





# GA50K6A1i SERIES II THERMISTORS

Thermally Conductive Epoxy Coating Ø 2.4 mm Maximum Diameter 32 AWG Solid Silver-Plated Copper Leads with White PTFE Insulation

Four Temperature Tolerance Classifications Available RoHS Compliant

BetaCURVE series II thermistors are small epoxy coated devices with solid tin-plated lead wires. The series II offers insulated lead wires for added protection, the PTFE insulation also enhances bonding for applications that require mounting or potting the thermistor with epoxies or adhesives. This series also offers a choice of precision temperature tolerance classifications for a wide variety of applications.

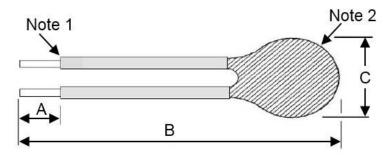
### **FEATURES**

- Interchangeability
- · Proven stability and reliability
- Rapid time response
- PTFE insulated lead wires
- Thermally conductive epoxy coating
- Temperature range -40°C to +125°C
- Custom probe assemblies available

#### **APPLICATIONS**

- Temperature sensing, control and compensation
- Tight tolerance instrumentation
- General instrumentation applications

## **MECHANICAL DETAILS**



### **DIMENSIONS**

Α	В	С
10 ±2 mm	76 ±2 mm	2.4 mm max.

Note 1: 30AWG Solid Silver-Plated Copper Leads with White PTFE Insulation

Note 2: Blue Stycast 2850ft Epoxy

## PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	50,000
GA50K6A1iA Resistance Tolerance from 0°C to +70°C	°C	±0.1
GA50K6A1iB Resistance Tolerance from 0°C to +70°C	°C	±0.2
GA50K6A1iC Resistance Tolerance from 0°C to +70°C	°C	±0.5
GA50K6A1iD 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

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms	
-40	2033476	
-39	1897553	
-38	1771522	
-37	1654608	
-36	1546100	
-35	1445347	
-34	1351752	
-33	1264768	
-32	1183890	
-31	1108657	
-30	1038644	
-29	973460	
-28	912745	
-27	856170	
-26	803428	
-25	754240	
-24 708347		
-23	665510	
-22	625510	
-21	588143	
-20	553222	
-19	520574	
-18	490038	
-17	461467	
-16	434724	
-15	409682	
-14	386224	
-13	364242	
-12	343634	
-11	324308	
-10	306178	
-9	289162	
-8	273187	
-7	258184	
-6	-6 244088	
-5 230839		
-4	218384	
-3	206669	
-2		
-1 185274		
0	175508	
1	166310	

Temp. °C	Ohmo	
	Ohms	
2	157645	
3	149478	
4	141779	
5	134519	
6	127670	
7	121206	
8	115105	
9	109344	
10	103902	
11	98761	
12	93901	
13	89307	
14	84962	
15	80852	
16	76962	
17	73280	
18	69794	
19	66492	
20	63364	
21	60400	
22	57590	
23	54925	
24	52398	
25	50000	
26	47724	
27	45564	
28	43513	
29	41565	
30	39715	
31	37956	
32	36284	
33	34695	
34	33183	
35	31745	
36	30376	
37	29074	
38	27834	
39	26654	
40	25529	
41	24458	
42	23437	
43	22463	
7-0	22+00	

Temp. °C	Ohms	
44	21536	
45	20651	
46	19807	
47	19001	
48	18233	
49	17499	
50	16799	
51	16130	
52	15491	
53	14881	
54	14297	
55	13740	
56	13207	
57	12697	
58	12209	
59	11743	
60	11297	
61	10869	
62	10460	
63	10069	
64	9694	
65	9335	
66	8990	
67	8661	
68	8345	
69	8041	
70	7751	
71	7472	
72	7205	
73	6948	
74	6702	
75	6466	
76	6239	
77	6022	
78	5812	
79	5612	
80	80 5419	
81	5233	
82	5055	
83	4884	
84	4719	
85	4561	

Temp. °C	Ohms	
86	4408	
87	4262	
88	4121	
89	3985	
90	3855	
91	3729	
92	3608	
93	3492	
94	3379	
95	3271	
96	3167	
97	3067	
98	2970	
99	2877	
100	2787	
101	2700	
102	2617	
103	2536	
104	2459	
105	2384	
106	2311	
107	2241	
108	2174	
109	2109	
110	2046	
111	1985	
112	1927	
113	1870	
114	1815	
115	1762	
116	1711	
117	1662	
118	1614	
119	1568	
120	1523	
121	1480	
122	1438	
123	1398	
124	1359	
125	1321	

### ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ*
GA50K6A1iA	Series II thermistor	50,000	1,000
GA50K6A1iB	Series II thermistor	50,000	1,000
GA50K6A1iC	Series II thermistor	50,000	1,000
GA50K6A1iD	Series II thermistor	50,000	1,000

<sup>\*</sup> For quantities less than MOQ (Minimum Order Quantity) contact distribution

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