10464000	6.8	1.1	6.2
-5.0	7227500	6793400	7661500	6.0	1.0	6.0
0.0	5381600	5098200	5665000	5.3	0.9	5.8
5.0	4043700	3859500	4228000	4.6	0.8	5.6
10.0	3064800	2946000	3183700	3.9	0.7	5.5
15.0	2342200	2266600	2417700	3.2	0.6	5.3
20.0	1804000	1757100	1850900	2.6	0.5	5.1
25.0	1400000	1372000	1428000	2.0	0.4	5.0
30.0	1094300	1066000	1122500	2.6	0.5	4.9
35.0	861230	834140	888330	3.1	0.7	4.7
40.0	682280	657060	707490	3.7	0.8	4.6
45.0	543920	520900	566940	4.2	0.9	4.5
50.0	436240	415500	456980	4.8	1.1	4.4
55.0	351910	333390	370430	5.3	1.2	4.2

	B57540G0145G000					
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 2%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
60.0	285460	269030	301900	5.8	1.4	4.1
65.0	232800	218270	247330	6.2	1.5	4.0
70.0	190830	178020	203630	6.7	1.7	3.9
75.0	157190	145920	168470	7.2	1.9	3.8
80.0	130100	120190	140020	7.6	2.0	3.7
85.0	108180	99460	116890	8.1	2.2	3.6
90.0	90338	82674	98003	8.5	2.4	3.6
95.0	75763	69019	82507	8.9	2.6	3.5
100.0	63799	57860	69738	9.3	2.7	3.4
105.0	53936	48700	59172	9.7	2.9	3.3
110.0	45772	41150	50393	10.1	3.1	3.2
115.0	38986	34901	43071	10.5	3.3	3.2
120.0	33324	29709	36940	10.8	3.5	3.1
125.0	28582	25377	31787	11.2	3.7	3.0
130.0	24596	21751	27442	11.6	3.9	3.0
135.0	21234	18704	23765	11.9	4.1	2.9
140.0	18389	16134	20643	12.3	4.3	2.8
145.0	15972	13961	17984	12.6	4.5	2.8
150.0	13914	12116	15712	12.9	4.7	2.7
155.0	12155	10545	13764	13.2	4.9	2.7
160.0	10647	9204	12091	13.6	5.2	2.6
165.0	9351	8055	10648	13.9	5.4	2.6
170.0	8234	7068	9401	14.2	5.6	2.5
175.0	7269	6218	8320	14.5	5.9	2.5
180.0	6432	5483	7381	14.7	6.1	2.4
185.0	5705	4847	6562	15.0	6.3	2.4
190.0	5071	4295	5848	15.3	6.6	2.3
195.0	4518	3814	5223	15.6	6.8	2.3
200.0	4034	3395	4674	15.9	7.1	2.2
205.0	3610	3028	4191	16.1	7.3	2.2
210.0	3236	2706	3766	16.4	7.6	2.2
215.0	2907	2424	3391	16.6	7.8	2.1
220.0	2617	2175	3058	16.9	8.1	2.1
225.0	2360	1956	2764	17.1	8.4	2.0
230.0	2132	1762	2502	17.4	8.6	2.0
235.0	1929	1590	2269	17.6	8.9	2.0
240.0	1749	1437	2061	17.8	9.2	1.9
245.0	1588	1301	1875	18.1	9.4	1.9
250.0	1445	1180	1709	18.3	9.7	1.9

B57540G0145H000						
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 3%					
	R _{nom} [Ω]	R _{min} [Ω]	R _{max} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
-55.0	256620000	213340000	299890000	16.9	2.0	8.5
-50.0	168960000	142540000	195390000	15.6	1.9	8.2
-45.0	113010000	96649000	129370000	14.5	1.8	7.9
-40.0	76708000	66447000	86970000	13.4	1.8	7.6
-35.0	52798000	46286000	59310000	12.3	1.7	7.3
-30.0	36821000	32645000	40998000	11.3	1.6	7.1
-25.0	26000000	23296000	28704000	10.4	1.5	6.8
-20.0	18576000	16811000	20341000	9.5	1.4	6.6
-15.0	13421000	12261000	14581000	8.6	1.4	6.4
-10.0	9799500	9032600	10567000	7.8	1.3	6.2
-5.0	7227500	6718300	7736600	7.0	1.2	6.0
0.0	5381600	5042700	5720500	6.3	1.1	5.8
5.0	4043700	3818000	4269400	5.6	1.0	5.6
10.0	3064800	2914800	3214900	4.9	0.9	5.5
15.0	2342200	2242900	2441400	4.2	0.8	5.3
20.0	1804000	1739000	1869100	3.6	0.7	5.1
25.0	1400000	1358000	1442000	3.0	0.6	5.0
30.0	1094300	1055000	1133500	3.6	0.7	4.9
35.0	861230	825430	897040	4.2	0.9	4.7
40.0	682280	650120	714430	4.7	1.0	4.6
45.0	543920	515340	572490	5.3	1.2	4.5
50.0	436240	411020	461460	5.8	1.3	4.4
55.0	351910	329760	374060	6.3	1.5	4.2
60.0	285460	266070	304860	6.8	1.6	4.1
65.0	232800	215850	249750	7.3	1.8	4.0
70.0	190830	176020	205630	7.8	2.0	3.9
75.0	157190	144270	170120	8.2	2.1	3.8
80.0	130100	118820	141390	8.7	2.3	3.7
85.0	108180	98314	118040	9.1	2.5	3.6
90.0	90338	81713	98964	9.5	2.7	3.6
95.0	75763	68210	83316	10.0	2.9	3.5
100.0	63799	57176	70422	10.4	3.1	3.4
105.0	53936	48120	59752	10.8	3.2	3.3
110.0	45772	40656	50887	11.2	3.4	3.2
115.0	38986	34479	43493	11.6	3.6	3.2
120.0	33324	29346	37302	11.9	3.8	3.1
125.0	28582	25065	32099	12.3	4.1	3.0
130.0	24596	21482	27711	12.7	4.3	3.0
135.0	21234	18471	23998	13.0	4.5	2.9

Temperature measurement
B57540
Glass-encapsulated sensors
G540

	B57540G0145H000					
R/T No.	8406					
T (°C)	$B_{200/300} = 5133 \text{ K}$, $R_{25} = 1400000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 3\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
140.0	18389	15932	20846	13.4	4.7	2.8
145.0	15972	13785	18160	13.7	4.9	2.8
150.0	13914	11962	15866	14.0	5.1	2.7
155.0	12155	10411	13899	14.4	5.4	2.7
160.0	10647	9086	12209	14.7	5.6	2.6
165.0	9351	7951	10752	15.0	5.8	2.6
170.0	8234	6976	9493	15.3	6.1	2.5
175.0	7269	6136	8401	15.6	6.3	2.5
180.0	6432	5411	7453	15.9	6.6	2.4
185.0	5705	4783	6627	16.2	6.8	2.4
190.0	5071	4238	5905	16.4	7.1	2.3
195.0	4518	3763	5274	16.7	7.3	2.3
200.0	4034	3349	4720	17.0	7.6	2.2
205.0	3610	2987	4232	17.3	7.8	2.2
210.0	3236	2669	3803	17.5	8.1	2.2
215.0	2907	2391	3424	17.8	8.4	2.1
220.0	2617	2145	3088	18.0	8.6	2.1
225.0	2360	1928	2791	18.3	8.9	2.0
230.0	2132	1737	2526	18.5	9.2	2.0
235.0	1929	1567	2291	18.8	9.5	2.0
240.0	1749	1417	2081	19.0	9.8	1.9
245.0	1588	1283	1893	19.2	10.1	1.9
250.0	1445	1164	1725	19.4	10.3	1.9

	B57540G0145J000					
R/T No.	8406					
T (°C)	$B_{200/300} = 5133 \text{ K}$, $R_{25} = 1400000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{\text{nom}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha (\%/K)$
−55.0	256620000	207520000	305710000	19.1	2.2	8.5
−50.0	168960000	138750000	199180000	17.9	2.2	8.2
−45.0	113010000	94137000	131880000	16.7	2.1	7.9
−40.0	76708000	64758000	88659000	15.6	2.0	7.6
−35.0	52798000	45134000	60462000	14.5	2.0	7.3
−30.0	36821000	31848000	41794000	13.5	1.9	7.1
−25.0	26000000	22739000	29261000	12.5	1.8	6.8
−20.0	18576000	16416000	20736000	11.6	1.8	6.6
−15.0	13421000	11978000	14864000	10.8	1.7	6.4
−10.0	9799500	8827400	10772000	9.9	1.6	6.2
−5.0	7227500	6568000	7886900	9.1	1.5	6.0

	B57540G0145J000					
R/T No.	8406					
T (°C)	B _{200/300} = 5133 K, R ₂₅ = 1400000 Ω, T _R = 25 °C, ΔR _R /R _R = ± 5%					
	R _{nomL} [Ω]	R _{minL} [Ω]	R _{maxL} [Ω]	ΔR _R /R _R [±%]	ΔT[±°C]	α (%/K)
0.0	5381600	4931600	5831600	8.4	1.4	5.8
5.0	4043700	3735100	4352300	7.6	1.4	5.6
10.0	3064800	2852400	3277300	6.9	1.3	5.5
15.0	2342200	2195500	2488800	6.3	1.2	5.3
20.0	1804000	1702700	1905400	5.6	1.1	5.1
25.0	1400000	1330000	1470000	5.0	1.0	5.0
30.0	1094300	1033000	1155600	5.6	1.2	4.9
35.0	861230	808010	914450	6.2	1.3	4.7
40.0	682280	636250	728300	6.7	1.5	4.6
45.0	543920	504230	583610	7.3	1.6	4.5
50.0	436240	402060	470420	7.8	1.8	4.4
55.0	351910	322500	381320	8.4	2.0	4.2
60.0	285460	260150	310780	8.9	2.1	4.1
65.0	232800	211000	254600	9.4	2.3	4.0
70.0	190830	172030	209620	9.8	2.5	3.9
75.0	157190	140970	173420	10.3	2.7	3.8
80.0	130100	116070	144140	10.8	2.9	3.7
85.0	108180	96022	120330	11.2	3.1	3.6
90.0	90338	79792	100890	11.7	3.3	3.6
95.0	75763	66592	84933	12.1	3.5	3.5
100.0	63799	55809	71789	12.5	3.7	3.4
105.0	53936	46960	60912	12.9	3.9	3.3
110.0	45772	39668	51875	13.3	4.1	3.2
115.0	38986	33634	44337	13.7	4.3	3.2
120.0	33324	28622	38026	14.1	4.5	3.1
125.0	28582	24442	32722	14.5	4.8	3.0
130.0	24596	20944	28249	14.9	5.0	3.0
135.0	21234	18005	24464	15.2	5.2	2.9
140.0	18389	15527	21250	15.6	5.5	2.8
145.0	15972	13432	18513	15.9	5.7	2.8
150.0	13914	11654	16174	16.2	5.9	2.7
155.0	12155	10141	14169	16.6	6.2	2.7
160.0	10647	8848	12446	16.9	6.4	2.6
165.0	9351	7742	10961	17.2	6.7	2.6
170.0	8234	6792	9677	17.5	7.0	2.5
175.0	7269	5973	8564	17.8	7.2	2.5
180.0	6432	5266	7598	18.1	7.5	2.4
185.0	5705	4654	6755	18.4	7.8	2.4
190.0	5071	4123	6020	18.7	8.0	2.3
195.0	4518	3661	5376	19.0	8.3	2.3

	B57540G0145J000					
R/T No.	8406					
T (°C)	$B_{200/300} = 5133 \text{ K}$, $R_{25} = 1400000 \text{ } \Omega$, $T_R = 25 \text{ } ^\circ\text{C}$, $\Delta R_R/R_R = \pm 5\%$					
	$R_{\text{noml}}[\Omega]$	$R_{\text{min}}[\Omega]$	$R_{\text{max}}[\Omega]$	$\Delta R_R/R_R[\pm\%]$	$\Delta T[\pm^\circ\text{C}]$	$\alpha \text{ } (\%/K)$
200.0	4034	3257	4811	19.3	8.6	2.2
205.0	3610	2905	4315	19.5	8.9	2.2
210.0	3236	2596	3877	19.8	9.1	2.2
215.0	2907	2324	3490	20.1	9.4	2.1
220.0	2617	2085	3148	20.3	9.7	2.1
225.0	2360	1874	2845	20.6	10.0	2.0
230.0	2132	1688	2575	20.8	10.3	2.0
235.0	1929	1523	2335	21.1	10.6	2.0
240.0	1749	1376	2121	21.3	10.9	1.9
245.0	1588	1246	1930	21.5	11.3	1.9
250.0	1445	1130	1759	21.8	11.6	1.9

Cautions and warnings

General

See "Important notes" at the end of this document.

Storage

- Store thermistors only in original packaging. Do not open the package before storage.
- Storage conditions in original packaging: storage temperature $-25\text{ }^{\circ}\text{C} \dots +45\text{ }^{\circ}\text{C}$, relative humidity $\leq 75\%$ annual mean, maximum 95%, dew precipitation is inadmissible.
- Do not store SMDs where they are exposed to heat or direct sunlight. Otherwise, the packing material may be deformed or SMDs may stick together, causing problems during mounting.
- Avoid contamination of thermistors surface during storage, handling and processing.
- Avoid storage of thermistor in harmful environments like corrosive gases (SO_x, Cl etc).
- After opening the factory seals, such as polyvinyl-sealed packages, use the SMDs as soon as possible.
- Solder thermistors after shipment from EPCOS within the time specified:
SMDs: 12 months
Leaded components: 24 months

Handling

- NTC thermistors must not be dropped. Chip-offs must not be caused during handling of NTCs.
- Components must not be touched with bare hands. Gloves are recommended.
- Avoid contamination of thermistor surface during handling.

Soldering

- Use resin-type flux or non-activated flux.
- Insufficient preheating may cause ceramic cracks.
- Rapid cooling by dipping in solvent is not recommended.
- Complete removal of flux is recommended.

Mounting

- When NTC thermistors are encapsulated with sealing material or overmolded with plastic material, the precautions given in chapter "Mounting instructions", "Sealing, potting and overmolding" must be observed.
- Electrode must not be scratched before/during/after the mounting process.
- Contacts and housings used for assembly with thermistor have to be clean before mounting.
- During operation, the thermistor's surface temperature can be very high (ICL). Ensure that adjacent components are placed at a sufficient distance from the thermistor to allow for proper cooling of the thermistors.
- Ensure that adjacent materials are designed for operation at temperatures comparable to the surface temperature of the thermistor. Be sure that surrounding parts and materials can withstand this temperature.
- Make sure that thermistors (ICLs) are adequately ventilated to avoid overheating.
- Avoid contamination of thermistor surface during processing.

Operation

- Use thermistors only within the specified operating temperature range.
- Use thermistors only within the specified voltage and current ranges (ICLs).
- Environmental conditions must not harm the thermistors. Use thermistors only in normal atmospheric conditions.
- Contact of NTC thermistors with any liquids and solvents should be prevented. It must be ensured that no water enters the NTC thermistor (e.g. through plug terminals). For measurement purposes (checking the specified resistance vs. temperature), the component must not be immersed in water but in suitable liquids (e.g. Galden).
- Avoid dewing and condensation.
- Be sure to provide an appropriate fail-safe function to prevent secondary product damage caused by malfunction (e.g. use VDR for limitation of overvoltage condition).

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application**. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of passive electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified**. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of a passive electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of a passive electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as “hazardous”)**. Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
5. We constantly strive to improve our products. Consequently, **the products described in this publication may change from time to time**. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order.
We also **reserve the right to discontinue production and delivery of products**. Consequently, we cannot guarantee that all products named in this publication will always be available.
6. Unless otherwise agreed in individual contracts, **all orders are subject to the current version of the “General Terms of Delivery for Products and Services in the Electrical Industry” published by the German Electrical and Electronics Industry Association (ZVEI)**.
7. The trade names EPCOS, EPCOS-JONES, Baoke, CeraDiode, CSSP, MLSC, PhaseCap, PhaseMod, SIFI, SIKOREL, SilverCap, SIMID, SIOV, SIP5D, SIP5K, UltraCap, WindCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.epcos.com/trademarks.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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