

# 1K2A1 Series V Thermistor



- Thermally conductive epoxy coating
- Ø 2.4 mm Maximum Diameter
- 32 AWG Alloy 180 Leads
- 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

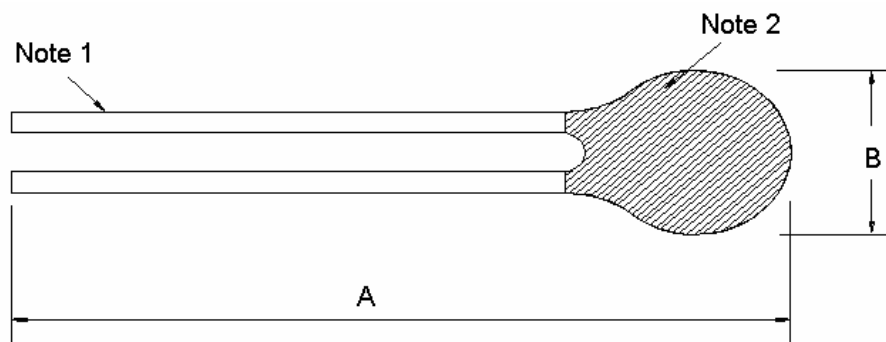
- Temperature sensing, control and compensation
- Suitable for measurement applications at the lower temperature ranges
- Assembly into probes used in low temperature applications

## PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	1000
Resistance tolerance from 0°C to +25°C	°C	0.2
Alpha Value @ 25°C	%/°C	3.68
Beta Value 25/85	K	3348
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
<b>Note 1</b>	32 AWG Solid Alloy 180 Leads	
<b>Note 2</b>	Black Stycast 2850ft Epoxy	

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	18641.3
-39	17648.9
-38	16715.5
-37	15837.1
-36	15010.1
-35	14231.4
-34	13497.7
-33	12806.3
-32	12154.5
-31	11539.8
-30	10959.8
-29	10412.5
-28	9895.7
-27	9407.7
-26	8946.7
-25	8511.0
-24	8099.0
-23	7709.5
-22	7341.0
-21	6992.3
-20	6662.1
-19	6349.6

Temp. °C	Ohms
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-18	6053.5
-17	5772.9
-16	5507.0
-15	5254.9
-14	5015.8
-13	4788.9
-12	4573.6
-11	4369.3
-10	4175.2
-9	3990.9
-8	3815.8
-7	3649.4
-6	3491.2
-5	3340.7
-4	3197.6
-3	3061.5
-2	2931.9
-1	2808.5
0	2691.0
1	2579.1
2	2472.5
3	2370.9

Temp. °C	Ohms
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4	2274.0
5	2181.6
6	2093.5
7	2009.5
8	1929.3
9	1852.7
10	1779.6
11	1709.8
12	1643.1
13	1579.4
14	1518.5
15	1460.3
16	1404.7
17	1351.4
18	1300.5
19	1251.8
20	1205.1
21	1160.5
22	1117.7
23	1076.8
24	1037.6
<b>25</b>	<b>1000.0</b>

Temp. °C	Ohms
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26	964.0
27	929.5
28	896.4
29	864.6
30	834.2
31	804.9
32	776.9
33	750.0
34	724.1
35	699.3
36	675.5
37	652.6
38	630.6
39	609.5
40	589.2
41	569.6
42	550.8
43	532.8
44	515.4
45	498.7
46	482.6
47	467.1

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48	452.2	68	244.8	88	140.8	108	85.4
49	437.8	69	237.8	89	137.2	109	83.4
50	424.0	70	231.0	90	133.6	110	81.4
51	410.7	71	224.5	91	130.2	111	79.5
52	397.8	72	218.1	92	126.9	112	77.7
53	385.5	73	212.0	93	123.7	113	75.9
54	373.5	74	206.1	94	120.5	114	74.2
55	362.0	75	200.4	95	117.5	115	72.5
56	351.0	76	194.9	96	114.6	116	70.8
57	340.3	77	189.5	97	111.7	117	69.2
58	330.0	78	184.3	98	109.0	118	67.7
59	320.0	79	179.3	99	106.3	119	66.1
60	310.4	80	174.5	100	103.7	120	64.7
61	301.2	81	169.8	101	101.2	121	63.2
62	292.3	82	165.2	102	98.7	122	61.8
63	283.6	83	160.8	103	96.3	123	60.5
64	275.3	84	156.6	104	94.0	124	59.2
65	267.3	85	152.4	105	91.7	125	57.9
66	259.5	86	148.4	106	89.6		
67	252.0	87	144.6	107	87.4		

## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
1K2A1	Series V Thermistor	1000	1,000*

\* For quantities less than Minimum Order Quantity – Contact Distribution

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