

2.2K3A1 Series 1 Thermistor



- Thermally conductive epoxy coating
- Ø 2.4 mm Maximum Diameter
- 32 AWG Alloy 180 Leads
- Choice of 4 temperature tolerance classifications
- RoHS Compliant

DESCRIPTION

The BetaCURVE Chip is Soldered to 32 AWG Alloy 180 Leads and Encapsulated in Stycast Epoxy Resin

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

APPLICATIONS

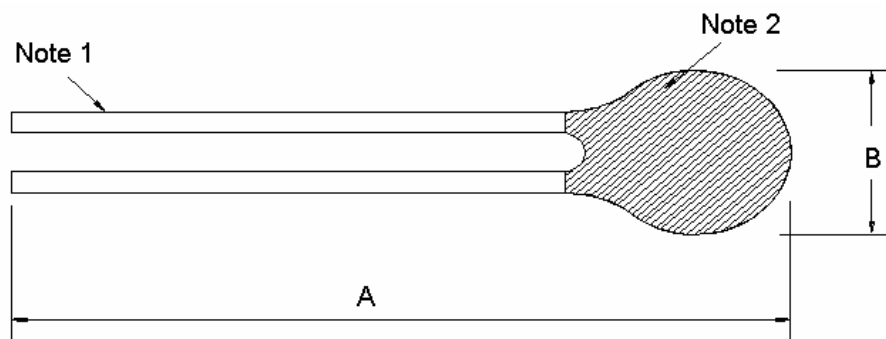
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	2,252
2.2K3A1A Resistance tolerance from 0°C to +70°C	°C	0.1
2.2K3A1B Resistance tolerance from 0°C to +70°C	°C	0.2
2.2K3A1C Resistance tolerance from 0°C to +70°C	°C	0.5
2.2K3A1D Resistance tolerance from 0°C to +70°C	°C	1.0
Alpha Value @ 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

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MECHANICAL DETAILS



	Dimensions	
	A	B
	76 ± 2mm	2.4mm Max
Note 1	32 AWG Solid Alloy 180 Leads	
Note 2	Brown Stycast 2850ft Epoxy	

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-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

Temp. °C	Ohms
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-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
2	6644
3	6318

Temp. °C	Ohms
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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

Temp. °C	Ohms
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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
44	1023
45	983
46	946
47	910

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48	875	68	422	88	220	108	122
49	842	69	408	89	213	109	118
50	811	70	394	90	206	110	115
51	781	71	381	91	200	111	112
52	752	72	369	92	194	112	109
53	724	73	356	93	188	113	106
54	698	74	345	94	183	114	103
55	672	75	333	95	177	115	100
56	648	76	322	96	172	116	98
57	624	77	312	97	167	117	95
58	602	78	302	98	162	118	92
59	581	79	292	99	157	119	90
60	560	80	283	100	153	120	88
61	540	81	274	101	149	121	85
62	521	82	265	102	144	122	83
63	503	83	257	103	140	123	81
64	486	84	249	104	136	124	79
65	469	85	241	105	132	125	77
66	453	86	234	106	129		
67	437	87	226	107	125		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
2.2K3A1A	Series 1 Thermistor	2,252	1,000*
2.2K3A1B	Series 1 Thermistor	2,252	1,000*
2.2K3A1C	Series 1 Thermistor	2,252	1,000*
2.2K3A1D	Series 1 Thermistor	2,252	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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