

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	1,000,000
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Alpha Value @ 25°C	%/°C	5.18
Beta Value 25/85	K	4799
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

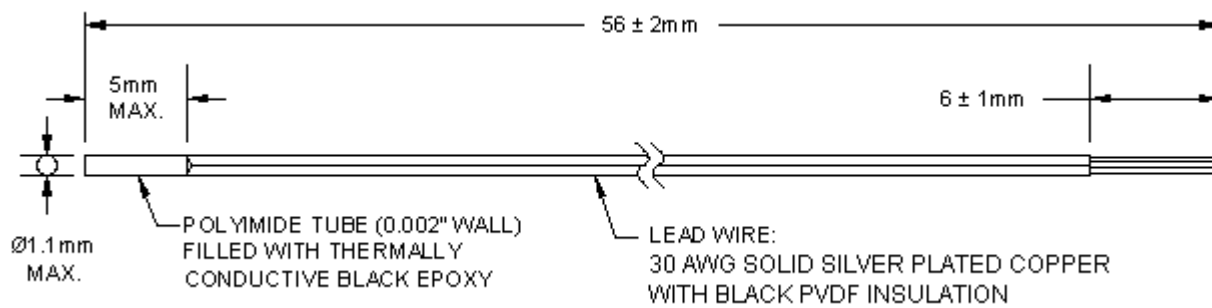


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

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RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms
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-40	54,555,844
-39	50,719,044
-38	47,171,884
-37	43,891,071
-36	40,855,298
-35	38,045,063
-34	35,442,506
-33	33,031,267
-32	30,796,351
-31	28,724,010
-30	26,801,629
-29	25,017,632
-28	23,361,392
-27	21,823,145
-26	20,393,918
-25	19,065,464
-24	17,830,197
-23	16,681,135
-22	15,611,853
-21	14,616,434
-20	13,689,426
-19	12,825,804
-18	12,020,936
-17	11,270,549
-16	10,570,699
-15	9,917,747
-14	9,308,331
-13	8,739,345
-12	8,207,919
-11	7,711,400
-10	7,247,334
-9	6,813,448
-8	6,407,643
-7	6,027,970
-6	5,672,628
-5	5,339,946
-4	5,028,376
-3	4,736,480
-2	4,462,929
-1	4,206,484
0	3,966,000
1	3,740,410

Temp °C	Ohms
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2	3,528,726
3	3,330,027
4	3,143,458
5	2,968,224
6	2,803,587
7	2,648,858
8	2,503,396
9	2,366,605
10	2,237,931
11	2,116,855
12	2,002,895
13	1,895,601
14	1,794,555
15	1,699,364
16	1,609,665
17	1,525,115
18	1,445,398
19	1,370,215
20	1,299,289
21	1,232,361
22	1,169,188
23	1,109,542
24	1,053,213
25	1,000,000
26	949,719
27	902,194
28	857,264
29	814,775
30	774,585
31	736,559
32	700,571
33	666,504
34	634,247
35	603,695
36	574,753
37	547,328
38	521,333
39	496,690
40	473,321
41	451,156
42	430,127
43	410,171

Temp °C	Ohms
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44	391,230
45	373,247
46	356,170
47	339,949
48	324,539
49	309,895
50	295,976
51	282,743
52	270,159
53	258,191
54	246,805
55	235,970
56	225,658
57	215,842
58	206,495
59	197,593
60	189,114
61	181,035
62	173,335
63	165,997
64	159,000
65	152,329
66	145,965
67	139,895
68	134,103
69	128,576
70	123,300
71	118,263
72	113,453
73	108,859
74	104,470
75	100,277
76	96,270
77	92,440
78	88,778
79	85,277
80	81,928
81	78,725
82	75,661
83	72,728
84	69,922
85	67,235

Temp °C	Ohms
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86	64,663
87	62,200
88	59,841
89	57,581
90	55,416
91	53,341
92	51,352
93	49,446
94	47,618
95	45,865
96	44,184
97	42,572
98	41,025
99	39,540
100	38,115
101	36,748
102	35,434
103	34,174
104	32,963
105	31,800
106	30,682
107	29,609
108	28,577
109	27,585
110	26,632
111	25,716
112	24,834
113	23,987
114	23,172
115	22,387
116	21,633
117	20,907
118	20,208
119	19,535
120	18,887
121	18,263
122	17,663
123	17,084
124	16,527
125	15,990

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ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
1M9MBD1	Mini BetaCurve Thermistor Probe (MBD)	1,000,000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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