

2.2K3A1W Series III & IV Thermistor



- Thermally conductive epoxy coating
- Choice of 30 AWG or 28 AWG tin plated copper leads
- Available in custom probe assemblies
- Available in custom tolerances
- RoHS Compliant

DESCRIPTION

The BetaCURVE Chip is Soldered to Tin Plated Copper 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

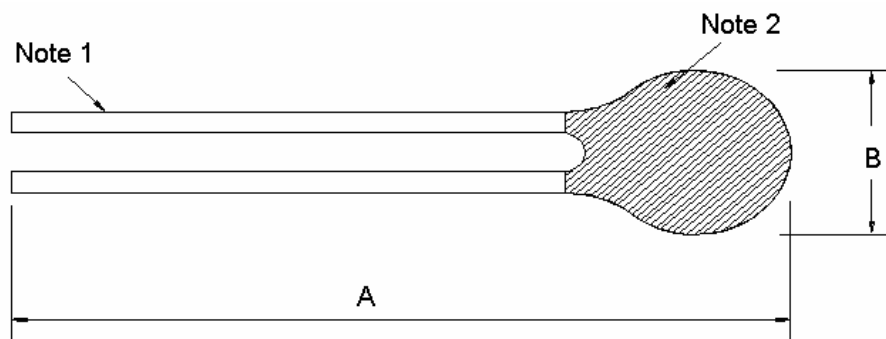
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	2,252
2.2K3A1W2 Resistance tolerance from 0°C to +70°C	°C	0.2
2.2K3A1W3 Resistance tolerance from 0°C to +70°C	°C	0.2
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	<1.5
2.2K3A1W2 Dissipation Constant in still air	mW/°C	2
2.2K3A1W3 Dissipation Constant in still air	mW/°C	3

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MECHANICAL DETAILS



	2.2K3A1W2		2.2K3A1W3	
	A	B	A	B
	46 ± 5mm	2.4mm Max	46 ± 5mm	2.8mm Max
Note 1	30 AWG Tin Plated Copper Leads		28 AWG Tin Plated Copper Leads	
Note 2	Brown Stycast 2850ft Epoxy		Brown Stycast 2850ft Epoxy	

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

Temp. °C	Ohms
-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

Temp. °C	Ohms
0	7353
1	6988
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

Temp. °C	Ohms
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

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40	1199	62	521	84	249	106	129
41	1152	63	503	85	241	107	125
42	1107	64	486	86	234	108	122
43	1064	65	469	87	226	109	118
44	1023	66	453	88	220	110	115
45	983	67	437	89	213	111	112
46	946	68	422	90	206	112	109
47	910	69	408	91	200	113	106
48	875	70	394	92	194	114	103
49	842	71	381	93	188	115	100
50	811	72	369	94	183	116	98
51	781	73	356	95	177	117	95
52	752	74	345	96	172	118	92
53	724	75	333	97	167	119	90
54	698	76	322	98	162	120	88
55	672	77	312	99	157	121	85
56	648	78	302	100	153	122	83
57	624	79	292	101	149	123	81
58	602	80	283	102	144	124	79
59	581	81	274	103	140	125	77
60	560	82	265	104	136		
61	540	83	257	105	132		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
2.2K3A1W2	Series III Thermistor	2,252	1,000*
2.2K3A1W3	Series IV Thermistor	2,252	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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