



## GA2K7MCD1 MICRO BetaCHIP (MCD) THERMISTOR PROBES

2K to 100K Ohms Resistance @25°C

0.2°C Tolerance @ 25°C

Thermally Conductive Epoxy Coating

38 AWG Solid Nickel Bifilar with Polyester Type Insulation

Fast Time Response

Small Tip Diameter

RoHS Compliant

Micro BetaCHIP (MCD) thermistor probes are suited for applications that require rapid temperature response and where space is limited. These NTC thermistors are potted in a polyimide tube with a thermally conductive epoxy.

### FEATURES

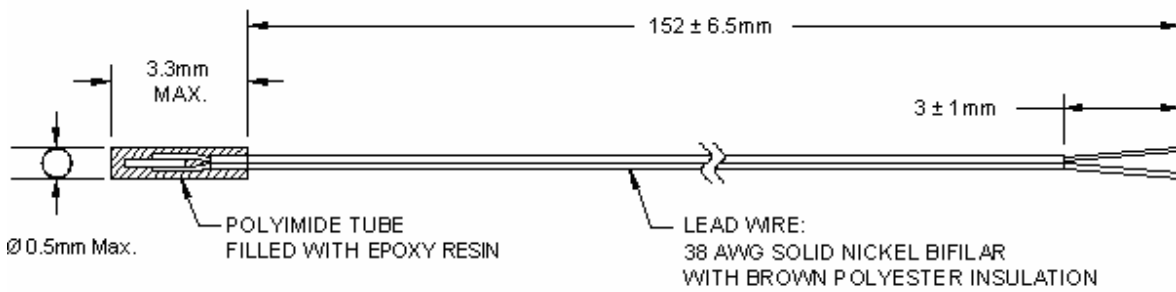
- $\pm 0.2^{\circ}\text{C}$  tolerance @  $+25^{\circ}\text{C}$
- Custom tolerances available
- Smaller than miniature BetaCURVE devices
- Rapid time response (200 milliseconds in liquids)
- Temperature range  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### APPLICATIONS

- Low volume flow sensors (liquids or gases)
- Laboratory animal research
- Peltier temperature tracking sensors
- Temperature control for bath showers
- DNA research sensors
- Medical catheters

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**MECHANICAL DETAILS**



**PERFORMANCE SPECS**

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	2,000
Resistance Tolerance at +25°C	°C	±0.2
Alpha Value at +25°C	%/°C	-3.87
Beta Value 25/85	K	3499
Tolerance on Beta Value 25/85	%	±0.5
Time Response in Liquids	milliseconds	200
Dissipation Constant in Still Air	mW/°C	0.3

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**RESISTANCE V TEMPERATURE TABLE DETAILS**

Temp. °C	Ohms
-40	43,423.10
-39	40,984.00
-38	38,697.10
-37	36,552.00
-36	34,539.10
-35	32,649.50
-34	30,874.90
-33	29,207.70
-32	27,640.80
-31	26,167.50
-30	24,781.80
-29	23,478.00
-28	22,250.60
-27	21,094.90
-26	20,006.20
-25	18,980.40
-24	18,013.30
-23	17,101.30
-22	16,241.00
-21	15,429.10
-20	14,662.70
-19	13,938.90
-18	13,255.20
-17	12,609.10
-16	11,998.30
-15	11,420.80
-14	10,874.40
-13	10,357.40
-12	9,868.10
-11	9,404.70
-10	8,965.90
-9	8,550.00
-8	8,155.90
-7	7,782.30
-6	7,427.90
-5	7,091.80
-4	6,772.80
-3	6,470.00
-2	6,182.50
-1	5,909.40
0	5,650.00
1	5,403.40
2	5,169.10
3	4,946.20

Temp. °C	Ohms
4	4,734.20
5	4,532.50
6	4,340.50
7	4,157.80
8	3,983.80
9	3,818.00
10	3,660.10
11	3,509.60
12	3,366.20
13	3,229.40
14	3,098.90
15	2,974.40
16	2,855.60
17	2,742.30
18	2,634.00
19	2,530.70
20	2,431.90
21	2,337.60
22	2,247.40
23	2,161.20
24	2,078.80
<b>25</b>	<b>2,000.00</b>
26	1,924.60
27	1,852.50
28	1,783.40
29	1,717.30
30	1,654.00
31	1,593.40
32	1,535.30
33	1,479.70
34	1,426.40
35	1,375.30
36	1,326.20
37	1,279.20
38	1,234.20
39	1,190.90
40	1,149.40
41	1,109.60
42	1,071.30
43	1,034.60
44	999.3
45	965.4
46	932.8
47	901.6

Temp. °C	Ohms
48	871.5
49	842.6
50	814.8
51	788
52	762.3
53	737.5
54	713.7
55	690.8
56	668.7
57	647.4
58	627
59	607.2
60	588.2
61	569.9
62	552.3
63	535.3
64	518.9
65	503.1
66	487.8
67	473.1
68	458.9
69	445.2
70	432
71	419.2
72	406.9
73	395
74	383.5
75	372.4
76	361.7
77	351.4
78	341.3
79	331.7
80	322.3
81	313.3
82	304.5
83	296
84	287.9
85	279.9
86	272.3
87	264.9
88	257.7
89	250.7
90	244
91	237.5

Temp. °C	Ohms
92	231.2
93	225.1
94	219.2
95	213.4
96	207.9
97	202.5
98	197.3
99	192.2
100	187.3
101	182.5
102	177.9
103	173.4
104	169.1
105	164.9
106	160.8
107	156.8
108	153
109	149.2
110	145.6
111	142.1
112	138.6
113	135.3
114	132.1
115	128.9
116	125.9
117	122.9
118	120
119	117.2
120	114.5
121	111.9
122	109.3
123	106.8
124	104.4
125	102

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**ORDERING INFORMATION**

<b>Part Number</b>	<b>Description</b>	<b>Ω @25°C</b>	<b>MOQ*</b>
GA2K7MCD1	Micro BetaCHIP thermistor probe (MCD)	2,000	1,000

\* For quantities less than MOQ (Minimum Order Quantity) contact distribution

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