

G500K4261 Radial Glass Thermistor



- Glass hermetic encapsulation with high resistance to humid environments
- Wide operating temperature range
- High stability and performance in harsh environmental conditions
- Fast response time
- RoHS Compliant

DESCRIPTION

The NTC Chip hermetically sealed in a glass encapsulation package

FEATURES

- Hermetically sealed glass package
- Proven Stability and Reliability
- Available in $\pm 1\%$, $\pm 2\%$, $\pm 3\%$, $\pm 5\%$ and $\pm 10\%$ tolerance @ $+25^\circ\text{C}$
- Fast time response
- Low cost
- Temperature range -40°C to $+250^\circ\text{C}$

APPLICATIONS

- Air conditioning systems
- Refrigeration control
- Assembly into probes for a wide variety of applications
- In environments where thermal shock and humidity are present
- Hot water boiler systems
- Sensor for engine temperature control

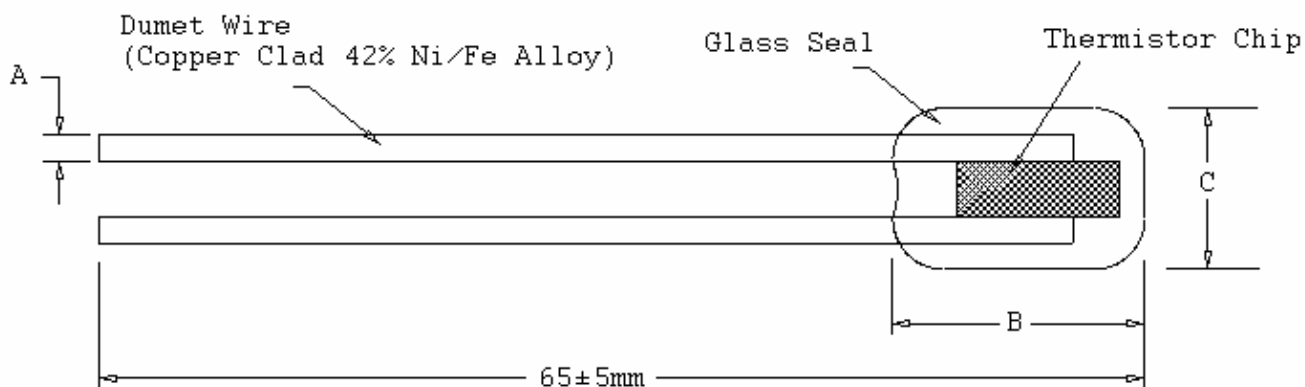
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25^\circ\text{C}$	Ohms	500,000
Resistance tolerance @ 25°C	%	± 1
Beta Value 25/85	K	4261
Tolerance on Beta Value 25/85	%	± 2
Series A Dissipation Constant in still air	mW/ $^\circ\text{C}$	1.3
Series B Dissipation Constant in still air	mW/ $^\circ\text{C}$	0.8
Series C Dissipation Constant in still air	mW/ $^\circ\text{C}$	0.5
Series A Time response in Liquids	Seconds	0.9~1.1
Series B Time response in Liquids	Seconds	0.3~0.4
Series C Time response in Liquids	Seconds	0.18~0.2

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Reliability Tests	Standard	Test Condition	Delta R
Storage in Dry Heat	IEC 60068-2-2	Storage temperature: +250°C Duration: 1000 hours	< 3%
Storage in Damp Heat	IEC 60068-2-3	Temperature of air is 50°C & RH 95% Duration: 56 days.	< 2%
Rapid Temperature Cycling	IEC 60068-2-14	Lower Test Temperature -55°C Upper Test Temperature +200°C Number of Cycles 1000	< 2%

MECHANICAL DETAILS



Dimensions			
	A	B	C
Series A Thermistor	0.3mm	4mm Max	2.5mm Max
Series B Thermistor	0.2mm	3mm Max	1.5mm Max
Series C Thermistor	0.15mm	2mm Max	0.9mm Max

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RESISTANCE V TEMPERATURE TABLE

Temp. °C	KOhms
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-40	18293
-39	17128
-38	16044
-37	15034
-36	14092
-35	13214
-34	12396
-33	11632
-32	10919
-31	10254
-30	9632
-29	9052
-28	8509
-27	8002
-26	7527
-25	7083
-24	6667
-23	6278
-22	5914
-21	5573
-20	5253
-19	4953
-18	4672
-17	4408
-16	4160
-15	3928
-14	3709
-13	3504
-12	3312
-11	3130
-10	2960
-9	2800
-8	2649
-7	2507
-6	2374
-5	2248
-4	2130
-3	2018
-2	1913
-1	1814
0	1720
1	1632

Temp. °C	KOhms
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2	1549
3	1470
4	1396
5	1326
6	1259
7	1197
8	1138
9	1082
10	1029
11	978.7
12	931.3
13	886.4
14	844
15	803.7
16	765.6
17	729.5
18	695.2
19	662.8
20	632
21	602.8
22	575
23	548.7
24	523.7
25	500
26	477.5
27	456.1
28	435.7
29	416.4
30	398
31	380.5
32	363.9
33	348.1
34	333
35	318.7
36	305
37	292
38	279.6
39	267.8
40	256.6
41	245.9
42	235.6
43	225.9

Temp. °C	KOhms
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44	216.6
45	207.7
46	199.2
47	191.2
48	183.4
49	176.1
50	169
51	162.3
52	155.9
53	149.7
54	143.9
55	138.3
56	132.9
57	127.8
58	122.8
59	118.1
60	113.6
61	109.3
62	105.2
63	101.3
64	97.47
65	93.85
66	90.37
67	87.05
68	83.85
69	80.79
70	77.86
71	75.04
72	72.34
73	69.75
74	67.27
75	64.88
76	62.59
77	60.39
78	58.27
79	56.24
80	54.29
81	52.42
82	50.62
83	48.89
84	47.22
85	45.62

Temp. °C	KOhms
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86	44.09
87	42.61
88	41.18
89	39.81
90	38.49
91	37.22
92	36
93	34.83
94	33.69
95	32.6
96	31.55
97	30.54
98	29.56
99	28.62
100	27.72
101	26.84
102	26
103	25.19
104	24.4
105	23.65
106	22.92
107	22.21
108	21.54
109	20.88
110	20.25
111	19.64
112	19.05
113	18.48
114	17.93
115	17.39
116	16.88
117	16.39
118	15.91
119	15.44
120	14.99
121	14.56
122	14.14
123	13.74
124	13.34
125	12.97
126	12.6
127	12.24

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128	11.9
129	11.57
130	11.25
131	10.93
132	10.63
133	10.34
134	10.06
135	9.784
136	9.519
137	9.262
138	9.013
139	8.771
140	8.537
141	8.31
142	8.091
143	7.877
144	7.671
145	7.47
146	7.276
147	7.087
148	6.904
149	6.727
150	6.554
151	6.387
152	6.225
153	6.067
154	5.914
155	5.766
156	5.622
157	5.482
158	5.346

159	5.214
160	5.086
161	4.961
162	4.84
163	4.722
164	4.608
165	4.497
166	4.389
167	4.284
168	4.182
169	4.082
170	3.986
171	3.892
172	3.801
173	3.712
174	3.625
175	3.541
176	3.46
177	3.38
178	3.302
179	3.227
180	3.154
181	3.082
182	3.013
183	2.945
184	2.879
185	2.815
186	2.752
187	2.691
188	2.632
189	2.574

190	2.517
191	2.463
192	2.409
193	2.357
194	2.306
195	2.256
196	2.208
197	2.161
198	2.115
199	2.07
200	2.027
201	1.984
202	1.943
203	1.902
204	1.862
205	1.824
206	1.786
207	1.75
208	1.714
209	1.679
210	1.645
211	1.611
212	1.579
213	1.547
214	1.516
215	1.486
216	1.456
217	1.427
218	1.399
219	1.372
220	1.345

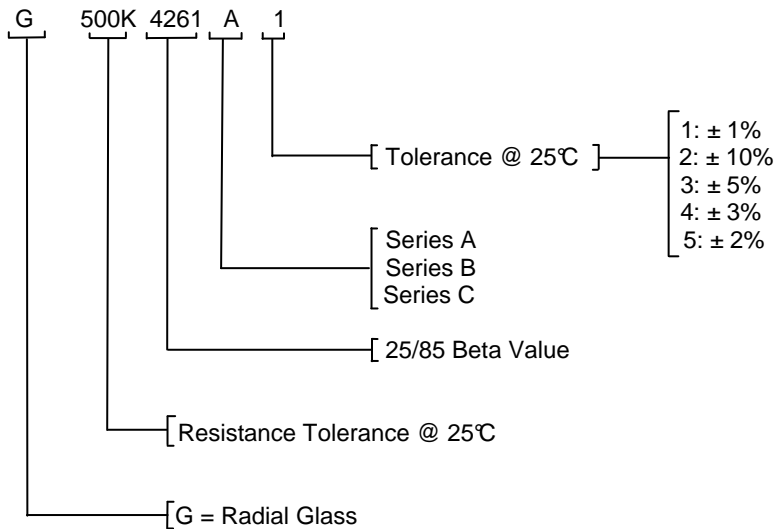
221	1.318
222	1.293
223	1.268
224	1.243
225	1.219
226	1.196
227	1.173
228	1.151
229	1.129
230	1.107
231	1.087
232	1.066
233	1.046
234	1.027
235	1.008
236	0.9889
237	0.9706
238	0.9528
239	0.9353
240	0.9182
241	0.9015
242	0.8851
243	0.8691
244	0.8535
245	0.8381
246	0.8231
247	0.8085
248	0.7941
249	0.78
250	0.7663

G500K4261 Radial Glass Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
G500K4261A1	Radial Glass Thermistor Series A	500,000	10,000*
G500K4261B1	Radial Glass Thermistor Series B	500,000	10,000*
G500K4261C1	Radial Glass Thermistor Series C	500,000	10,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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