

30K5A1 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

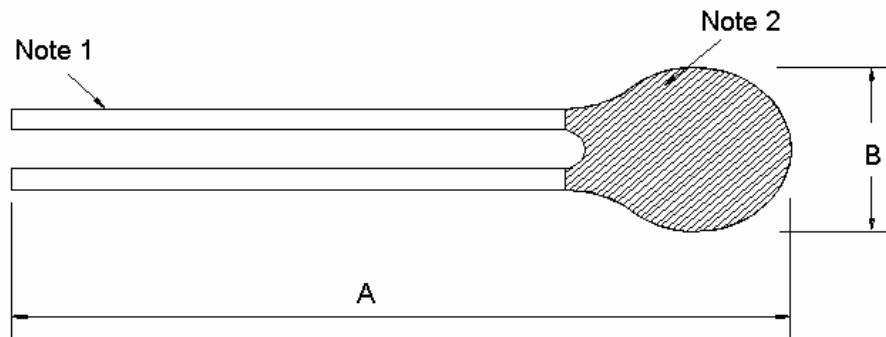
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	30,000
30K5A1A Resistance tolerance from 0°C to +70°C	°C	0.1
30K5A1B Resistance tolerance from 0°C to +70°C	°C	0.2
30K5A1C Resistance tolerance from 0°C to +70°C	°C	0.5
30K5A1D Resistance tolerance from 0°C to +70°C	°C	1.0
Alpha Value @ 25°C	%/°C	4.30
Beta Value 25/85	K	3942
Tolerance on Beta Value 25/85	%	0.5
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/°C	0.75

30K5A1 Series 1 Thermistor

MECHANICAL DETAILS



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

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	884198
-39	830463
-38	780301
-37	733457
-36	689693
-35	648790
-34	610546
-33	574773
-32	541299
-31	509964
-30	480620
-29	453130
-28	427367
-27	403213
-26	380560
-25	359305
-24	339357
-23	320627
-22	303035
-21	286506

Temp. °C	Ohms
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-20	270969
-19	256362
-18	242622
-17	229694
-16	217526
-15	206069
-14	195278
-13	185111
-12	175529
-11	166495
-10	157975
-9	149937
-8	142352
-7	135191
-6	128429
-5	122041
-4	116006
-3	110301
-2	104907
-1	99806

Temp. °C	Ohms
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0	94980
1	90413
2	86090
3	81996
4	78119
5	74445
6	70964
7	67663
8	64534
9	61565
10	58749
11	56076
12	53539
13	51129
14	48841
15	46667
16	44601
17	42637
18	40769
19	38993

Temp. °C	Ohms
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20	37303
21	35696
22	34166
23	32709
24	31321
25	30000
26	28741
27	27541
28	26398
29	25307
30	24268
31	23276
32	22329
33	21426
34	20564
35	19741
36	18955
37	18204
38	17487
39	16801

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40	16146	62	7075	84	3380	106	1739
41	15519	63	6829	85	3274	107	1690
42	14920	64	6593	86	3172	108	1642
43	14347	65	6366	87	3074	109	1596
44	13799	66	6148	88	2979	110	1552
45	13274	67	5939	89	2888	111	1509
46	12772	68	5738	90	2800	112	1467
47	12292	69	5544	91	2715	113	1427
48	11831	70	5358	92	2633	114	1388
49	11391	71	5179	93	2554	115	1350
50	10968	72	5007	94	2477	116	1314
51	10564	73	4841	95	2403	117	1278
52	10176	74	4682	96	2332	118	1244
53	9805	75	4528	97	2263	119	1211
54	9449	76	4381	98	2197	120	1178
55	9107	77	4239	99	2132	121	1147
56	8780	78	4102	100	2070	122	1117
57	8466	79	3970	101	2010	123	1087
58	8164	80	3843	102	1952	124	1059
59	7875	81	3721	103	1896	125	1031
60	7597	82	3603	104	1842		
61	7331	83	3489	105	1789		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
30K5A1A	Series 1 Thermistor	30,000	1,000*
30K5A1B	Series 1 Thermistor	30,000	1,000*
30K5A1C	Series 1 Thermistor	30,000	1,000*
30K5A1D	Series 1 Thermistor	30,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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