

G2K3348 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

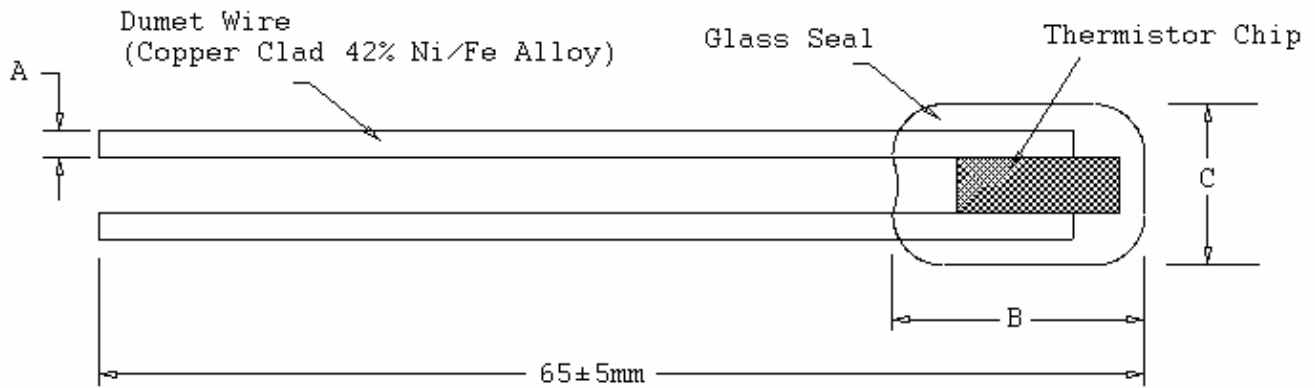
PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25^\circ\text{C}$	Ohms	2,000
Resistance tolerance @ 25°C	%	± 1
Beta Value 25/85	K	3348
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	37.79	2	4.961	44	1.03	86	0.2968
-39	35.77	3	4.756	45	0.996	87	0.2891
-38	33.87	4	4.561	46	0.964	88	0.2816
-37	32.08	5	4.375	47	0.933	89	0.2743
-36	30.4	6	4.197	48	0.903	90	0.2673
-35	28.81	7	4.028	49	0.875	91	0.2604
-34	27.32	8	3.867	50	0.847	92	0.2538
-33	25.91	9	3.713	51	0.82	93	0.2474
-32	24.59	10	3.566	52	0.795	94	0.2411
-31	23.34	11	3.425	53	0.77	95	0.2351
-30	22.16	12	3.291	54	0.746	96	0.2292
-29	21.05	13	3.163	55	0.723	97	0.2236
-28	20	14	3.041	56	0.701	98	0.218
-27	19.01	15	2.924	57	0.68	99	0.2127
-26	18.07	16	2.812	58	0.659	100	0.2075
-25	17.18	17	2.705	59	0.639	101	0.2024
-24	16.35	18	2.603	60	0.62	102	0.1975
-23	15.56	19	2.505	61	0.602	103	0.1928
-22	14.81	20	2.412	62	0.584	104	0.1881
-21	14.1	21	2.322	63	0.567	105	0.1837
-20	13.43	22	2.236	64	0.55	106	0.1793
-19	12.8	23	2.154	65	0.534	107	0.1751
-18	12.2	24	2.075	66	0.518	108	0.1709
-17	11.63	25	2	67	0.504	109	0.1669
-16	11.09	26	1.928	68	0.489	110	0.163
-15	10.58	27	1.859	69	0.475	111	0.1593
-14	10.1	28	1.792	70	0.462	112	0.1556
-13	9.64	29	1.729	71	0.449	113	0.152
-12	9.2	30	1.668	72	0.436	114	0.1485
-11	8.79	31	1.609	73	0.424	115	0.1452
-10	8.4	32	1.553	74	0.412	116	0.1419
-9	8.03	33	1.499	75	0.4	117	0.1387
-8	7.67	34	1.447	76	0.389	118	0.1356
-7	7.34	35	1.398	77	0.379	119	0.1325
-6	7.02	36	1.35	78	0.368	120	0.1296
-5	6.712	37	1.304	79	0.358	121	0.1267
-4	6.423	38	1.26	80	0.349	122	0.1239
-3	6.148	39	1.218	81	0.339	123	0.1212
-2	5.887	40	1.177	82	0.33	124	0.1186
-1	5.638	41	1.138	83	0.322	125	0.116
0	5.401	42	1.101	84	0.313	126	0.1135
1	5.175	43	1.064	85	0.3048	127	0.111

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128	0.1087
129	0.1063
130	0.1041
131	0.1019
132	0.0997
133	0.0977
134	0.0956
135	0.0936
136	0.0917
137	0.0898
138	0.088
139	0.0862
140	0.0844
141	0.0827
142	0.0811
143	0.0794
144	0.0779
145	0.0763
146	0.0748
147	0.0733
148	0.0719
149	0.0705
150	0.0691
151	0.0678
152	0.0665
153	0.0652
154	0.064
155	0.0628
156	0.0616
157	0.0604
158	0.0593

159	0.0582
160	0.0571
161	0.056
162	0.055
163	0.054
164	0.053
165	0.052
166	0.0511
167	0.0502
168	0.0493
169	0.0484
170	0.0475
171	0.0467
172	0.0459
173	0.0451
174	0.0443
175	0.0435
176	0.0427
177	0.042
178	0.0413
179	0.0406
180	0.0399
181	0.0392
182	0.0385
183	0.0379
184	0.0373
185	0.0366
186	0.036
187	0.0354
188	0.0348
189	0.0343

190	0.0337
191	0.0332
192	0.0326
193	0.0321
194	0.0316
195	0.0311
196	0.0306
197	0.0301
198	0.0296
199	0.0291
200	0.0287
201	0.0282
202	0.0278
203	0.0274
204	0.0269
205	0.0265
206	0.0261
207	0.0257
208	0.0253
209	0.0249
210	0.0246
211	0.0242
212	0.0238
213	0.0235
214	0.0231
215	0.0228
216	0.0224
217	0.0221
218	0.0218
219	0.0215
220	0.0211

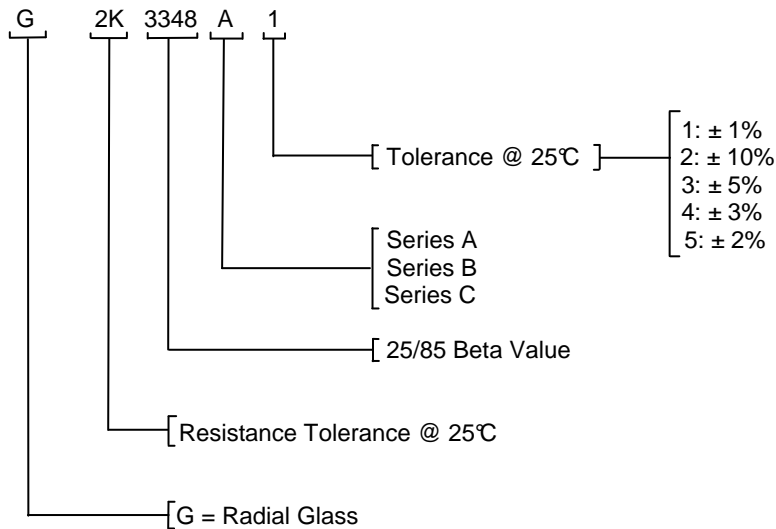
221	0.0208
222	0.0205
223	0.0202
224	0.02
225	0.0197
226	0.0194
227	0.0191
228	0.0188
229	0.0186
230	0.0183
231	0.0181
232	0.0178
233	0.0176
234	0.0173
235	0.0171
236	0.0168
237	0.0166
238	0.0164
239	0.0162
240	0.016
241	0.0157
242	0.0155
243	0.0153
244	0.0151
245	0.0149
246	0.0147
247	0.0145
248	0.0143
249	0.0141
250	0.014

G2K3348 Radial Glass Thermistor

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
G2K3348A1	Radial Glass Thermistor Series A	2,000	10,000*
G2K3348B1	Radial Glass Thermistor Series B	2,000	10,000*
G2K3348C1	Radial Glass Thermistor Series C	2,000	10,000*

* For quantities less than Minimum Order Quantity – Contact Distribution



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