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RoHS

100K6A1I SERIES II

Thermistor

SPECIFICATIONS

- **Thermally conductive epoxy coating**
- **Ø 2.4 mm Maximum Diameter**
- **30 AWG Solid Silver Plated Copper Leads with White PTFE Insulation**
- **Choice of 4 temperature tolerance classifications**
- **RoHS Compliant**

The BetaCURVE Chip is Soldered to 30 AWG Solid Silver Plated Copper Leads with White PTFE Insulation Device is Encapsulated in Stycast Epoxy Resin.

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FEATURES

- Interchangeability
- Proven Stability and Reliability
- Rapid time response
- PTFE Insulated lead Wires
- Thermally Conductive Epoxy Coating
- Temperature range -40 ºC to +125ºC

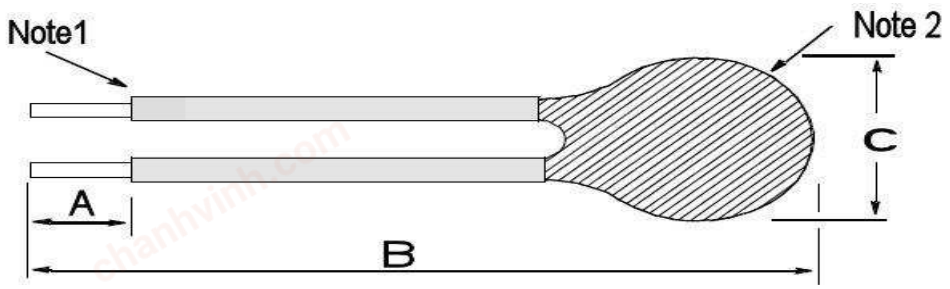
APPLICATIONS

- 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
Nominal Resistance at +25°C	Ohms	100000
100K6A1iA Resistance tolerance from 0°C to +70°C	°C	± 0.1
100K6A1iB Resistance tolerance from 0°C to +70°C	°C	± 0.2
100K6A1iC Resistance tolerance from 0°C to +70°C	°C	± 0.5
100K6A1iD Resistance tolerance from 0°C to +70°C	°C	± 1.0
Alpha Value at +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	0.85

MECHANICAL DETAILS



	Dimensions		
	A	B	C
	10 ± 2mm	76 ± 2mm	2.4mm Max
Note 1	30AWG Solid Silver Plated Copper Leads with White PTFE Insulation		
Note 2	Violet Stycast 2850ft Epoxy		

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RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	4071186
-39	3798837
-38	3546330
-37	3312107
-36	3094743
-35	2892930
-34	2705469
-33	2531260
-32	2369292
-31	2218639
-30	2078448
-29	1947934
-28	1826376
-27	1713112
-26	1607529
-25	1509065
-24	1417202
-23	1331461
-22	1251401
-21	1176615
-20	1106727
-19	1041391
-18	980285
-17	923112
-16	869600
-15	819493
-14	772557
-13	728575
-12	687344
-11	648680
-10	612407
-9	578366
-8	546408
-7	516394
-6	488196
-5	461695
-4	436779
-3	413346
-2	391300
-1	370551
0	351017

Temp. °C	Ohms
1	332620
2	315288
3	298954
4	283555
5	269034
6	255335
7	242408
8	230206
9	218684
10	207801
11	197518
12	187799
13	178610
14	169921
15	161700
16	153921
17	146558
18	139586
19	132983
20	126727
21	120799
22	115179
23	109850
24	104795
25	**100000**
26	95449
27	91129
28	87027
29	83131
30	79430
31	75913
32	72569
33	69390
34	66367
35	63491
36	60755
37	58150
38	55670
39	53309
40	51060
41	48917

Temp. °C	Ohms
42	46875
43	44929
44	43073
45	41303
46	39615
47	38005
48	36467
49	35000
50	33599
51	32262
52	30984
53	29763
54	28596
55	27481
56	26415
57	25395
58	24420
59	23487
60	22594
61	21740
62	20922
63	20138
64	19388
65	18670
66	17981
67	17322
68	16689
69	16083
70	15502
71	14945
72	14410
73	13897
74	13405
75	12932
76	12478
77	12043
78	11625
79	11223
80	10837
81	10466
82	10109
83	9767

Temp. °C	Ohms
84	9437
85	9121
86	8816
87	8523
88	8241
89	7970
90	7708
91	7457
92	7215
93	6982
94	6758
95	6541
96	6333
97	6132
98	5939
99	5753
100	5573
101	5400
102	5232
103	5071
104	4916
105	4766
106	4621
107	4481
108	4346
109	4216
110	4090
111	3969
112	3852
113	3738
114	3629
115	3523
116	3421
117	3322
118	3227
119	3134
120	3045
121	2959
122	2875
123	2794
124	2716
125	2640

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ORDERING INFORMATION

Part Number	Description	Ω @25ºC	MOQ
100K6A1iA	Series II – NTC Thermistor (± 0.1ºC from 0ºC to +70ºC)	100000	1000*
100K6A1iB	Series II – NTC Thermistor (± 0.2ºC from 0ºC to +70ºC)	100000	1000*
100K6A1iC	Series II – NTC Thermistor (± 0.5ºC from 0ºC to +70ºC)	100000	1000*
100K6A1iD	Series II – NTC Thermistor (± 1.0ºC from 0ºC to +70ºC)	100000	1000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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