

MINI BETACURVE THERMISTOR PROBE (MBD)

SPECIFICATIONS

- NTC Temperature Sensor
- Fast time response
- Small tip diameter
- Various lead lengths available

NTC thermistor soldered to 30 AWG Solid Silver Plated Copper Wire with PVDF Insulation. Unit is potted in a polyimide tube with thermally conductive black epoxy.

FEATURES

- Rapid Time Constant
(400 milliseconds in liquids).
- Standards supplied with $\pm 0.2^{\circ}\text{C}$ tolerance
(0°C to 70°C).
- Custom tolerances available on request
- Temperature range -40°C to $+125^{\circ}\text{C}$

APPLICATIONS

- Reduced size allows localized temperature sensing
- Small Medical probes
- Micro-flow sensing

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PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Alpha Value @ 25°C	%/°C	4.04
Beta Value 25/85	K	3694
Tolerance on Beta Value 25/85	%	± 0.5
Time response in Liquids	milliseconds	400
Dissipation Constant in still air	mW/°C	0.5

MECHANICAL DETAILS

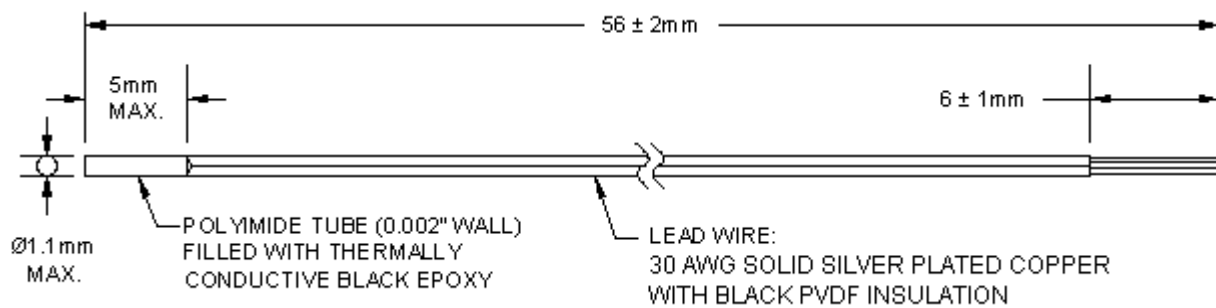


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

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RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms
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-40	239,828.4
-39	226,102.9
-38	213,242.6
-37	201,188.1
-36	189,884.7
-35	179,281.5
-34	169,331.4
-33	159,990.6
-32	151,218.6
-31	142,977.6
-30	135,232.8
-29	127,951.6
-28	121,103.8
-27	114,661.2
-26	108,597.9
-25	102,889.5
-24	97,513.2
-23	92,448.2
-22	87,674.6
-21	83,174.3
-20	78,930.1
-19	74,926.2
-18	71,147.7
-17	67,580.8
-16	64,212.4
-15	61,030.6
-14	58,024.0
-13	55,182.1
-12	52,495.1
-11	49,953.6
-10	47,549.2
-9	45,273.6
-8	43,119.3
-7	41,079.3
-6	39,146.9
-5	37,315.9
-4	35,580.5
-3	33,935.2
-2	32,374.8
-1	30,894.6
0	29,490.0
1	28,156.8

Temp °C	Ohms
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2	26,891.1
3	25,689.0
4	24,547.0
5	23,461.9
6	22,430.6
7	21,450.0
8	20,517.5
9	19,630.5
10	18,786.5
11	17,983.3
12	17,218.6
13	16,490.4
14	15,796.9
15	15,136.1
16	14,506.5
17	13,906.3
18	13,334.0
19	12,788.3
20	12,267.8
21	11,771.1
22	11,297.1
23	10,844.6
24	10,412.6
25	10,000.0
26	9,605.9
27	9,229.3
28	8,869.4
29	8,525.4
30	8,196.4
31	7,881.9
32	7,581.0
33	7,293.1
34	7,017.6
35	6,753.9
36	6,501.4
37	6,259.6
38	6,028.1
39	5,806.2
40	5,593.7
41	5,390.0
42	5,194.7
43	5,007.4

Temp °C	Ohms
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44	4,827.9
45	4,655.6
46	4,490.4
47	4,331.8
48	4,179.7
49	4,033.6
50	3,893.3
51	3,758.6
52	3,629.2
53	3,504.9
54	3,385.5
55	3,270.7
56	3,160.4
57	3,054.3
58	2,952.3
59	2,854.2
60	2,759.9
61	2,669.1
62	2,581.7
63	2,497.6
64	2,416.7
65	2,338.7
66	2,263.7
67	2,191.4
68	2,121.7
69	2,054.7
70	1,990.0
71	1,927.7
72	1,867.6
73	1,809.7
74	1,753.9
75	1,700.0
76	1,648.1
77	1,597.9
78	1,549.6
79	1,502.9
80	1,457.9
81	1,414.4
82	1,372.4
83	1,331.8
84	1,292.7
85	1,254.8

Temp °C	Ohms
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86	1,218.3
87	1,183.0
88	1,148.8
89	1,115.8
90	1,084.0
91	1,053.1
92	1,023.3
93	994.5
94	966.6
95	939.6
96	913.5
97	888.2
98	863.8
99	840.1
100	817.2
101	795.0
102	773.5
103	752.7
104	732.6
105	713.0
106	694.1
107	675.8
108	658.0
109	640.8
110	624.1
111	607.9
112	592.2
113	577.0
114	562.2
115	547.9
116	534.0
117	520.6
118	507.5
119	494.8
120	482.5
121	470.5
122	458.9
123	447.6
124	436.7
125	426.0

MINI BETACURVE THERMISTOR PROBE (MBD)

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K4MBD1	Mini BetaCurve Thermistor Probe (MBD)	10,000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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