

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	30,000
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

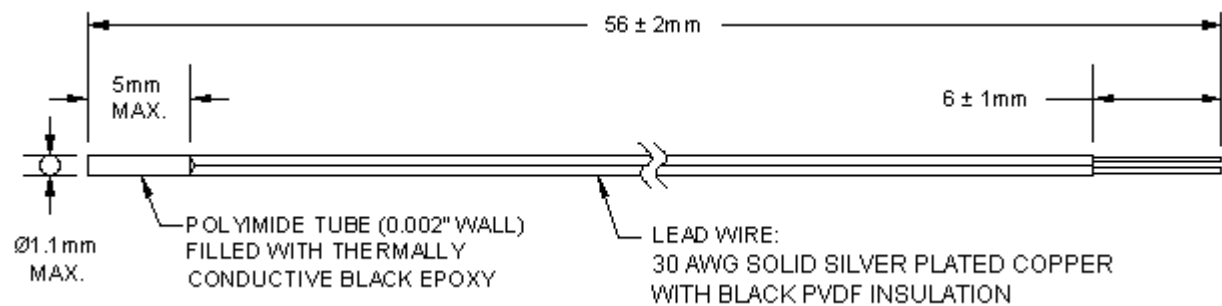


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms
-40	1,219,175	2	94,588	44	12,921	86	2,645
-39	1,137,733	3	89,689	45	12,390	87	2,557
-38	1,062,212	4	85,069	46	11,884	88	2,473
-37	992,149	5	80,713	47	11,400	89	2,392
-36	927,120	6	76,603	48	10,939	90	2,313
-35	866,736	7	72,725	49	10,499	91	2,238
-34	810,638	8	69,065	50	10,079	92	2,165
-33	758,499	9	65,608	51	9,678	93	2,095
-32	710,019	10	62,343	52	9,294	94	2,028
-31	664,919	11	59,258	53	8,928	95	1,963
-30	622,947	12	56,342	54	8,578	96	1,901
-29	583,867	13	53,585	55	8,244	97	1,841
-28	547,466	14	50,978	56	7,924	98	1,783
-27	513,545	15	48,512	57	7,618	99	1,727
-26	481,921	16	46,178	58	7,325	100	1,673
-25	452,427	17	43,969	59	7,046	101	1,621
-24	424,907	18	41,877	60	6,778	102	1,571
-23	399,219	19	39,896	61	6,521	103	1,522
-22	375,231	20	38,019	62	6,276	104	1,476
-21	352,822	21	36,240	63	6,041	105	1,431
-20	331,879	22	34,554	64	5,816	106	1,387
-19	312,298	23	32,955	65	5,601	107	1,345
-18	293,984	24	31,439	66	5,394	108	1,305
-17	276,847	25	30,000	67	5,196	109	1,266
-16	260,807	26	28,635	68	5,007	110	1,228
-15	245,786	27	27,339	69	4,825	111	1,192
-14	231,716	28	26,108	70	4,651	112	1,157
-13	218,530	29	24,939	71	4,483	113	1,123
-12	206,168	30	23,828	72	4,323	114	1,090
-11	194,575	31	22,773	73	4,169	115	1,058
-10	183,699	32	21,770	74	4,022	116	1,027
-9	173,491	33	20,816	75	3,880	117	998
-8	163,908	34	19,909	76	3,744	118	969
-7	154,907	35	19,046	77	3,613	119	941
-6	146,450	36	18,225	78	3,488	120	915
-5	138,502	37	17,444	79	3,367	121	889
-4	131,030	38	16,700	80	3,251	122	864
-3	124,001	39	15,992	81	3,140	123	839
-2	117,389	40	15,317	82	3,033	124	816
-1	111,165	41	14,674	83	2,931	125	793
0	105,306	42	14,062	84	2,832		
1	99,788	43	13,478	85	2,737		

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ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
30K6MBD1	Mini BetaCurve Thermistor Probe (MBD)	30,000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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