

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
Nominal Resistance at +25°C	Ohms	2252
Resistance tolerance from 0°C to +70°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	400
Dissipation Constant in still air	mW/°C	0.5

MECHANICAL DETAILS

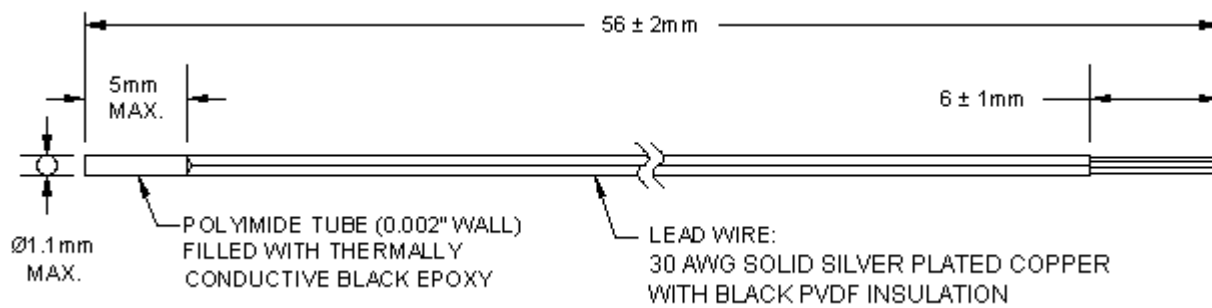


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

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RESISTANCE V TEMPERATURE TABLE

Temp.°C	Ohms
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-40	75491
-39	70663
-38	66173
-37	61996
-36	58109
-35	54489
-34	51118
-33	47975
-32	45045
-31	42312
-30	39761
-29	37380
-28	35156
-27	33077
-26	31134
-25	29317
-24	27617
-23	26026
-22	24536
-21	23140
-20	21832
-19	20606
-18	19456
-17	18377
-16	17364
-15	16413
-14	15520
-13	14681
-12	13892
-11	13150
-10	12452
-9	11795
-8	11177
-7	10595
-6	10046
-5	9529
-4	9042
-3	8582
-2	8148
-1	7739
0	7353

Temp.°C	Ohms
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1	6988
2	6644
3	6318
4	6010
5	5719
6	5444
7	5183
8	4937
9	4703
10	4482
11	4273
12	4075
13	3886
14	3708
15	3539
16	3378
17	3226
18	3081
19	2944
20	2814
21	2690
22	2572
23	2460
24	2353
25	2252
26	2156
27	2064
28	1977
29	1893
30	1814
31	1739
32	1667
33	1598
34	1533
35	1471
36	1411
37	1354
38	1300
39	1248
40	1199
41	1152

Temp.°C	Ohms
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42	1107
43	1064
44	1023
45	983
46	946
47	910
48	875
49	842
50	811
51	781
52	752
53	724
54	698
55	672
56	648
57	624
58	602
59	581
60	560
61	540
62	521
63	503
64	486
65	469
66	453
67	437
68	422
69	408
70	394
71	381
72	369
73	356
74	345
75	333
76	322
77	312
78	302
79	292
80	283
81	274
82	265

Temp.°C	Ohms
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83	257
84	249
85	241
86	234
87	226
88	220
89	213
90	206
91	200
92	194
93	188
94	183
95	177
96	172
97	167
98	162
99	157
100	153
101	149
102	144
103	140
104	136
105	132
106	129
107	125
108	122
109	118
110	115
111	112
112	109
113	106
114	103
115	100
116	98
117	95
118	92
119	90
120	88
121	85
122	83
123	81
124	79
125	77

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ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
2.2K3MBD1	Mini BetaCurve Thermistor Probe (MBD)	2252	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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