

# 30K6A1 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

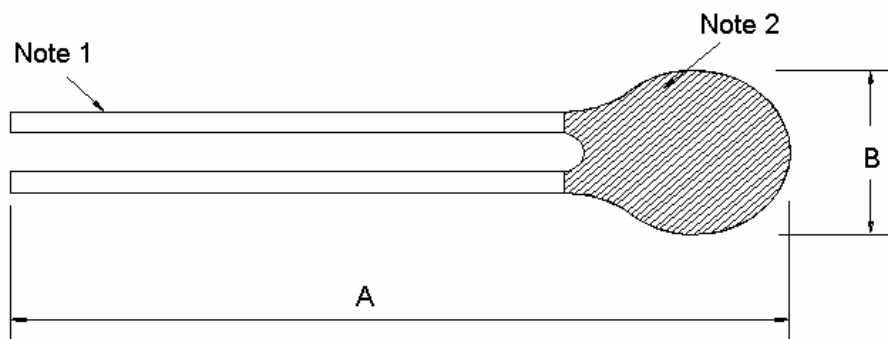
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

## PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	30,000
30K6A1A Resistance tolerance from 0°C to +70°C	°C	0.1
30K6A1B Resistance tolerance from 0°C to +70°C	°C	0.2
30K6A1C Resistance tolerance from 0°C to +70°C	°C	0.5
30K6A1D Resistance tolerance from 0°C to +70°C	°C	1.0
Alpha Value @ 25°C	%/°C	4.68
Beta Value 25/85	K	4261
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>	Green Stycast 2850ft Epoxy	

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	1219114
-39	1137677
-38	1062161
-37	992104
-36	927079
-35	866698
-34	810604
-33	758469
-32	709991
-31	664894
-30	622924
-29	583847
-28	547448
-27	513528
-26	481906
-25	452413
-24	424895
-23	399208
-22	375221
-21	352813
-20	331871
-19	312291

Temp. °C	Ohms
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-18	293977
-17	276841
-16	260801
-15	245781
-14	231711
-13	218526
-12	206164
-11	194572
-10	183696
-9	173489
-8	163905
-7	154905
-6	146449
-5	138501
-4	131028
-3	124000
-2	117388
-1	111164
0	105305
1	99787
2	94588
3	89688

Temp. °C	Ohms
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4	85069
5	80712
6	76603
7	72725
8	69064
9	65608
10	62343
11	59258
12	56342
13	53585
14	50978
15	48512
16	46178
17	43969
18	41877
19	39896
20	38019
21	36240
22	34554
23	32955
24	31439
25	<b>30000</b>

Temp. °C	Ohms
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26	28635
27	27339
28	26108
29	24939
30	23828
31	22773
32	21770
33	20816
34	19909
35	19047
36	18225
37	17444
38	16700
39	15992
40	15317
41	14674
42	14062
43	13478
44	12921
45	12390
46	11884
47	11400

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48	10939	68	5007	88	2473	108	1305
49	10499	69	4825	89	2392	109	1266
50	10079	70	4651	90	2313	110	1228
51	9678	71	4483	91	2238	111	1192
52	9294	72	4323	92	2165	112	1156
53	8928	73	4169	93	2095	113	1123
54	8578	74	4022	94	2028	114	1090
55	8244	75	3880	95	1963	115	1058
56	7924	76	3744	96	1901	116	1027
57	7618	77	3613	97	1841	117	998
58	7325	78	3488	98	1783	118	969
59	7046	79	3367	99	1727	119	941
60	6778	80	3251	100	1673	120	915
61	6521	81	3140	101	1621	121	889
62	6276	82	3033	102	1571	122	864
63	6041	83	2930	103	1522	123	839
64	5816	84	2832	104	1476	124	816
65	5601	85	2737	105	1431	125	793
66	5394	86	2645	106	1387		
67	5196	87	2557	107	1345		

## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
30K6A1A	Series 1 Thermistor	30,000	1,000*
30K6A1B	Series 1 Thermistor	30,000	1,000*
30K6A1C	Series 1 Thermistor	30,000	1,000*
30K6A1D	Series 1 Thermistor	30,000	1,000*

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

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