

10K4A1 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

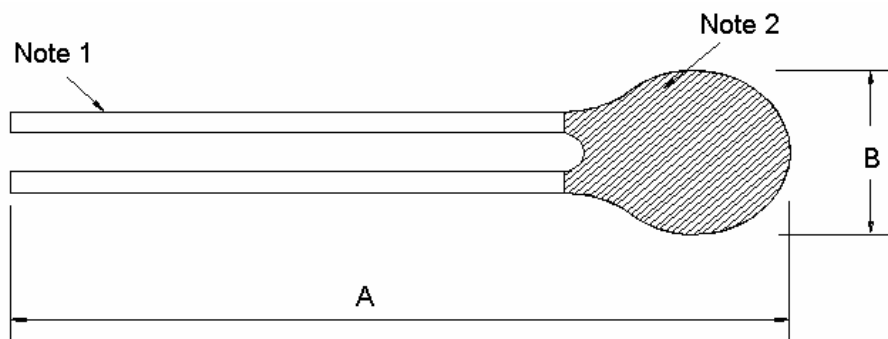
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
10K4A1A Resistance tolerance from 0°C to +70°C	°C	0.1
10K4A1B Resistance tolerance from 0°C to +70°C	°C	0.2
10K4A1C Resistance tolerance from 0°C to +70°C	°C	0.5
10K4A1D Resistance tolerance from 0°C to +70°C	°C	1.0
Alpha Value @ 25°C	%/°C	4.04
Beta Value 25/85	K	3694
Tolerance on Beta Value 25/85	%	0.5
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/°C	0.75

10K4A1 Series 1 Thermistor

MECHANICAL DETAILS



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

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	239828
-39	226103
-38	213243
-37	201188
-36	189885
-35	179282
-34	169331
-33	159991
-32	151219
-31	142978
-30	135233
-29	127952
-28	121104
-27	114661
-26	108598
-25	102889
-24	97513
-23	92448
-22	87675
-21	83174
-20	78930

Temp. °C	Ohms
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-19	74926
-18	71148
-17	67581
-16	64212
-15	61031
-14	58024
-13	55182
-12	52495
-11	49954
-10	47549
-9	45274
-8	43119
-7	41079
-6	39147
-5	37316
-4	35580
-3	33935
-2	32375
-1	30895
0	29490
1	28157

Temp. °C	Ohms
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2	26891
3	25689
4	24547
5	23462
6	22431
7	21450
8	20518
9	19631
10	18787
11	17983
12	17219
13	16490
14	15797
15	15136
16	14506
17	13906
18	13334
19	12788
20	12268
21	11771
22	11297

Temp. °C	Ohms
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23	10845
24	10413
25	10000
26	9606
27	9229
28	8869
29	8525
30	8196
31	7882
32	7581
33	7293
34	7018
35	6754
36	6501
37	6260
38	6028
39	5806
40	5594
41	5390
42	5195
43	5007

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44	4828	65	2339	86	1218	107	676
45	4656	66	2264	87	1183	108	658
46	4490	67	2191	88	1149	109	641
47	4332	68	2122	89	1116	110	624
48	4180	69	2055	90	1084	111	608
49	4034	70	1990	91	1053	112	592
50	3893	71	1928	92	1023	113	577
51	3759	72	1868	93	994	114	562
52	3629	73	1810	94	967	115	548
53	3505	74	1754	95	940	116	534
54	3386	75	1700	96	913	117	521
55	3271	76	1648	97	888	118	507
56	3160	77	1598	98	864	119	495
57	3054	78	1550	99	840	120	482
58	2952	79	1503	100	817	121	470
59	2854	80	1458	101	795	122	459
60	2760	81	1414	102	774	123	448
61	2669	82	1372	103	753	124	437
62	2582	83	1332	104	733	125	426
63	2498	84	1293	105	713		
64	2417	85	1255	106	694		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K4A1A	Series 1 Thermistor	10,000	1,000*
10K4A1B	Series 1 Thermistor	10,000	1,000*
10K4A1C	Series 1 Thermistor	10,000	1,000*
10K4A1D	Series 1 Thermistor	10,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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