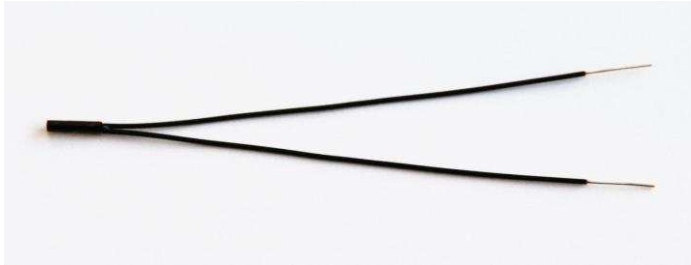


Mini BetaCURVE Thermistor Probe (MBD)



- NTC Temperature Sensor
- Fast time response
- Small tip diameter
- Various lead lengths available

DESCRIPTION

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

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25^\circ\text{C}$	Ohms	30,000
Resistance tolerance from 0°C to $+70^\circ\text{C}$	$^\circ\text{C}$	± 0.2
Alpha Value @ 25°C	$\%/^\circ\text{C}$	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	$\text{mW}/^\circ\text{C}$	0.5

Mini BetaCURVE Thermistor Probe (MBD)

MECHANICAL DETAILS

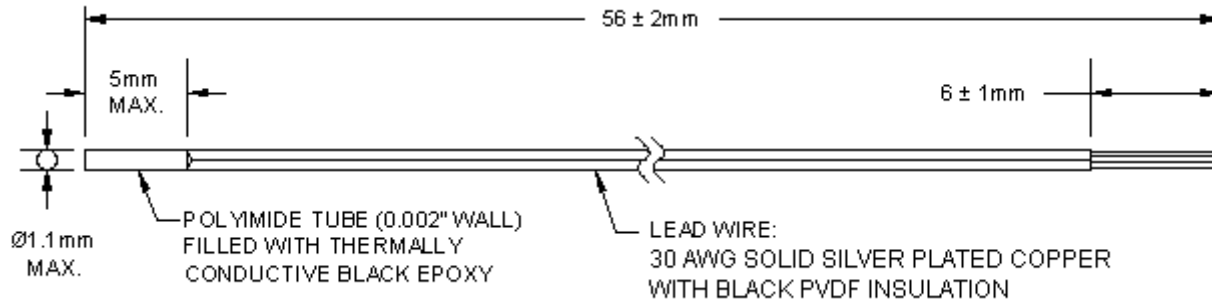


Figure 1: Mini BetaCURVE Thermistor Probe (MBD)

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms
-40	1,219,175	-12	206,168	16	46,178	44	12,921
-39	1,137,733	-11	194,575	17	43,969	45	12,390
-38	1,062,212	-10	183,699	18	41,877	46	11,884
-37	992,149	-9	173,491	19	39,896	47	11,400
-36	927,120	-8	163,908	20	38,019	48	10,939
-35	866,736	-7	154,907	21	36,240	49	10,499
-34	810,638	-6	146,450	22	34,554	50	10,079
-33	758,499	-5	138,502	23	32,955	51	9,678
-32	710,019	-4	131,030	24	31,439	52	9,294
-31	664,919	-3	124,001	25	30,000	53	8,928
-30	622,947	-2	117,389	26	28,635	54	8,578
-29	583,867	-1	111,165	27	27,339	55	8,244
-28	547,466	0	105,306	28	26,108	56	7,924
-27	513,545	1	99,788	29	24,939	57	7,618
-26	481,921	2	94,588	30	23,828	58	7,325
-25	452,427	3	89,689	31	22,773	59	7,046
-24	424,907	4	85,069	32	21,770	60	6,778
-23	399,219	5	80,713	33	20,816	61	6,521
-22	375,231	6	76,603	34	19,909	62	6,276
-21	352,822	7	72,725	35	19,046	63	6,041
-20	331,879	8	69,065	36	18,225	64	5,816
-19	312,298	9	65,608	37	17,444	65	5,601
-18	293,984	10	62,343	38	16,700	66	5,394
-17	276,847	11	59,258	39	15,992	67	5,196
-16	260,807	12	56,342	40	15,317	68	5,007
-15	245,786	13	53,585	41	14,674	69	4,825
-14	231,716	14	50,978	42	14,062	70	4,651
-13	218,530	15	48,512	43	13,478	71	4,483

Mini BetaCURVE Thermistor Probe (MBD)

72	4,323	86	2,645	100	1,673	114	1,090
73	4,169	87	2,557	101	1,621	115	1,058
74	4,022	88	2,473	102	1,571	116	1,027
75	3,880	89	2,392	103	1,522	117	998
76	3,744	90	2,313	104	1,476	118	969
77	3,613	91	2,238	105	1,431	119	941
78	3,488	92	2,165	106	1,387	120	915
79	3,367	93	2,095	107	1,345	121	889
80	3,251	94	2,028	108	1,305	122	864
81	3,140	95	1,963	109	1,266	123	839
82	3,033	96	1,901	110	1,228	124	816
83	2,931	97	1,841	111	1,192	125	793
84	2,832	98	1,783	112	1,157		
85	2,737	99	1,727	113	1,123		

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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