

G2K3499 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

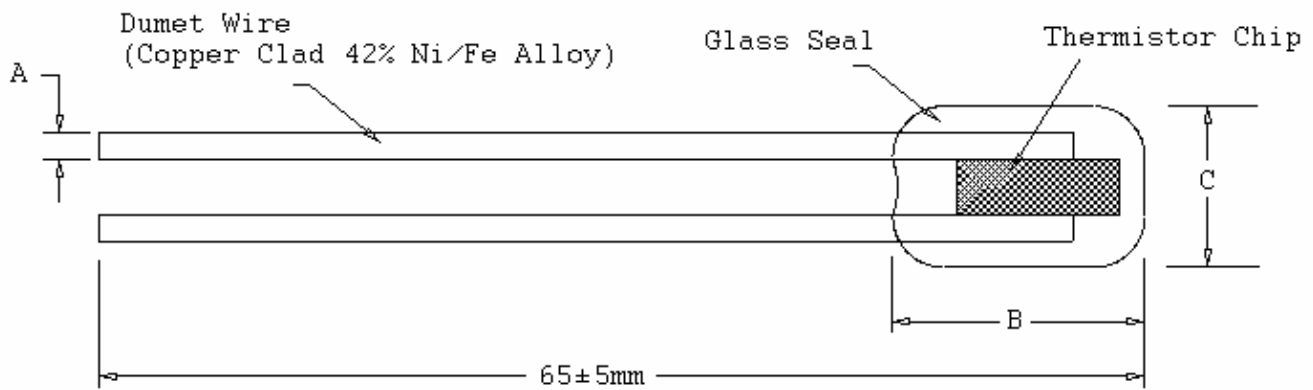
Parameters	Units	Value
Resistance @ $+25^\circ\text{C}$	Ohms	2,000
Resistance tolerance @ 25°C	%	± 1
Beta Value 25/85	K	3499
Tolerance on Beta Value 25/85	%	± 2
Series A Dissipation Constant in still air	mW/ $^\circ\text{C}$	1.3
Series B Dissipation Constant in still air	mW/ $^\circ\text{C}$	0.8
Series 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	Temp. °C	KOhms	Temp. °C	KOhms	Temp. °C	KOhms
-40	43.46	2	5.173	44	0.999	86	0.2726
-39	41.02	3	4.95	45	0.965	87	0.2651
-38	38.74	4	4.737	46	0.933	88	0.258
-37	36.6	5	4.535	47	0.901	89	0.251
-36	34.58	6	4.343	48	0.871	90	0.2443
-35	32.69	7	4.16	49	0.843	91	0.2378
-34	30.92	8	3.986	50	0.815	92	0.2315
-33	29.25	9	3.82	51	0.788	93	0.2254
-32	27.68	10	3.662	52	0.762	94	0.2195
-31	26.21	11	3.511	53	0.738	95	0.2137
-30	24.82	12	3.367	54	0.714	96	0.2082
-29	23.52	13	3.23	55	0.691	97	0.2028
-28	22.29	14	3.1	56	0.669	98	0.1976
-27	21.13	15	2.975	57	0.647	99	0.1925
-26	20.04	16	2.856	58	0.627	100	0.1876
-25	19.01	17	2.743	59	0.607	101	0.1828
-24	18.04	18	2.635	60	0.588	102	0.1782
-23	17.13	19	2.531	61	0.57	103	0.1737
-22	16.27	20	2.432	62	0.552	104	0.1694
-21	15.45	21	2.338	63	0.535	105	0.1652
-20	14.69	22	2.248	64	0.519	106	0.1611
-19	13.96	23	2.161	65	0.503	107	0.1571
-18	13.28	24	2.079	66	0.488	108	0.1532
-17	12.63	25	2	67	0.473	109	0.1495
-16	12.02	26	1.925	68	0.459	110	0.1459
-15	11.44	27	1.852	69	0.445	111	0.1423
-14	10.89	28	1.783	70	0.432	112	0.1389
-13	10.37	29	1.717	71	0.419	113	0.1356
-12	9.88	30	1.654	72	0.407	114	0.1324
-11	9.42	31	1.593	73	0.395	115	0.1292
-10	8.98	32	1.535	74	0.384	116	0.1262
-9	8.56	33	1.48	75	0.373	117	0.1232
-8	8.17	34	1.426	76	0.362	118	0.1203
-7	7.79	35	1.375	77	0.352	119	0.1175
-6	7.44	36	1.326	78	0.342	120	0.1148
-5	7.1	37	1.279	79	0.332	121	0.1121
-4	6.78	38	1.234	80	0.323	122	0.1096
-3	6.477	39	1.191	81	0.314	123	0.1071
-2	6.188	40	1.149	82	0.305	124	0.1046
-1	5.915	41	1.109	83	0.296	125	0.1023
0	5.655	42	1.071	84	0.288	126	0.1
1	5.408	43	1.034	85	0.2802	127	0.0977

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128	0.0955
129	0.0934
130	0.0913
131	0.0893
132	0.0874
133	0.0855
134	0.0836
135	0.0818
136	0.08
137	0.0783
138	0.0767
139	0.075
140	0.0734
141	0.0719
142	0.0704
143	0.0689
144	0.0675
145	0.0661
146	0.0647
147	0.0634
148	0.0621
149	0.0608
150	0.0596
151	0.0584
152	0.0572
153	0.0561
154	0.055
155	0.0539
156	0.0528
157	0.0518
158	0.0508

159	0.0498
160	0.0488
161	0.0479
162	0.047
163	0.0461
164	0.0452
165	0.0443
166	0.0435
167	0.0427
168	0.0419
169	0.0411
170	0.0403
171	0.0396
172	0.0389
173	0.0382
174	0.0375
175	0.0368
176	0.0361
177	0.0355
178	0.0348
179	0.0342
180	0.0336
181	0.033
182	0.0324
183	0.0319
184	0.0313
185	0.0308
186	0.0302
187	0.0297
188	0.0292
189	0.0287

190	0.0282
191	0.0277
192	0.0272
193	0.0268
194	0.0263
195	0.0259
196	0.0255
197	0.025
198	0.0246
199	0.0242
200	0.0238
201	0.0234
202	0.0231
203	0.0227
204	0.0223
205	0.022
206	0.0216
207	0.0213
208	0.0209
209	0.0206
210	0.0203
211	0.0199
212	0.0196
213	0.0193
214	0.019
215	0.0187
216	0.0184
217	0.0182
218	0.0179
219	0.0176
220	0.0173

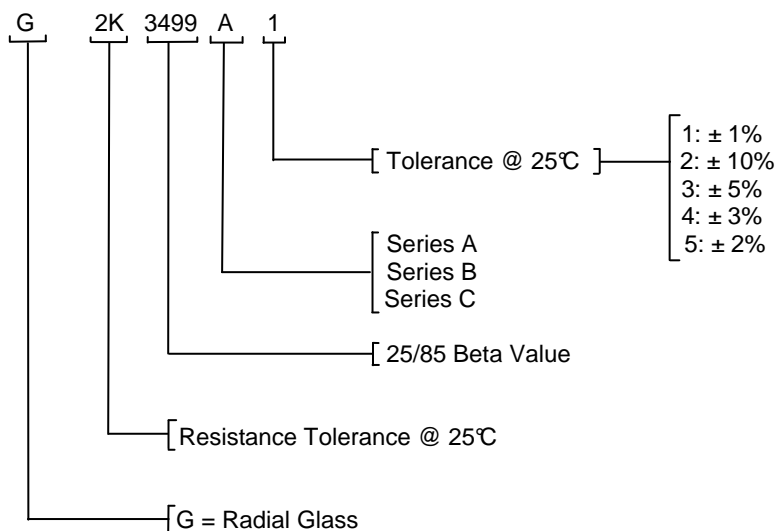
221	0.0171
222	0.0168
223	0.0166
224	0.0163
225	0.0161
226	0.0158
227	0.0156
228	0.0154
229	0.0152
230	0.0149
231	0.0147
232	0.0145
233	0.0143
234	0.0141
235	0.0139
236	0.0137
237	0.0135
238	0.0133
239	0.0131
240	0.0129
241	0.0128
242	0.0126
243	0.0124
244	0.0122
245	0.0121
246	0.0119
247	0.0117
248	0.0116
249	0.0114
250	0.0113

G2K3499 Radial Glass Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
G2K3499A1	Radial Glass Thermistor Series A	2,000	10,000*
G2K3499B1	Radial Glass Thermistor Series B	2,000	10,000*
G2K3499C1	Radial Glass Thermistor Series C	2,000	10,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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