

## 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  
( $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ ).
- Custom tolerances available on request
- Temperature range  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### APPLICATIONS

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

## MINI BETACURVE THERMISTOR PROBE (MBD)

### PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	50,000
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Alpha Value @ 25°C	%/°C	4.68
Beta Value 25/85	K	4261
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

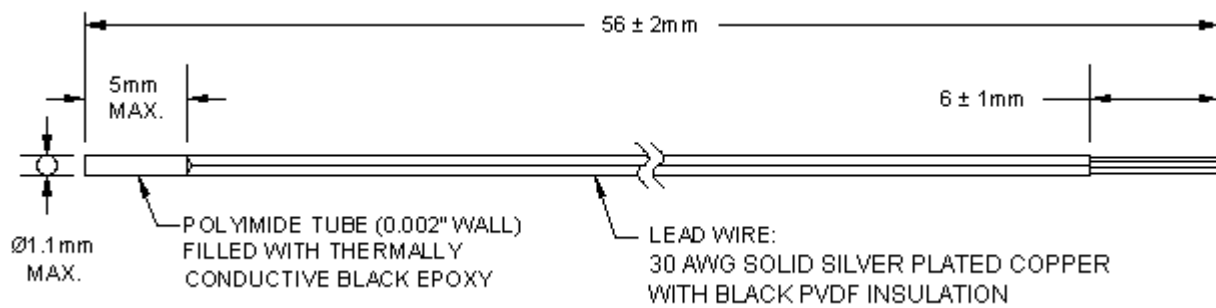


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

## MINI BETACURVE THERMISTOR PROBE (MBD)

### RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms
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-40	2,033,641
-39	1,897,702
-38	1,771,656
-37	1,654,729
-36	1,546,208
-35	1,445,445
-34	1,351,841
-33	1,264,847
-32	1,183,962
-31	1,108,722
-30	1,038,702
-29	973,512
-28	912,792
-27	856,212
-26	803,466
-25	754,274
-24	708,378
-23	665,538
-22	625,535
-21	588,165
-20	553,242
-19	520,592
-18	490,054
-17	461,482
-16	434,737
-15	409,694
-14	386,235
-13	364,251
-12	343,643
-11	324,316
-10	306,184
-9	289,168
-8	273,192
-7	258,188
-6	244,092
-5	230,843
-4	218,387
-3	206,672
-2	195,650
-1	185,276
0	175,510
1	166,312

Temp °C	Ohms
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2	157,646
3	149,480
4	141,781
5	134,520
6	127,671
7	121,207
8	115,106
9	109,345
10	103,903
11	98,761
12	93,902
13	89,307
14	84,962
15	80,852
16	76,962
17	73,280
18	69,794
19	66,493
20	63,364
21	60,400
22	57,590
23	54,925
24	52,398
25	50,000
26	47,724
27	45,564
28	43,513
29	41,565
30	39,715
31	37,956
32	36,284
33	34,694
34	33,183
35	31,745
36	30,376
37	29,074
38	27,834
39	26,654
40	25,529
41	24,458
42	23,437
43	22,463

Temp °C	Ohms
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44	21,536
45	20,651
46	19,807
47	19,001
48	18,233
49	17,499
50	16,799
51	16,130
52	15,491
53	14,881
54	14,297
55	13,740
56	13,207
57	12,697
58	12,209
59	11,743
60	11,297
61	10,869
62	10,460
63	10,069
64	9,694
65	9,335
66	8,991
67	8,661
68	8,345
69	8,042
70	7,751
71	7,472
72	7,205
73	6,949
74	6,702
75	6,466
76	6,239
77	6,022
78	5,813
79	5,612
80	5,419
81	5,233
82	5,055
83	4,884
84	4,719
85	4,561

Temp °C	Ohms
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86	4,408
87	4,262
88	4,121
89	3,985
90	3,855
91	3,729
92	3,608
93	3,492
94	3,379
95	3,271
96	3,167
97	3,067
98	2,970
99	2,877
100	2,787
101	2,701
102	2,617
103	2,536
104	2,459
105	2,384
106	2,311
107	2,241
108	2,174
109	2,109
110	2,046
111	1,985
112	1,927
113	1,870
114	1,815
115	1,763
116	1,711
117	1,662
118	1,614
119	1,568
120	1,523
121	1,480
122	1,439
123	1,398
124	1,359
125	1,321

## MINI BETACURVE THERMISTOR PROBE (MBD)

### ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
50K6MBD1	Mini BetaCurve Thermistor Probe (MBD)	50,000	1000 *

\* For quantities less than Minimum Order Quantity – contact distribution

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