

1K7A1 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

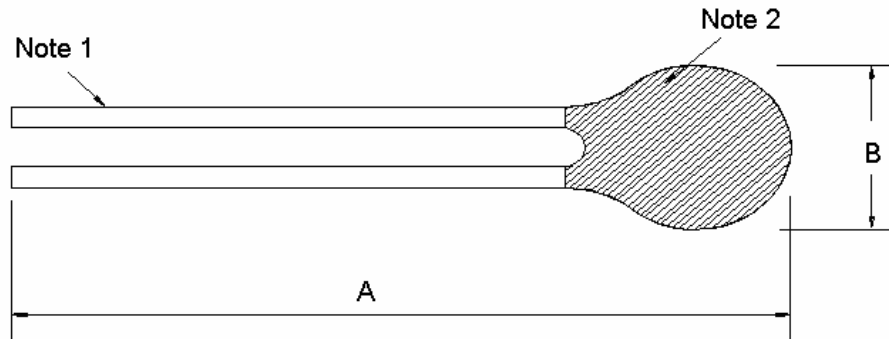
- Temperature sensing, control and compensation
- Suitable for measurement applications at the lower temperature ranges
- Assembly into probes used in low temperature applications

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	3.87
Beta Value 25/85	K	3499
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
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	21681
-39	20465
-38	19324
-37	18255
-36	17251
-35	16308
-34	15422
-33	14591
-32	13809
-31	13073
-30	12382
-29	11731
-28	11118
-27	10541
-26	9998
-25	9485
-24	9002
-23	8547
-22	8117
-21	7712
-20	7329
-19	6967

Temp. °C	Ohms
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-18	6626
-17	6303
-16	5998
-15	5709
-14	5436
-13	5178
-12	4933
-11	4702
-10	4482
-9	4275
-8	4078
-7	3891
-6	3714
-5	3546
-4	3386
-3	3235
-2	3091
-1	2955
0	2825
1	2702
2	2585
3	2473

Temp. °C	Ohms
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4	2367
5	2266
6	2170
7	2079
8	1992
9	1909
10	1830
11	1755
12	1683
13	1615
14	1549
15	1487
16	1428
17	1371
18	1317
19	1265
20	1216
21	1169
22	1124
23	1081
24	1039
25	1000

Temp. °C	Ohms
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26	962
27	926
28	892
29	859
30	827
31	797
32	768
33	740
34	713
35	688
36	663
37	640
38	617
39	595
40	575
41	555
42	536
43	517
44	500
45	483
46	466
47	451

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48	436	68	229	88	129	108	77
49	421	69	223	89	125	109	75
50	407	70	216	90	122	110	73
51	394	71	210	91	119	111	71
52	381	72	203	92	116	112	69
53	369	73	198	93	113	113	68
54	357	74	192	94	110	114	66
55	345	75	186	95	107	115	65
56	334	76	181	96	104	116	63
57	324	77	176	97	101	117	62
58	313	78	171	98	99	118	60
59	304	79	166	99	96	119	59
60	294	80	161	100	94	120	57
61	285	81	157	101	91	121	56
62	276	82	152	102	89	122	55
63	268	83	148	103	87	123	53
64	259	84	144	104	85	124	52
65	252	85	140	105	82	125	51
66	244	86	136	106	80		
67	237	87	132	107	78		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
1K7A1	Series V Thermistor	1000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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