RoHS

GLASS BEAD FAST TIME RESPONSE PROBE

SPECIFICATIONS

- **NTC Temperature Sensor**
- **Rapid time response**
- **Small bead diameter (Ø0.38mm Max)**
- **Selection of resistance values and Resistance/Temperature characteristics available**
- **Various lead types and lengths available**
- **Custom designs available**

Hermetically sealed glass-encapsulated thermistor welded to 40 AWG Solid Nickel leads with Polyester Type Insulation. Unit potted in polyimide tube using Epoxy Resin. The glass encapsulated thermistor bead extends from tube. Probe supplied on small spools with calibration data at +37 ºC.

FEATURES

Rapid Time Constant
(30 milliseconds in liquids).
Selection of resistance values and
Resistance/Temperature characteristics available
0.3 mW/°C typ. Dissipation Constant
in air at 25°C.
Smaller than mini-BetaCURVE device.
Temperature range 0ºC to +70ºC

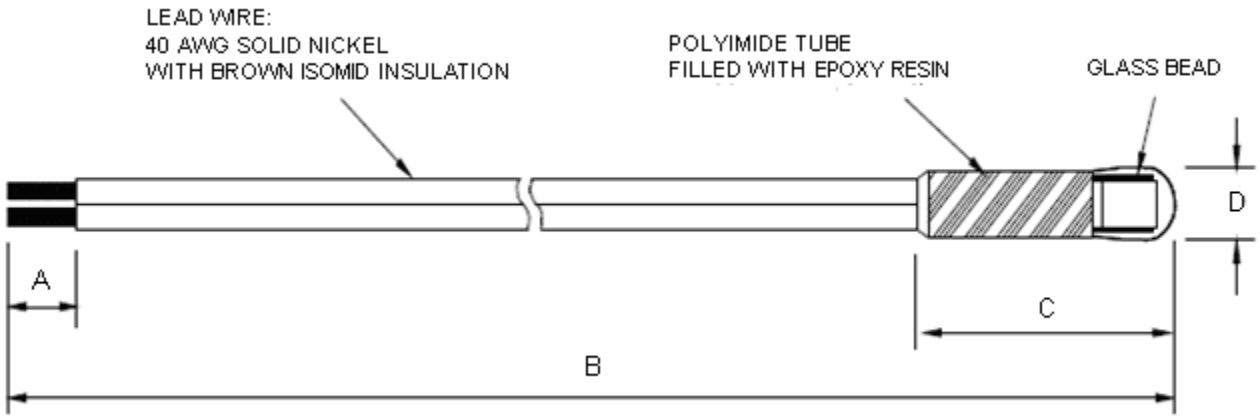
APPLICATIONS

Incorporation in catheters
Insertion in hypodermic needles
Insertion in small housings for instrumentation or
medical applications
Use in situation where fast time response is critical.
Temperature control for bath showers.
DNA research sensors.

PERFORMANCE SPECS

Parameters	**Units**	**Value**
Resistance @ +25°C	Ohms	22,000
Resistance @ +37°C	Ohms	14,004
Resistance tolerance @ 37°C	%	± 15
Alpha Value @ 25°C	%/°C	- 3.87
Beta Value 25/85	K	3499
Time response in Liquids	milliseconds	30
Dissipation Constant in still air	mW/°C	0.3

MECHANICAL DETAILS



Dimension			
A	B	C	D
6.35 ± 1mm	1830 ± 50mm	1.75mm Typical	Ø 0.38mm Max

Figure 1: Glass Bead Fast Time Response Probe

RESISTANCE V TEMPERATURE TABLE

Temp. ºC	Ohms	Temp. ºC	Ohms	Temp. ºC	Ohms	Temp. ºC	Ohms
0	62,150	18	28,973	36	14,590	54	7,852
1	59,437	19	27,836	37	14,004	55	7,599
2	56,858	20	26,750	38	13,577	56	7,357
3	54,406	21	25,713	39	13,101	57	7,123
4	52,074	22	24,721	40	12,645	58	6,897
5	49,855	23	23,773	41	12,206	59	6,680
6	47,743	24	22,867	42	11,786	60	6,471
7	45,733	**25**	**22,000**	43	11,382	61	6,270
8	43,819	26	21,171	44	10,994	62	6,076
9	41,995	27	20,377	45	10,621	63	5,889
10	40,258	28	19,618	46	10,263	64	5,708
11	38,603	29	18,891	47	9,918	65	5,534
12	37,025	30	18,195	48	9,588	66	5,366
13	35,521	31	17,528	49	9,269	67	5,204
14	34,086	32	16,890	50	8,964	68	5,048
15	32,717	33	16,278	51	8,669	69	4,897
16	31,410	34	15,691	52	8,386	70	4,752
17	30,163	35	15,129	53	8,114		

ORDERING INFORMATION

Part Number	Description	Ω @25ºC	MOQ
G22K7MCD419	Glass Bead Fast Time response Probe	22,000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

NORTH AMERICA

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