

3K3A1W 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

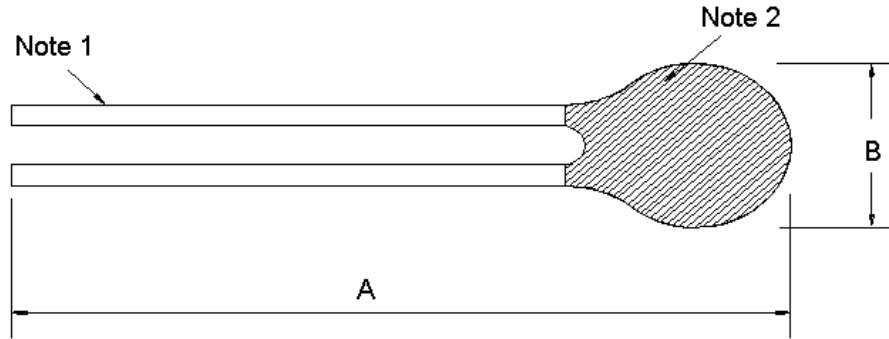
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	3,000
3K3A1W2 Resistance tolerance from 0°C to +70°C	°C	0.2
3K3A1W3 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
3K3A1W2 Dissipation Constant in still air	mW/°C	2
3K3A1W3 Dissipation Constant in still air	mW/°C	3

3K3A1W Series III & IV Thermistor

MECHANICAL DETAILS



	3K3A1W2		3K3A1W3	
	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	Red Stycast 2850ft Epoxy		Red Stycast 2850ft Epoxy	

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	100619
-39	94180
-38	88194
-37	82625
-36	77442
-35	72616
-34	68121
-33	63932
-32	60026
-31	56382
-30	52982
-29	49808
-28	46843
-27	44073
-26	41484
-25	39062
-24	36796
-23	34676
-22	32690
-21	30830

Temp. °C	Ohms
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-20	29087
-19	27453
-18	25921
-17	24483
-16	23134
-15	21867
-14	20676
-13	19558
-12	18507
-11	17518
-10	16588
-9	15713
-8	14890
-7	14114
-6	13383
-5	12694
-4	12045
-3	11433
-2	10855
-1	10310

Temp. °C	Ohms
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0	9795
1	9309
2	8850
3	8416
4	8006
5	7619
6	7252
7	6905
8	6577
9	6266
10	5971
11	5692
12	5428
13	5177
14	4940
15	4714
16	4500
17	4297
18	4105
19	3922

Temp. °C	Ohms
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20	3748
21	3583
22	3426
23	3277
24	3135
25	3000
26	2872
27	2749
28	2633
29	2522
30	2417
31	2316
32	2220
33	2129
34	2042
35	1959
36	1880
37	1804
38	1732
39	1663

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40	1597	62	695	84	332	106	171
41	1535	63	670	85	321	107	167
42	1475	64	647	86	311	108	162
43	1417	65	625	87	302	109	157
44	1362	66	603	88	292	110	153
45	1310	67	583	89	283	111	149
46	1260	68	563	90	275	112	145
47	1212	69	544	91	267	113	141
48	1166	70	525	92	259	114	137
49	1122	71	508	93	251	115	133
50	1080	72	491	94	243	116	130
51	1040	73	475	95	236	117	126
52	1002	74	459	96	229	118	123
53	965	75	444	97	222	119	120
54	929	76	430	98	216	120	117
55	895	77	416	99	210	121	114
56	863	78	402	100	204	122	111
57	832	79	389	101	198	123	108
58	802	80	377	102	192	124	105
59	774	81	365	103	187	125	102
60	746	82	353	104	181		
61	720	83	342	105	176		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
3K3A1W2	Series III Thermistor	3,000	1,000*
3K3A1W3	Series IV Thermistor	3,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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