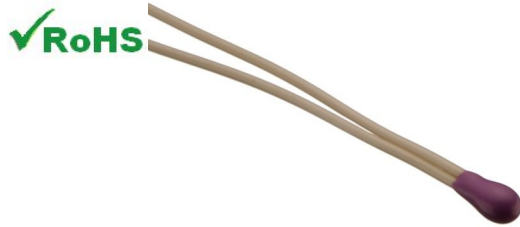


100K6A1I Series II Thermistor



- 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

DESCRIPTION

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

FEATURES

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

APPLICATIONS

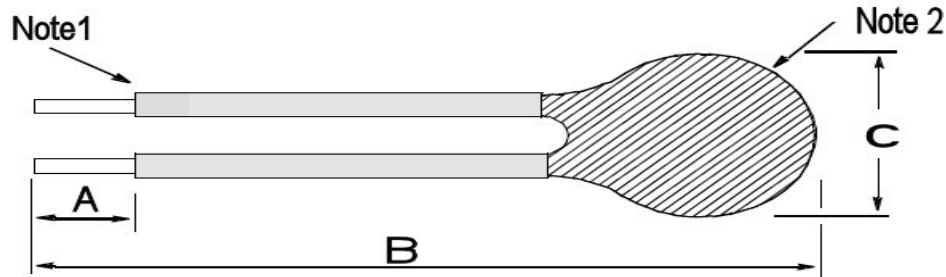
Temperature sensing, control and compensation
Tight Tolerance Instrumentation
Assembly into probes for a wide variety of applications
General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
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

100K6A1I Series II Thermistor

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		

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

Temp. °C	Ohms
-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
1	332620
2	315288
3	298954
4	283555
5	269034
6	255335
7	242408
8	230206
9	218684

Temp. °C	Ohms
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

Temp. °C	Ohms
35	63491
36	60755
37	58150
38	55670
39	53309
40	51060
41	48917
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

100K6A1I Series II Thermistor

60	22594	77	12043	94	6758	111	3969
61	21740	78	11625	95	6541	112	3852
62	20922	79	11223	96	6333	113	3738
63	20138	80	10837	97	6132	114	3629
64	19388	81	10466	98	5939	115	3523
65	18670	82	10109	99	5753	116	3421
66	17981	83	9767	100	5573	117	3322
67	17322	84	9437	101	5400	118	3227
68	16689	85	9121	102	5232	119	3134
69	16083	86	8816	103	5071	120	3045
70	15502	87	8523	104	4916	121	2959
71	14945	88	8241	105	4766	122	2875
72	14410	89	7970	106	4621	123	2794
73	13897	90	7708	107	4481	124	2716
74	13405	91	7457	108	4346	125	2640
75	12932	92	7215	109	4216		
76	12478	93	6982	110	4090		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
100K6A1iA	Series II – NTC Thermistor ($\pm 0.1^\circ\text{C}$ from 0°C to $+70^\circ\text{C}$)	100000	1000*
100K6A1iB	Series II – NTC Thermistor ($\pm 0.2^\circ\text{C}$ from 0°C to $+70^\circ\text{C}$)	100000	1000*
100K6A1iC	Series II – NTC Thermistor ($\pm 0.5^\circ\text{C}$ from 0°C to $+70^\circ\text{C}$)	100000	1000*
100K6A1iD	Series II – NTC Thermistor ($\pm 1.0^\circ\text{C}$ from 0°C to $+70^\circ\text{C}$)	100000	1000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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910 Turnpike Road
Shrewsbury, MA 01545
Tel: 1-508-842-0516
Fax: 1-508-842-0342
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temperature.cs.amer@meas-spec.com

EUROPE

Measurement Specialties, Inc
Ballybrit Business Park
Galway Ireland
Tel: +353-91-753238
Fax: +353-91-770789
Sales:
temperature.cs.emea@meas-spec.com

ASIA

Measurement Specialties (China) Ltd.
No. 26, Langshan Road,
Shenzhen High-tech Park (North)
Nanshan District, Shenzhen,
China 518057
Sales:
temperature.cs.asia@meas-spec.com

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