

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 value at +25°C	Ohms	30000
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Alpha Value at +25°C	%/°C	4.30
Beta Value 25/85	K	3942
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

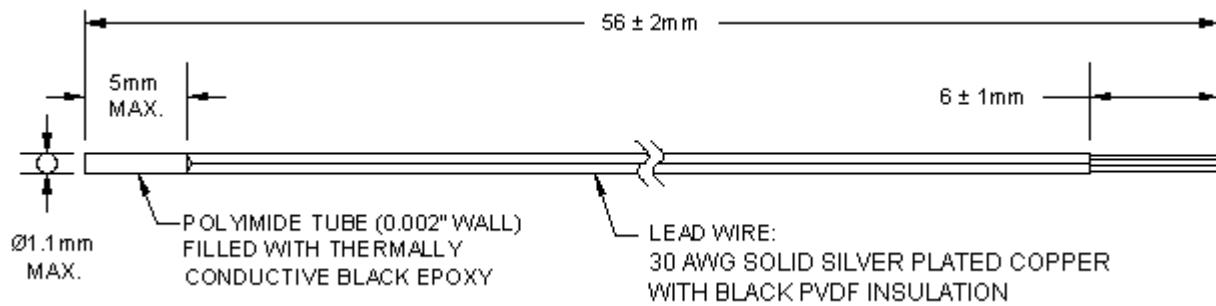


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

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RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms
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-40	884,198
-39	830,463
-38	780,301
-37	733,457
-36	689,693
-35	648,790
-34	610,546
-33	574,773
-32	541,299
-31	509,964
-30	480,620
-29	453,130
-28	427,367
-27	403,213
-26	380,560
-25	359,305
-24	339,357
-23	320,627
-22	303,035
-21	286,506
-20	270,969
-19	256,362
-18	242,622
-17	229,694
-16	217,526
-15	206,069
-14	195,278
-13	185,111
-12	175,529
-11	166,495
-10	157,975
-9	149,937
-8	142,352
-7	135,191
-6	128,429
-5	122,041
-4	116,006
-3	110,301
-2	104,907
-1	99,806
0	94,980
1	90,413

Temp °C	Ohms
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2	86,090
3	81,996
4	78,119
5	74,445
6	70,964
7	67,663
8	64,534
9	61,565
10	58,749
11	56,076
12	53,539
13	51,129
14	48,841
15	46,667
16	44,601
17	42,637
18	40,769
19	38,993
20	37,303
21	35,696
22	34,166
23	32,709
24	31,321
25	30,000
26	28,741
27	27,541
28	26,398
29	25,307
30	24,268
31	23,276
32	22,329
33	21,426
34	20,564
35	19,741
36	18,955
37	18,204
38	17,487
39	16,801
40	16,146
41	15,519
42	14,920
43	14,347

Temp °C	Ohms
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44	13,799
45	13,274
46	12,772
47	12,292
48	11,831
49	11,391
50	10,968
51	10,564
52	10,176
53	9,805
54	9,449
55	9,107
56	8,780
57	8,466
58	8,164
59	7,875
60	7,597
61	7,331
62	7,075
63	6,829
64	6,593
65	6,366
66	6,148
67	5,939
68	5,738
69	5,544
70	5,358
71	5,179
72	5,007
73	4,841
74	4,682
75	4,528
76	4,381
77	4,239
78	4,102
79	3,970
80	3,843
81	3,721
82	3,603
83	3,489
84	3,380
85	3,274

Temp °C	Ohms
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86	3,172
87	3,074
88	2,979
89	2,888
90	2,800
91	2,715
92	2,633
93	2,554
94	2,477
95	2,403
96	2,332
97	2,263
98	2,197
99	2,132
100	2,070
101	2,010
102	1,952
103	1,896
104	1,842
105	1,789
106	1,739
107	1,690
108	1,642
109	1,596
110	1,552
111	1,509
112	1,467
113	1,427
114	1,388
115	1,350
116	1,314
117	1,278
118	1,244
119	1,211
120	1,178
121	1,147
122	1,117
123	1,087
124	1,059
125	1,031

MINI BETACURVE THERMISTOR PROBE (MBD)

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
30K5MBD1	Mini BetaCurve Thermistor Probe (MBD)	30000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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