



GA10K3MCD1 MICRO BetaCHIP (MCD) THERMISTOR PROBES

2K to 100K Ohms Resistance @25°C

0.2°C Tolerance from @ 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

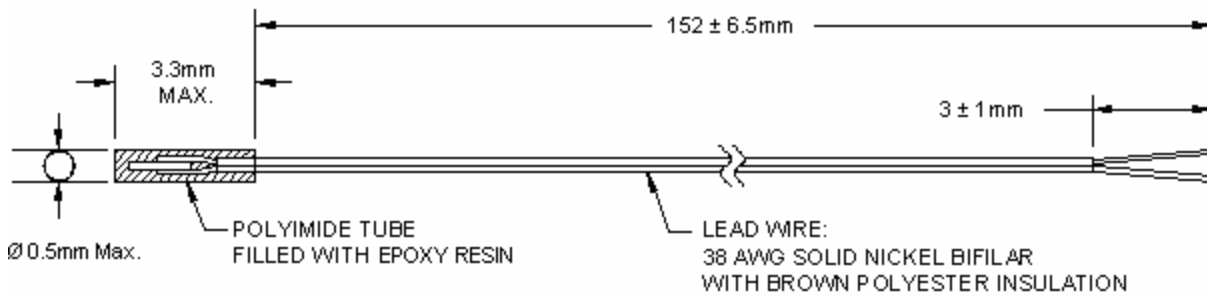
- $\pm 0.2^{\circ}\text{C}$ tolerance @ +25°C
- Custom tolerances available
- Smaller than miniature BetaCURVE devices
- Rapid time response (200 milliseconds in liquids)
- Temperature range -40°C to +125°C

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	10,000
Resistance Tolerance at +25°C	°C	±0.2
Alpha Value at +25°C	%/°C	-4.39
Beta Value 25/85	K	3976
Tolerance on Beta Value 25/85	%	±0.5
Time Response in Liquids	milliseconds	200
Dissipation Constant in Still Air	mW/°C	0.3

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	336103
-39	314558
-38	294529
-37	275901
-36	258567
-35	242430
-34	227401
-33	213397
-32	200341
-31	188166
-30	176805
-29	166200
-28	156296
-27	147043
-26	138395
-25	130308
-24	122742
-23	115662
-22	109033
-21	102825
-20	97006.9
-19	91553.3
-18	86439.2
-17	81641.4
-16	77138.6
-15	72911.1
-14	68940.4
-13	65209.7
-12	61702.9
-11	58405.5
-10	55303.9
-9	52385.2
-8	49637.8
-7	47050.6
-6	44613.4
-5	42316.7
-4	40151.6
-3	38110
-2	36184
-1	34366.6
0	32650.9

Temp. °C	Ohms
1	31030.8
2	29500.5
3	28054.4
4	26687.5
5	25395
6	24172.5
7	23015.9
8	21921.2
9	20884.7
10	19903.2
11	18973.3
12	18092.2
13	17256.9
14	16464.9
15	15713.7
16	15000.9
17	14324.5
18	13682.3
19	13072.6
20	12493.3
21	11943
22	11419.9
23	10922.7
24	10449.8
25	10000
26	9572
27	9164.7
28	8777
29	8407.7
30	8056.1
31	7721
32	7401.7
33	7097.3
34	6807.1
35	6530.3
36	6266.2
37	6014.3
38	5773.8
39	5544.2
40	5325
41	5115.6

Temp. °C	Ohms
42	4915.6
43	4724.4
44	4541.7
45	4367
46	4200
47	4040.2
48	3887.4
49	3741.1
50	3601.1
51	3467
52	3338.7
53	3215.8
54	3098
55	2985.2
56	2877
57	2773.3
58	2673.9
59	2578.6
60	2487.1
61	2399.4
62	2315.2
63	2234.4
64	2156.8
65	2082.3
66	2010.8
67	1942.1
68	1876
69	1812.6
70	1751.6
71	1693
72	1636.6
73	1582.4
74	1530.2
75	1480.1
76	1431.8
77	1385.3
78	1340.6
79	1297.5
80	1256.1
81	1216.1
82	1177.7

Temp. °C	Ohms
83	1140.6
84	1104.9
85	1070.5
86	1037.3
87	1005.3
88	974.4
89	944.7
90	916
91	888.3
92	861.5
93	835.8
94	810.9
95	786.8
96	763.6
97	741.2
98	719.6
99	698.6
100	678.4
101	658.9
102	640
103	621.8
104	604.2
105	587.1
106	570.6
107	554.6
108	539.2
109	524.3
110	509.8
111	495.9
112	482.3
113	469.2
114	456.5
115	444.2
116	432.3
117	420.8
118	409.7
119	398.8
120	388.4
121	378.2
122	368.3
123	358.8
124	349.5
125	340.6

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ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ*
GA10K3MCD1	Micro BetaCHIP thermistor probe (MCD)	10,000	1,000

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

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