文件編號 EIM-103275-02

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.

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'04. 8. 11
設計部門

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		- 50 ~ 300
4	103GT-2	10.0		4 126		
5	203GT-2	20.0		4 282		
6	503GT-2	50.0		4 288		
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		

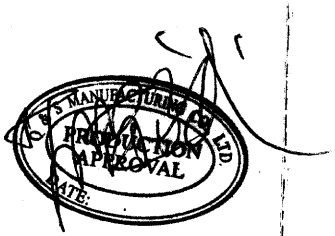
(The B-value is calculated from zero-power resistance values at 25 deg. C and 85 deg. C.)

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

132

Aug.5,2004

[DATA FOR REFERENCE]

SEMITEC®

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance ± 3 %
B Value 4 608K at 25/85 Degree C
B Value Tolerance ± 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

出図 '04.8.06 設計部門

O & S MANUFACTURING (H.K.) LTD. PRODUCTION APPROVAL DATE

EIM-103275-02

Aug.5,2004

[DATA FOR REFERENCE]

105GT-2

SEMITEC®

出図 '04.8.06 設計部門

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance ± 3 %
B Value 4 608K at 25/85 Degree C
B Value Tolerance ± 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

Aug.5,2004

[DATA FOR REFERENCE]

SEMITEC®

出図 04.8.06 設計部門

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

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

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

Q & S MANUFACTURING CO., LTD. PRODUCTION APPROVAL

Aug.5,2004

[DATA FOR REFERENCE]

SEMITEC®

出図 04.8.06 設計部門

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

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

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

FTM-1013275-02

Aug.5,2004

[DATA FOR REFERENCE]

SEMITEC®

出図 04.8.06 設計部門

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance ± 3 %
B Value 4 608K at 25/85 Degree C
B Value Tolerance ± 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

Q & S MANUFACTURING CO., LTD. PRODUCTION APPROVAL

Aug.5,2004

[DATA FOR REFERENCE]

105GT-2

SEMITEC®

出図 04.8.06 設計部門

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance ± 3 %
B Value 4 608K at 25/85 Degree C
B Value Tolerance ± 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

Aug.5,2004 [DATA FOR REFERENCE]

SEMITEC®

出図 04.8.06 設計部門

105GT-2

TEMPERATURE VS RESISTANCE CHARACTERISTICS [ITS-90]

Resistance 1000k ohms at 25 Degree C
Resistance Tolerance ± 3 %
B Value 4 608K at 25/85 Degree C
B Value Tolerance ± 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

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