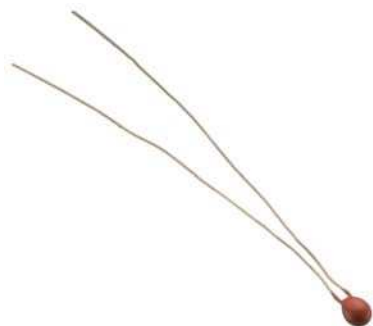


5K3A1 Series 1 Thermistor



- 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

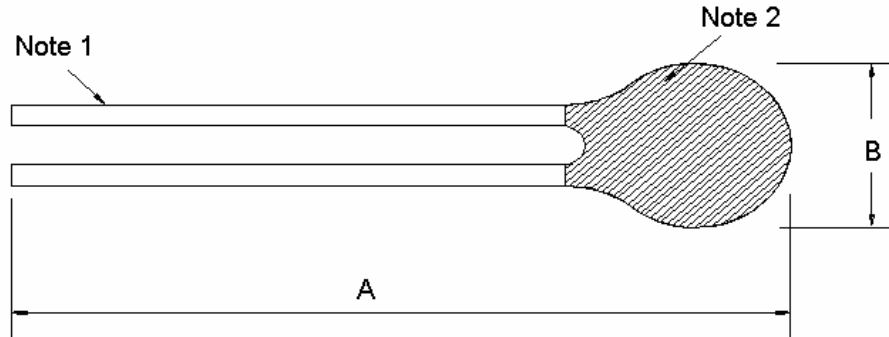
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	5,000
5K3A1A Resistance tolerance from 0°C to +70°C	°C	0.1
5K3A1B Resistance tolerance from 0°C to +70°C	°C	0.2
5K3A1C Resistance tolerance from 0°C to +70°C	°C	0.5
5K3A1D Resistance tolerance from 0°C to +70°C	°C	1.0
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
Dissipation Constant in still air	mW/°C	0.75

5K3A1 Series 1 Thermistor

MECHANICAL DETAILS



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

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
----------	------

-40	167862
-39	157111
-38	147117
-37	137820
-36	129169
-35	121114
-34	113611
-33	106620
-32	100102
-31	94022
-30	88349
-29	83054
-28	78107
-27	73486
-26	69166
-25	65127
-24	61348
-23	57811
-22	54499
-21	51397
-20	48490
-19	45765
-18	43210

Temp. °C	Ohms
----------	------

-17	40812
-16	38562
-15	36450
-14	34465
-13	32601
-12	30848
-11	29200
-10	27649
-9	26191
-8	24817
-7	23524
-6	22306
-5	21158
-4	20075
-3	19055
-2	18092
-1	17183
0	16325
1	15515
2	14750
3	14027
4	13344
5	12698

Temp. °C	Ohms
----------	------

6	12086
7	11508
8	10961
9	10443
10	9952
11	9487
12	9046
13	8629
14	8233
15	7857
16	7501
17	7162
18	6841
19	6536
20	6247
21	5972
22	5710
23	5461
24	5225
25	5000
26	4786
27	4582
28	4388

Temp. °C	Ohms
----------	------

29	4204
30	4028
31	3860
32	3701
33	3549
34	3403
35	3265
36	3133
37	3007
38	2887
39	2772
40	2662
41	2558
42	2458
43	2362
44	2271
45	2183
46	2100
47	2020
48	1944
49	1870
50	1800
51	1733

5K3A1 Series 1 Thermistor

52	1669	71	847	90	458	109	262
53	1608	72	818	91	444	110	255
54	1549	73	791	92	431	111	248
55	1493	74	765	93	418	112	241
56	1438	75	740	94	406	113	235
57	1387	76	716	95	394	114	228
58	1337	77	693	96	382	115	222
59	1289	78	670	97	371	116	216
60	1244	79	649	98	360	117	211
61	1200	80	628	99	349	118	205
62	1158	81	608	100	339	119	200
63	1117	82	589	101	330	120	194
64	1078	83	570	102	320	121	189
65	1041	84	553	103	311	122	184
66	1005	85	535	104	302	123	180
67	971	86	519	105	294	124	175
68	938	87	503	106	285	125	170
69	906	88	487	107	277		
70	876	89	472	108	270		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
5K3A1A	Series 1 Thermistor	5,000	1,000*
5K3A1B	Series 1 Thermistor	5,000	1,000*
5K3A1C	Series 1 Thermistor	5,000	1,000*
5K3A1D	Series 1 Thermistor	5,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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910 Turnpike Road
Shrewsbury, MA 01545
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Fax: 1-508-842-0342

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Fax: +353-91-770789

Sales email:
temperature.sales.emea@meas-spec.com

ASIA

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temperature.sales.asia@meas-spec.com

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