



GA2.2K3A1 SERIES I THERMISTORS

Thermally Conductive Epoxy Coating

Ø 2.4 mm Maximum Diameter

32 AWG Alloy 180 Leads

Four Temperature Tolerance Classifications Available

RoHS Compliant

BetaCURVE series I thermistors are small epoxy coated devices with solid tin-plated lead wires. The series I offers a choice of precision temperature tolerance classifications for a wide variety of customer applications, such as temperature measurements, temperature indication, temperature control, and thermal compensation.

FEATURES

- Interchangeability
- Proven stability and reliability
- Rapid time response
- Alloy lead wires for reduced thermal conductivity ("stem effect")
- Thermally conductive epoxy coating
- Temperature range -40°C to +125°C
- Custom probe assemblies available

APPLICATIONS

- Temperature sensing, control and compensation
- Tight tolerance instrumentation
- Assembly into probes for a wide variety of applications
- General instrumentation applications

MECHANICAL DETAILS



DIMENSIONS

A	B
76 ±2 mm	2.4 mm max.

Note 1: 32 AWG Solid Alloy 180 Leads

Note 2: Brown Stycast 2850ft Epoxy

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	2,252
GA2.2K3A1A Resistance Tolerance from 0°C to +70°C	°C	±0.1
GA2.2K3A1B Resistance Tolerance from 0°C to +70°C	°C	±0.2
GA2.2K3A1C Resistance Tolerance from 0°C to +70°C	°C	±0.5
GA2.2K3A1D Resistance Tolerance from 0°C to +70°C	°C	±1.0
Alpha Value at +25°C	%/°C	4.39
Beta Value 25/85	K	3976
Tolerance on Beta Value 25/85	%	±0.5
Time Response in Liquids	Seconds	<1
Dissipation Constant in Still Air	mW/°C	0.75

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	75491
-39	70663
-38	66173
-37	61996
-36	58109
-35	54489
-34	51118
-33	47975
-32	45045
-31	42312
-30	39761
-29	37380
-28	35156
-27	33077
-26	31134
-25	29317
-24	27617
-23	26026
-22	24536
-21	23140
-20	21832
-19	20606
-18	19456
-17	18377
-16	17364
-15	16413
-14	15520
-13	14681
-12	13892
-11	13150
-10	12452
-9	11795
-8	11177
-7	10595
-6	10046
-5	9529
-4	9042
-3	8582
-2	8148
-1	7739
0	7353
1	6988

Temp. °C	Ohms
2	6644
3	6318
4	6010
5	5719
6	5444
7	5183
8	4937
9	4703
10	4482
11	4273
12	4075
13	3886
14	3708
15	3539
16	3378
17	3226
18	3081
19	2944
20	2814
21	2690
22	2572
23	2460
24	2353
25	2252
26	2156
27	2064
28	1977
29	1893
30	1814
31	1739
32	1667
33	1598
34	1533
35	1471
36	1411
37	1354
38	1300
39	1248
40	1199
41	1152
42	1107
43	1064

Temp. °C	Ohms
44	1023
45	983
46	946
47	910
48	875
49	842
50	811
51	781
52	752
53	724
54	698
55	672
56	648
57	624
58	602
59	581
60	560
61	540
62	521
63	503
64	486
65	469
66	453
67	437
68	422
69	408
70	394
71	381
72	369
73	356
74	345
75	333
76	322
77	312
78	302
79	292
80	283
81	274
82	265
83	257
84	249
85	241

Temp. °C	Ohms
86	234
87	226
88	220
89	213
90	206
91	200
92	194
93	188
94	183
95	177
96	172
97	167
98	162
99	157
100	153
101	149
102	144
103	140
104	136
105	132
106	129
107	125
108	122
109	118
110	115
111	112
112	109
113	106
114	103
115	100
116	98
117	95
118	92
119	90
120	88
121	85
122	83
123	81
124	79
125	77