

Maverick ET-732/733 Temperature Probes

Datasheet provided by Maverick Industries

Thermistor GT-2

Semitek Ishizuka Electronics Corporation

6-Aug-04

Spec No. S04-0156

Thermistor	105-GT2		
Zero Power Resistance, R25 (k ohms)	1000	1,000,000	ohms
Tolerance on zero-power resistance (%)	+/-3		
B-value R25/R85 (K)	4 608		
Tolerance on B-Value (%)	+/-2		
Category Temperature Range (deg C)	-50 ~300		
Thermal Time Constant	~7.0 sec		
Dissipation Factor	~0.6 mW/deg C		
Rated Maximum Power Dissipation	~3.0 mW		
Storage Temperature Range	-10 to ~40 deg C		

Temp (deg C)	Rmax (k ohms)	Rst.m (k ohms)	Rmin (k ohms)	Tolerance (Deg C)	
-10	7409	6920	6457	-1.2	+1.2
-9	6961	6510	6082	-1.2	+1.2
-8	6544	6127	5731	-1.2	+1.2
-7	6154	5769	5403	-1.1	+1.1
-6	5791	5434	5095	-1.1	+1.1
-5	5451	5122	4808	-1.1	+1.1
-4	5133	4829	4538	-1.1	+1.1
-3	4837	4555	4286	-1.1	+1.1
-2	4559	4298	4049	-1.1	+1.1
-1	4299	4058	3827	-1.1	+1.1
0	4056	3833	3619	-1.0	+1.0
1	3824	3618	3419	-1.0	+1.0
2	3606	3416	3232	-1.0	+1.0
3	3403	3227	3057	-1.0	+1.0
4	3212	3049	2892	-1.0	+1.0
5	3033	2883	2737	-1.0	+1.0
6	2866	2727	2592	-0.9	+1.0
7	2708	2580	2455	-0.9	+0.9
8	2561	2442	2326	-0.9	+0.9
9	2422	2312	2205	-0.9	+0.9
10	2292	2190	2091	-0.9	+0.9

11	2168	2074	1982	-0.9	+0.9
12	2051	1964	1879	-0.8	+0.9
13	1941	1861	1782	-0.8	+0.9
14	1838	1764	1691	-0.8	+0.8
15	1741	1673	1605	-0.8	+0.8
16	1650	1587	1525	-0.8	+0.8
17	1564	1506	1448	-0.8	+0.8
18	1483	1429	1376	-0.8	+0.8
19	1407	1357	1308	-0.7	+0.8
20	1335	1289	1244	-0.7	+0.7
21	1267	1225	1183	-0.7	+0.7
22	1203	1164	1125	-0.7	+0.7
23	1142	1106	1070	-0.7	+0.7
24	1085	1051	1018	-0.7	+0.7
25	1030	1000	970	-0.7	+0.7
26	980.7	951.1	921.6	-0.7	+0.7
27	934.0	904.9	876.0	-0.7	+0.7
28	889.8	861.3	832.9	-0.7	+0.7
29	848.0	820.0	792.2	-0.7	+0.8
30	808.4	780.9	753.7	-0.8	+0.8
31	770.5	743.6	716.9	-0.8	+0.8
32	734.6	708.2	682.2	-0.8	+0.8
33	700.6	674.8	649.4	-0.8	+0.8
34	668.4	643.1	618.3	-0.8	+0.9
35	637.8	613.2	588.9	-0.9	+0.9
36	608.9	584.8	561.1	-0.9	+0.9
37	581.4	557.9	534.8	-0.9	+0.9
38	555.3	532.3	509.8	-1.0	+1.0
39	530.6	508.1	486.2	-1.0	+1.0
40	507.1	485.2	463.8	-1.0	+1.0
41	484.5	463.2	442.4	-1.0	+1.0
42	463.1	442.3	422.0	-1.0	+1.1
43	442.8	422.5	402.8	-1.1	+1.1
44	423.4	403.7	384.5	-1.1	+1.1
45	405.1	385.8	367.1	-1.1	+1.2
46	387.6	368.8	350.7	-1.2	+1.2
47	371.0	352.7	335.0	-1.2	+1.2
48	355.2	337.4	320.2	-1.2	+1.2
49	340.2	322.8	306.1	-1.2	+1.3
50	325.9	309.0	292.7	-1.3	+1.3
51	312.1	295.7	279.8	-1.3	+1.3
52	299.0	283.0	267.6	-1.3	+1.3
53	286.5	270.9	256.0	-1.3	+1.4
54	274.6	259.4	244.9	-1.4	+1.4
55	263.3	248.5	234.4	-1.4	+1.4

56	252.5	238.1	224.4	-1.4	+1.4
57	242.2	228.2	214.9	-1.4	+1.5
58	232.3	218.8	205.8	-1.5	+1.5
59	223.0	209.8	197.2	-1.5	+1.5
60	214.0	201.2	189.0	-1.5	+1.5
61	205.4	192.9	181.0	-1.5	+1.6
62	197.2	185.0	173.5	-1.6	+1.6
63	189.3	177.5	166.3	-1.6	+1.6
64	181.8	170.3	159.4	-1.6	+1.7
65	174.7	163.5	152.9	-1.7	+1.7
66	167.8	157.0	146.7	-1.7	+1.7
67	161.3	150.7	140.7	-1.7	+1.7
68	155.0	144.8	135.0	-1.7	+1.8
69	149.1	139.1	129.6	-1.8	+1.8
70	143.4	133.6	124.5	-1.8	+1.8
71	137.9	128.4	119.5	-1.8	+1.9
72	132.6	123.4	114.7	-1.8	+1.9
73	127.6	118.6	110.2	-1.9	+1.9
74	122.7	114.1	105.9	-1.9	+1.9
75	118.1	109.7	101.7	-1.9	+2.0
76	113.7	105.5	97.84	-2.0	+2.0
77	109.5	101.5	94.06	-2.0	+2.0
78	105.5	97.69	90.44	-2.0	+2.1
79	101.6	94.03	86.99	-2.1	+2.1
80	97.84	90.53	83.69	-2.1	+2.1
81	94.26	87.16	80.51	-2.1	+2.2
82	90.84	83.93	77.47	-2.1	+2.2
83	87.56	80.84	74.56	-2.2	+2.2
84	84.42	77.88	71.78	-2.2	+2.3
85	81.41	75.04	69.11	-2.2	+2.3
86	78.51	72.31	66.55	-2.2	+2.3
87	75.72	69.7	64.1	-2.2	+2.3
88	73.06	67.19	61.75	-2.2	+2.4
89	70.49	64.79	59.5	-2.4	+2.4
90	68.04	62.49	57.34	-2.4	+2.4
91	65.67	60.27	55.26	-2.4	+2.5
92	63.39	58.14	53.27	-2.4	+2.5
93	61.21	56.09	51.36	-2.5	+2.5
94	59.11	54.13	49.53	-2.5	+2.6
95	57.1	52.25	47.77	-2.5	+2.6
96	55.16	50.44	46.09	-2.6	+2.6
97	53.3	48.71	44.47	-2.6	+2.7
98	51.51	47.04	42.92	-2.6	+2.7
99	49.79	45.44	41.43	-2.7	+2.7
100	48.14	43.9	40	-2.7	+2.8

101	46.54	42.41	38.61	-2.7	+2.8
102	45	40.98	37.29	-2.8	+2.8
103	43.52	39.6	36.01	-2.8	+2.9
104	42.09	38.28	34.78	-2.8	+2.9
105	40.72	37.01	33.6	-2.9	+2.9
106	39.4	35.78	32.47	-2.9	+3.0
107	38.13	34.61	31.38	-2.9	+3.0
108	36.91	33.48	30.33	-3.0	+3.0
109	35.73	32.39	29.33	-3.0	+3.1
110	34.6	31.34	28.36	-3.0	+3.1
111	33.49	30.32	27.42	-3.1	+3.1
112	32.43	29.34	26.51	-3.1	+3.2
113	31.41	28.39	25.64	-3.1	+3.2
114	30.42	27.48	24.8	-3.1	+3.2
115	29.47	26.61	24	-3.2	+3.3
116	28.56	25.76	23.22	-3.2	+3.3
117	27.67	24.95	22.47	-3.3	+3.3
118	26.82	24.17	21.76	-3.3	+3.4
119	26	23.41	21.06	-3.3	+3.4
120	25.21	22.69	20.4	-3.4	+3.4
121	24.44	21.98	19.75	-3.4	+3.5
122	23.7	21.3	19.12	-3.4	+3.5
123	22.98	20.64	18.52	-3.5	+3.5
124	22.98	20.01	17.94	-3.5	+3.6
125	21.63	19.4	17.39	-3.5	+3.6
126	20.98	18.81	16.85	-3.5	+3.6
127	20.36	18.24	16.33	-3.6	+3.7
128	19.76	17.69	15.83	-3.6	+3.7
129	19.18	17.16	15.34	-3.6	+3.8
130	18.62	16.65	14.88	-3.7	+3.8
131	18.08	16.16	14.43	-3.7	+3.8
132	17.55	15.68	13.99	-3.7	+3.9
133	17.05	15.22	13.57	-3.8	+3.9
134	16.56	14.77	13.16	-3.8	+3.9
135	16.08	14.34	12.77	-3.9	+4.0
136	15.62	13.92	12.39	-3.9	+4.0
137	15.18	13.52	12.03	-4.0	+4.1
138	14.75	13.13	11.67	-4.0	+4.1
139	14.34	12.75	11.33	-4.0	+4.1
140	13.94	12.39	11	-4.1	+4.2
141	13.55	12.04	10.68	-4.1	+4.2
142	13.17	11.69	10.37	-4.1	+4.2
143	12.81	11.36	10.07	-4.2	+4.3
144	12.45	11.04	9.788	-4.2	+4.3
145	12.11	10.73	9.508	-4.2	+4.4

146	11.78	10.43	9.238	-4.3	+4.4
147	11.46	10.14	8.976	-4.3	+4.4
148	11.15	9.864	8.723	-4.4	+4.5
149	10.85	9.592	8.478	-4.4	+4.5
150	10.56	9.33	8.242	-4.4	+4.5
151	10.27	9.074	8.011	-4.5	+4.6
152	9.994	8.827	7.788	-4.5	+4.6
153	9.728	8.587	7.573	-4.6	+4.7
154	9.47	8.355	7.364	-4.6	+4.7
155	9.22	8.13	7.162	-4.6	+4.8
156	8.978	7.912	6.966	-4.7	+4.8
157	8.744	7.701	6.777	-4.7	+4.8
158	8.516	7.497	6.594	-4.7	+4.9
159	8.296	7.299	6.416	-4.8	+4.9
160	8.082	7.107	6.244	-4.8	+4.9
161	7.873	6.92	6.076	-4.9	+5.0
162	7.671	6.738	5.914	-4.9	+5.0
163	7.475	6.563	5.756	-4.9	+5.1
164	7.284	6.392	5.604	-5.0	+5.1
165	7.1	6.227	5.456	-5.0	+5.2
166	6.921	6.066	5.313	-5.1	+5.2
167	6.747	5.911	5.174	-5.1	+5.2
168	6.578	5.76	5.039	-5.1	+5.3
169	6.414	5.614	4.909	-5.2	+5.3
170	6.255	5.472	4.782	-5.2	+5.3
171	6.1	5.333	4.658	-5.3	+5.4
172	5.949	5.199	4.539	-5.3	+5.4
173	5.803	5.068	4.422	-5.3	+5.5
174	5.66	4.941	4.31	-5.4	+5.5
175	5.522	4.818	4.2	-5.4	+5.6
176	5.388	4.699	4.094	-5.4	+5.6
177	5.258	4.583	3.991	-5.5	+5.6
178	5.132	4.471	3.891	-5.5	+5.7
179	5.009	4.361	3.794	-5.6	+5.7
180	4.889	4.255	3.7	-5.5	+5.8
181	4.772	4.151	3.608	-5.7	+5.8
182	4.658	4.05	3.518	-5.7	+5.8
183	4.584	3.952	3.431	-5.7	+5.9
184	4.44	3.857	3.347	-5.8	+5.9
185	4.336	3.764	3.265	-5.8	+6.0
186	4.234	3.674	3.185	-5.8	+6.0
187	4.135	3.587	3.108	-5.9	+6.1
188	4.039	3.502	3.033	-5.9	+6.1
189	3.946	3.419	2.96	-6.0	+6.1
190	3.855	3.339	2.889	-6.0	+6.2

191	3.766	3.26	2.82	-6.1	+6.2
192	3.68	3.184	2.752	-6.1	+6.3
193	3.596	3.11	2.687	-6.1	+6.3
194	3.514	3.038	2.623	-6.2	+6.4
195	3.434	2.967	2.562	-6.2	+6.4
196	3.357	2.899	2.501	-6.3	+6.5
197	3.281	2.833	2.443	-6.3	+6.5
198	3.208	2.768	2.386	-6.4	+6.6
199	3.136	2.705	2.331	-6.4	+6.6
200	3.067	2.644	2.277	-6.5	+6.7
201	2.999	2.584	2.225	-6.5	+6.7
202	2.933	2.526	2.173	-6.5	+6.8
203	2.868	2.469	2.124	-6.6	+6.8
204	2.806	2.414	2.075	-6.6	+6.8
205	2.745	2.361	2.028	-6.7	+6.9
206	2.685	2.308	1.983	-6.7	+6.9
207	2.627	2.257	1.938	-6.8	+7.0
208	2.57	2.208	1.895	-6.8	+7.0
209	2.515	2.16	1.852	-6.9	+7.1
210	2.462	2.113	1.811	-6.9	+7.1
211	2.409	2.067	1.771	-6.9	+7.2
212	2.358	2.022	1.732	-7.0	+7.2
213	2.308	1.978	1.694	-7.0	+7.3
214	2.259	1.936	1.656	-7.1	+7.3
215	2.212	1.894	1.62	-7.1	+7.4
216	2.166	1.854	1.585	-7.2	+7.4
217	2.121	1.814	1.551	-7.2	+7.5
218	2.077	1.776	1.517	-7.3	+7.5
219	2.034	1.738	1.485	-7.3	+7.6
220	1.992	1.702	1.453	-7.4	+7.6
221	1.951	1.666	1.422	-7.4	+7.7
222	1.911	1.632	1.391	-7.5	+7.7
223	1.872	1.598	1.362	-7.5	+7.8
224	1.834	1.564	1.333	-7.5	+7.8
225	1.797	1.532	1.305	-7.5	+7.8
226	1.761	1.501	1.278	-7.6	+7.9
227	1.726	1.47	1.251	-7.7	+8.0
228	1.691	1.44	1.225	-7.7	+8.0
229	1.657	1.411	1.2	-7.8	+8.1
230	1.625	1.382	1.175	-7.8	+8.1
231	1.592	1.354	1.151	-7.9	+8.2
232	1.561	1.327	1.127	-7.9	+8.2
233	1.53	1.301	1.104	-8.0	+8.3
234	1.5	1.275	1.082	-8.0	+8.3
235	1.471	1.249	1.06	-8.1	+8.4

236	1.443	1.224	1.038	-8.1	+8.4
237	1.415	1.2	1.017	-8.2	+8.5
238	1.388	1.177	0.9973	-8.2	+8.5
239	1.361	1.154	0.9774	-8.3	+8.6
240	1.335	1.131	0.9579	-8.3	+8.6
241	1.309	1.109	0.9389	-8.4	+8.7
242	1.285	1.088	0.9203	-8.4	+8.7
243	1.26	1.067	0.9022	-8.5	+8.8
244	1.236	1.046	0.8845	-8.5	+8.8
245	1.213	1.026	0.8671	-8.6	+8.9
246	1.19	1.006	0.8502	-8.6	+8.9
247	1.168	0.9872	0.8337	-8.7	+9.0
248	1.147	0.9684	0.8176	-8.7	+9.0
249	1.125	0.9501	0.8018	-8.8	+9.1
250	1.105	0.9323	0.7865	-8.8	+9.1
251	1.084	0.9147	0.7714	-8.9	+9.2
252	1.064	0.8976	0.7566	-8.9	+9.3
253	1.045	0.8808	0.7422	-9.0	+9.3
254	1.026	0.8645	0.7281	-9.0	+9.4
255	1.007	0.8484	0.7144	-9.1	+9.4
256	0.9885	0.8328	0.7009	-9.1	+9.5
257	0.9707	0.8175	0.6878	-9.2	+9.5
258	0.9533	0.8025	0.6749	-9.2	+9.6
259	0.9362	0.7878	0.6624	-9.3	+9.6
260	0.9195	0.7735	0.6501	-9.3	+9.7
261	0.9031	0.7595	0.638	-9.4	+9.7
262	0.8871	0.7457	0.6263	-9.4	+9.8
263	0.8714	0.7323	0.6147	-9.5	+9.8
264	0.8561	0.7191	0.6035	-9.5	+9.9
265	0.8411	0.7062	0.5925	-9.6	+9.9
266	0.8263	0.6936	0.5817	-9.6	+10.0
267	0.8119	0.6813	0.5711	-9.7	+10.1
268	0.7979	0.6692	0.5608	-9.7	+10.1
269	0.7841	0.6574	0.5507	-9.8	+10.2
270	0.7705	0.6459	0.5408	-9.8	+10.2
271	0.7573	0.6345	0.5311	-9.9	+10.3
272	0.7443	0.6234	0.5217	-9.9	+10.3
273	0.7315	0.6125	0.5124	-10.0	+10.4
274	0.7191	0.6018	0.5033	-10.0	+10.4
275	0.7068	0.5914	0.4944	-10.1	+10.5
276	0.6949	0.5812	0.4857	-10.1	+10.6
277	0.6832	0.5712	0.4771	-10.2	+10.6
278	0.6717	0.5614	0.4688	-10.3	+10.7
279	0.6604	0.5518	0.4606	-10.3	+10.7
280	0.6594	0.5424	0.4526	-10.4	+10.8

281	0.6386	0.5332	0.4448	-10.4	+10.9
282	0.628	0.5242	0.4371	-10.5	+10.9
283	0.6176	0.5154	0.4296	-10.5	+11.0
284	0.6075	0.5067	0.4222	-10.6	+11.0
285	0.5975	0.4982	0.415	-10.6	+11.1
286	0.5877	0.4899	0.408	-10.7	+11.1
287	0.5782	0.4818	0.4011	-10.7	+11.2
288	0.5688	0.4738	0.3943	-10.8	+11.3
289	0.5596	0.466	0.3876	-10.9	+11.3
290	0.5506	0.4583	0.3811	-10.9	+11.4
291	0.5417	0.4508	0.3748	-11.0	+11.4
292	0.533	0.4435	0.3685	-11.0	+11.5
293	0.5245	0.4362	0.3624	-11.1	+11.6
294	0.5161	0.4291	0.3564	-11.1	+11.6
295	0.5079	0.4221	0.3505	-11.2	+11.7
296	0.4999	0.4153	0.3447	-11.2	+11.7
297	0.492	0.4068	0.3391	-11.3	+11.8
298	0.4843	0.4021	0.3335	-11.4	+11.9
299	0.4767	0.3957	0.3281	-11.4	+11.9
300	0.4693	0.3894	0.3228	-11.5	+12.0

SPECIFICATIONS	User Part No.;	Approved	Checked	Drawn
	Application;	Part No.;		
	GT-2 Thermistor	H. Ishida	M. Miyake	M. Fukuda

1. Scope

This specification defines rating, dimensions, electric properties, mechanical properties and climatic properties for the following part.



2. Part No. and Rating

No.	Part No.	Zero-power resistance R25[k ohm]	Tolerance on zero-power resistance [%]	B-value B 25/85[K]	Tolerance on B-value [%]	Category temperature range [deg. C]
1	102GT-2	1.00	+/- 3	3 305	+/- 2	- 50 ~ 200
2	202GT-2	2.00		3 838		
3	502GT-2	5.00		3 964		
4	103GT-2	10.0		4 126		
5	203GT-2	20.0		4 282		
6	503GT-2	50.0		4 288		- 50 ~ 300
7	104GT-2	100		4 267		
8	104GTA-2	100		4 390		
9	204GT-2	200		4 338		
10	504GT-2	500		4 526		
11	105GT-2	1000		4 608		

(The B value is calculated from zero-power resistance values at 25 deg. C and 85 deg. C.)

3.1 Thermal time constant

Approx. 7.0 s (in still air)

3.2 Dissipation factor

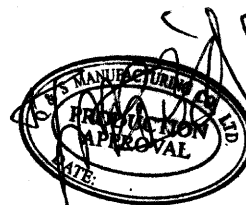
Approx. 0.6 mW/deg. C (in still air)

3.3 Rated maximum power dissipation

Approx. 3.0 mW (in still air at 25 deg. C)
(Including self-heat of approx. 5 deg. C.)

4. Storage temperature range

-10 deg. C ~ 40 deg. C



Company ;	Note ;	Date	Aug.6.2004
SEMITEC Ishizuka Electronics Corporation		Spec.No.	S04-0156

Aug.5,2004

文件 EIM-103275-02
[DATA FOR REFERENCE]

105GT-2

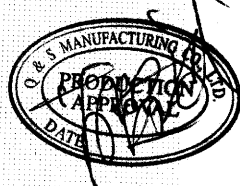
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TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance $\pm 3\%$
B Value 4 608K at 25/85 Degree C
B Value Tolerance $\pm 2\%$

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
-10	7409	6920	6457	-1.2 + 1.2
-9	6961	6510	6082	-1.1 + 1.2
-8	6544	6127	5731	-1.1 + 1.2
-7	6154	5769	5403	-1.1 + 1.1
-6	5791	5434	5095	-1.1 + 1.1
-5	5451	5122	4808	-1.1 + 1.1
-4	5133	4829	4538	-1.1 + 1.1
-3	4837	4555	4286	-1.1 + 1.1
-2	4559	4298	4049	-1.1 + 1.1
-1	4299	4058	3827	-1.1 + 1.1
0	4056	3833	3619	-1.0 + 1.0
1	3824	3618	3419	-1.0 + 1.0
2	3606	3416	3232	-1.0 + 1.0
3	3403	3227	3057	-1.0 + 1.0
4	3212	3049	2892	-1.0 + 1.0
5	3033	2883	2737	-1.0 + 1.0
6	2866	2727	2592	-0.9 + 1.0
7	2708	2580	2455	-0.9 + 0.9
8	2561	2442	2326	-0.9 + 0.9
9	2422	2312	2205	-0.9 + 0.9
10	2292	2190	2091	-0.9 + 0.9
11	2168	2074	1982	-0.9 + 0.9
12	2051	1964	1879	-0.8 + 0.9
13	1941	1861	1782	-0.8 + 0.9
14	1838	1764	1691	-0.8 + 0.8
15	1741	1673	1605	-0.8 + 0.8
16	1650	1587	1525	-0.8 + 0.8
17	1564	1506	1448	-0.8 + 0.8
18	1483	1429	1376	-0.8 + 0.8
19	1407	1357	1308	-0.7 + 0.8
20	1335	1289	1244	-0.7 + 0.7
21	1267	1225	1183	-0.7 + 0.7
22	1203	1164	1125	-0.7 + 0.7
23	1142	1106	1070	-0.7 + 0.7
24	1085	1051	1018	-0.7 + 0.7
25	1030	1000	970.0	-0.6 + 0.7
26	980.7	951.1	921.6	-0.7 + 0.7
27	934.0	904.9	876.0	-0.7 + 0.7
28	889.8	861.3	832.9	-0.7 + 0.7
29	848.0	820.0	792.2	-0.7 + 0.8
30	808.4	780.9	753.7	-0.8 + 0.8
31	770.5	743.6	716.9	-0.8 + 0.8
32	734.6	708.2	682.2	-0.8 + 0.8
33	700.6	674.8	649.4	-0.8 + 0.8
34	668.4	643.1	618.3	-0.8 + 0.9
35	637.8	613.2	588.9	-0.9 + 0.9
36	608.9	584.8	561.1	-0.9 + 0.9
37	581.4	557.9	534.8	-0.9 + 0.9
38	555.3	532.3	509.8	-1.0 + 1.0
39	530.6	508.1	486.2	-1.0 + 1.0
40	507.1	485.2	463.8	-1.0 + 1.0



Aug.5,2004

EIM-1013275-02

[DATA FOR REFERENCE]

105GT-2**SEMITEC®**3/8
出図

04.8.06

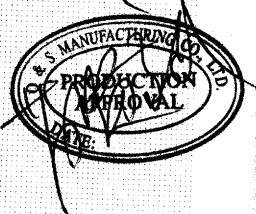
設計部門

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
 Resistance Tolerance $\pm 3\%$
 B Value 4 608K at 25/85 Degree C
 B Value Tolerance $\pm 2\%$

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
40	507.1	485.2	463.8	-1.0 + 1.0
41	484.5	463.2	442.4	-1.0 + 1.0
42	463.1	442.3	422.0	-1.0 + 1.1
43	442.8	422.5	402.8	-1.1 + 1.1
44	423.4	403.7	384.5	-1.1 + 1.1
45	405.1	385.8	367.1	-1.1 + 1.2
46	387.6	368.8	350.7	-1.2 + 1.2
47	371.0	352.7	335.0	-1.2 + 1.2
48	355.2	337.4	320.2	-1.2 + 1.2
49	340.2	322.8	306.1	-1.2 + 1.3
50	325.9	309.0	292.7	-1.3 + 1.3
51	312.1	295.7	279.8	-1.3 + 1.3
52	299.0	283.0	267.6	-1.3 + 1.3
53	286.5	270.9	256.0	-1.3 + 1.4
54	274.6	259.4	244.9	-1.4 + 1.4
55	263.3	248.5	234.4	-1.4 + 1.4
56	252.5	238.1	224.4	-1.4 + 1.4
57	242.2	228.2	214.9	-1.4 + 1.5
58	232.3	218.8	205.8	-1.5 + 1.5
59	223.0	209.8	197.2	-1.5 + 1.5
60	214.0	201.2	189.0	-1.5 + 1.5
61	205.4	192.9	181.0	-1.5 + 1.6
62	197.2	185.0	173.5	-1.6 + 1.6
63	189.3	177.5	166.3	-1.6 + 1.6
64	181.8	170.3	159.4	-1.6 + 1.7
65	174.7	163.5	152.9	-1.7 + 1.7
66	167.8	157.0	146.7	-1.7 + 1.7
67	161.3	150.7	140.7	-1.7 + 1.7
68	155.0	144.8	135.0	-1.7 + 1.8
69	149.1	139.1	129.6	-1.8 + 1.8
70	143.4	133.6	124.5	-1.8 + 1.8
71	137.9	128.4	119.5	-1.8 + 1.9
72	132.6	123.4	114.7	-1.8 + 1.9
73	127.6	118.6	110.2	-1.9 + 1.9
74	122.7	114.1	105.9	-1.9 + 1.9
75	118.1	109.7	101.7	-1.9 + 2.0
76	113.7	105.5	97.84	-2.0 + 2.0
77	109.5	101.5	94.06	-2.0 + 2.0
78	105.5	97.69	90.44	-2.0 + 2.1
79	101.6	94.03	86.99	-2.1 + 2.1
80	97.84	90.53	83.69	-2.1 + 2.1
81	94.26	87.16	80.51	-2.1 + 2.2
82	90.84	83.93	77.47	-2.1 + 2.2
83	87.56	80.84	74.56	-2.2 + 2.2
84	84.42	77.88	71.78	-2.2 + 2.3
85	81.41	75.04	69.11	-2.2 + 2.3
86	78.51	72.31	66.55	-2.3 + 2.3
87	75.72	69.70	64.10	-2.3 + 2.3
88	73.06	67.19	61.75	-2.3 + 2.4
89	70.49	64.79	59.50	-2.4 + 2.4
90	68.04	62.49	57.34	-2.4 + 2.4

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Aug.5,2004

[DATA FOR REFERENCE]

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance $\pm 3\%$
B Value 4 608K at 25/85 Degree C
B Value Tolerance $\pm 2\%$

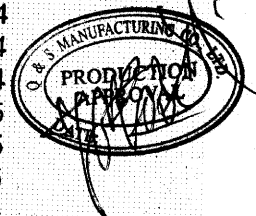
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出図

04.8.06

設計部門

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
90	68.04	62.49	57.34	-2.4 + 2.4
91	65.67	60.27	55.26	-2.4 + 2.5
92	63.39	58.14	53.27	-2.4 + 2.5
93	61.21	56.09	51.36	-2.5 + 2.5
94	59.11	54.13	49.53	-2.5 + 2.6
95	57.10	52.25	47.77	-2.5 + 2.6
96	55.16	50.44	46.09	-2.6 + 2.6
97	53.30	48.71	44.47	-2.6 + 2.7
98	51.51	47.04	42.92	-2.6 + 2.7
99	49.79	45.44	41.43	-2.7 + 2.7
100	48.14	43.90	40.00	-2.7 + 2.8
101	46.54	42.41	38.61	-2.7 + 2.8
102	45.00	40.98	37.29	-2.8 + 2.8
103	43.52	39.60	36.01	-2.8 + 2.9
104	42.09	38.28	34.78	-2.8 + 2.9
105	40.72	37.01	33.60	-2.9 + 2.9
106	39.40	35.78	32.47	-2.9 + 3.0
107	38.13	34.61	31.38	-2.9 + 3.0
108	36.91	33.48	30.33	-3.0 + 3.0
109	35.73	32.39	29.33	-3.0 + 3.1
110	34.60	31.34	28.36	-3.0 + 3.1
111	33.49	30.32	27.42	-3.1 + 3.1
112	32.43	29.34	26.51	-3.1 + 3.2
113	31.41	28.39	25.64	-3.1 + 3.2
114	30.42	27.48	24.80	-3.1 + 3.2
115	29.47	26.61	24.00	-3.2 + 3.3
116	28.56	25.76	23.22	-3.2 + 3.3
117	27.67	24.95	22.47	-3.3 + 3.3
118	26.82	24.17	21.76	-3.3 + 3.4
119	26.00	23.41	21.06	-3.3 + 3.4
120	25.21	22.69	20.40	-3.4 + 3.4
121	24.44	21.98	19.75	-3.4 + 3.5
122	23.70	21.30	19.12	-3.4 + 3.5
123	22.98	20.64	18.52	-3.5 + 3.5
124	22.29	20.01	17.94	-3.5 + 3.6
125	21.63	19.40	17.39	-3.5 + 3.6
126	20.98	18.81	16.85	-3.6 + 3.7
127	20.36	18.24	16.33	-3.6 + 3.7
128	19.76	17.69	15.83	-3.6 + 3.7
129	19.18	17.16	15.34	-3.7 + 3.8
130	18.62	16.65	14.88	-3.7 + 3.8
131	18.08	16.16	14.43	-3.7 + 3.8
132	17.55	15.68	13.99	-3.8 + 3.9
133	17.05	15.22	13.57	-3.8 + 3.9
134	16.56	14.77	13.16	-3.8 + 3.9
135	16.08	14.34	12.77	-3.9 + 4.0
136	15.62	13.92	12.39	-3.9 + 4.0
137	15.18	13.52	12.03	-4.0 + 4.1
138	14.75	13.13	11.67	-4.0 + 4.1
139	14.34	12.75	11.33	-4.0 + 4.1
140	13.94	12.39	11.00	-4.1 + 4.2



Aug.5,2004

[DATA FOR REFERENCE]

105GT-2**TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]**

Resistance 1000k ohms at 25 Degree C
 Resistance Tolerance $\pm 3\%$
 B Value 4 608K at 25/85 Degree C
 B Value Tolerance $\pm 2\%$

SEMITEC

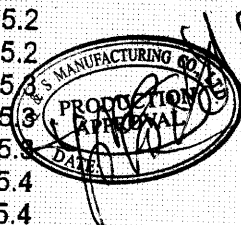
出図

04.8.06

設計部門

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
140	13.94	12.39	11.00	-4.1 + 4.2
141	13.55	12.04	10.68	-4.1 + 4.2
142	13.17	11.69	10.37	-4.1 + 4.2
143	12.81	11.36	10.07	-4.2 + 4.3
144	12.45	11.04	9.788	-4.2 + 4.3
145	12.11	10.73	9.508	-4.2 + 4.4
146	11.78	10.43	9.238	-4.3 + 4.4
147	11.46	10.14	8.976	-4.3 + 4.4
148	11.15	9.864	8.723	-4.4 + 4.5
149	10.85	9.592	8.478	-4.4 + 4.5
150	10.56	9.330	8.242	-4.4 + 4.5
151	10.27	9.074	8.011	-4.5 + 4.6
152	9.994	8.827	7.788	-4.5 + 4.6
153	9.728	8.587	7.573	-4.6 + 4.7
154	9.470	8.355	7.364	-4.6 + 4.7
155	9.220	8.130	7.162	-4.6 + 4.8
156	8.978	7.912	6.966	-4.7 + 4.8
157	8.744	7.701	6.777	-4.7 + 4.8
158	8.516	7.497	6.594	-4.7 + 4.9
159	8.296	7.299	6.416	-4.8 + 4.9
160	8.082	7.107	6.244	-4.8 + 4.9
161	7.873	6.920	6.076	-4.9 + 5.0
162	7.671	6.738	5.914	-4.9 + 5.0
163	7.475	6.563	5.756	-4.9 + 5.1
164	7.284	6.392	5.604	-5.0 + 5.1
165	7.100	6.227	5.456	-5.0 + 5.2
166	6.921	6.066	5.313	-5.1 + 5.2
167	6.747	5.911	5.174	-5.1 + 5.2
168	6.578	5.760	5.039	-5.1 + 5.3
169	6.414	5.614	4.909	-5.2 + 5.3
170	6.255	5.472	4.782	-5.2 + 5.3
171	6.100	5.333	4.658	-5.3 + 5.4
172	5.949	5.199	4.539	-5.3 + 5.4
173	5.803	5.068	4.422	-5.3 + 5.5
174	5.660	4.941	4.310	-5.4 + 5.5
175	5.522	4.818	4.200	-5.4 + 5.6
176	5.388	4.699	4.094	-5.4 + 5.6
177	5.258	4.583	3.991	-5.5 + 5.6
178	5.132	4.471	3.891	-5.5 + 5.7
179	5.009	4.361	3.794	-5.6 + 5.7
180	4.889	4.255	3.700	-5.6 + 5.8
181	4.772	4.151	3.608	-5.7 + 5.8
182	4.658	4.050	3.518	-5.7 + 5.8
183	4.548	3.952	3.431	-5.7 + 5.9
184	4.440	3.857	3.347	-5.8 + 5.9
185	4.336	3.764	3.265	-5.8 + 6.0
186	4.234	3.674	3.185	-5.8 + 6.0
187	4.135	3.587	3.108	-5.9 + 6.1
188	4.039	3.502	3.033	-5.9 + 6.1
189	3.946	3.419	2.960	-6.0 + 6.1
190	3.855	3.339	2.889	-6.0 + 6.2

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Aug.5,2004

[DATA FOR REFERENCE]

105GT-2

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出図

04.8.06

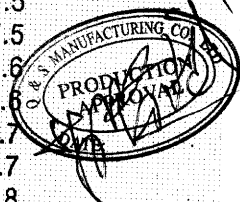
設計部門

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance $\pm 3\%$
B Value 4 608K at 25/85 Degree C
B Value Tolerance $\pm 2\%$

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
190	3.855	3.339	2.889	-6.0 + 6.2
191	3.766	3.260	2.820	-6.1 + 6.2
192	3.680	3.184	2.752	-6.1 + 6.3
193	3.596	3.110	2.687	-6.1 + 6.3
194	3.514	3.038	2.623	-6.2 + 6.4
195	3.434	2.967	2.562	-6.2 + 6.4
196	3.357	2.899	2.501	-6.3 + 6.5
197	3.281	2.833	2.443	-6.3 + 6.5
198	3.208	2.768	2.386	-6.4 + 6.6
199	3.136	2.705	2.331	-6.4 + 6.6
200	3.067	2.644	2.277	-6.5 + 6.7
201	2.999	2.584	2.225	-6.5 + 6.7
202	2.933	2.526	2.173	-6.5 + 6.8
203	2.868	2.469	2.124	-6.6 + 6.8
204	2.806	2.414	2.075	-6.6 + 6.8
205	2.745	2.361	2.028	-6.7 + 6.9
206	2.685	2.308	1.983	-6.7 + 6.9
207	2.627	2.257	1.938	-6.8 + 7.0
208	2.570	2.208	1.895	-6.8 + 7.0
209	2.515	2.160	1.852	-6.9 + 7.1
210	2.462	2.113	1.811	-6.9 + 7.1
211	2.409	2.067	1.771	-6.9 + 7.2
212	2.358	2.022	1.732	-7.0 + 7.2
213	2.308	1.978	1.694	-7.0 + 7.3
214	2.259	1.936	1.656	-7.1 + 7.3
215	2.212	1.894	1.620	-7.1 + 7.4
216	2.166	1.854	1.585	-7.2 + 7.4
217	2.121	1.814	1.551	-7.2 + 7.5
218	2.077	1.776	1.517	-7.3 + 7.5
219	2.034	1.738	1.485	-7.3 + 7.6
220	1.992	1.702	1.453	-7.4 + 7.6
221	1.951	1.666	1.422	-7.4 + 7.7
222	1.911	1.632	1.391	-7.5 + 7.7
223	1.872	1.598	1.362	-7.5 + 7.8
224	1.834	1.564	1.333	-7.5 + 7.8
225	1.797	1.532	1.305	-7.6 + 7.9
226	1.761	1.501	1.278	-7.6 + 7.9
227	1.726	1.470	1.251	-7.7 + 8.0
228	1.691	1.440	1.225	-7.7 + 8.0
229	1.657	1.411	1.200	-7.8 + 8.1
230	1.625	1.382	1.175	-7.8 + 8.1
231	1.592	1.354	1.151	-7.9 + 8.2
232	1.561	1.327	1.127	-7.9 + 8.2
233	1.530	1.301	1.104	-8.0 + 8.3
234	1.500	1.275	1.082	-8.0 + 8.3
235	1.471	1.249	1.060	-8.1 + 8.4
236	1.443	1.224	1.038	-8.1 + 8.4
237	1.415	1.200	1.017	-8.2 + 8.5
238	1.388	1.177	0.9973	-8.2 + 8.5
239	1.361	1.154	0.9774	-8.3 + 8.6
240	1.335	1.131	0.9579	-8.3 + 8.6

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ITEM - 1013275-02
[DATA FOR REFERENCE]

105GT-2**SEMITEC®**

出國

04.8.06

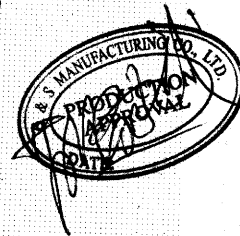
設計部門

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance $\pm 3\%$
B Value 4 608K at 25/85 Degree C
B Value Tolerance $\pm 2\%$

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
240	1.335	1.131	0.9579	-8.3 + 8.6
241	1.309	1.109	0.9389	-8.4 + 8.7
242	1.285	1.088	0.9203	-8.4 + 8.7
243	1.260	1.067	0.9022	-8.5 + 8.8
244	1.236	1.046	0.8845	-8.5 + 8.8
245	1.213	1.026	0.8671	-8.6 + 8.9
246	1.190	1.006	0.8502	-8.6 + 8.9
247	1.168	0.9872	0.8337	-8.7 + 9.0
248	1.147	0.9684	0.8176	-8.7 + 9.0
249	1.125	0.9501	0.8018	-8.8 + 9.1
250	1.105	0.9323	0.7865	-8.8 + 9.1
251	1.084	0.9147	0.7714	-8.9 + 9.2
252	1.064	0.8976	0.7566	-8.9 + 9.3
253	1.045	0.8808	0.7422	-9.0 + 9.3
254	1.026	0.8645	0.7281	-9.0 + 9.4
255	1.007	0.8484	0.7144	-9.1 + 9.4
256	0.9885	0.8328	0.7009	-9.1 + 9.5
257	0.9707	0.8175	0.6878	-9.2 + 9.5
258	0.9533	0.8025	0.6749	-9.2 + 9.6
259	0.9362	0.7878	0.6624	-9.3 + 9.6
260	0.9195	0.7735	0.6501	-9.3 + 9.7
261	0.9031	0.7595	0.6380	-9.4 + 9.7
262	0.8871	0.7457	0.6263	-9.4 + 9.8
263	0.8714	0.7323	0.6147	-9.5 + 9.8
264	0.8561	0.7191	0.6035	-9.5 + 9.9
265	0.8411	0.7062	0.5925	-9.6 + 9.9
266	0.8263	0.6936	0.5817	-9.6 + 10.0
267	0.8119	0.6813	0.5711	-9.7 + 10.1
268	0.7979	0.6692	0.5608	-9.7 + 10.1
269	0.7841	0.6574	0.5507	-9.8 + 10.2
270	0.7705	0.6459	0.5408	-9.8 + 10.2
271	0.7573	0.6345	0.5311	-9.9 + 10.3
272	0.7443	0.6234	0.5217	-9.9 + 10.3
273	0.7315	0.6125	0.5124	-10.0 + 10.4
274	0.7191	0.6018	0.5033	-10.0 + 10.4
275	0.7068	0.5914	0.4944	-10.1 + 10.5
276	0.6949	0.5812	0.4857	-10.1 + 10.6
277	0.6832	0.5712	0.4771	-10.2 + 10.6
278	0.6717	0.5614	0.4688	-10.3 + 10.7
279	0.6604	0.5518	0.4606	-10.3 + 10.7
280	0.6494	0.5424	0.4526	-10.4 + 10.8
281	0.6386	0.5332	0.4448	-10.4 + 10.9
282	0.6280	0.5242	0.4371	-10.5 + 10.9
283	0.6176	0.5154	0.4296	-10.5 + 11.0
284	0.6075	0.5067	0.4222	-10.6 + 11.0
285	0.5975	0.4982	0.4150	-10.6 + 11.1
286	0.5877	0.4899	0.4080	-10.7 + 11.1
287	0.5782	0.4818	0.4011	-10.7 + 11.2
288	0.5688	0.4738	0.3943	-10.8 + 11.3
289	0.5596	0.4660	0.3876	-10.9 + 11.3
290	0.5506	0.4583	0.3811	-10.9 + 11.4

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[DATA FOR REFERENCE]

SEMITEC®

出國

04. 8. 06

設計部門

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance $\pm 3\%$
B Value 4 608K at 25/85 Degree C
B Value Tolerance $\pm 2\%$

Temp. (deg C)	Rmax. (k ohms)	Rst. (k ohms)	Rmin. (k ohms)	Tolerance (deg C)
290	0.5506	0.4583	0.3811	-10.9 + 11.4
291	0.5417	0.4508	0.3748	-11.0 + 11.4
292	0.5330	0.4434	0.3685	-11.0 + 11.5
293	0.5245	0.4362	0.3624	-11.1 + 11.6
294	0.5161	0.4291	0.3564	-11.1 + 11.6
295	0.5079	0.4221	0.3505	-11.2 + 11.7
296	0.4999	0.4153	0.3447	-11.2 + 11.7
297	0.4920	0.4086	0.3391	-11.3 + 11.8
298	0.4843	0.4021	0.3335	-11.4 + 11.9
299	0.4767	0.3957	0.3281	-11.4 + 11.9
300	0.4693	0.3894	0.3228	-11.5 + 12.0

