





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 °C.

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 0°C to +70°C

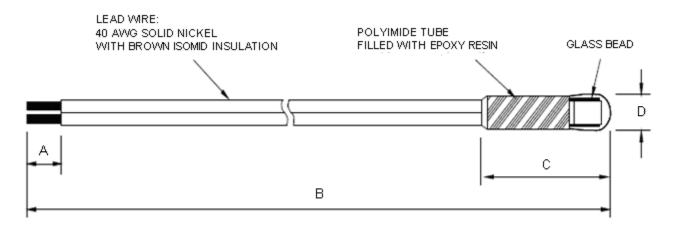
APPLICATIONS

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 | К | 3499 | |
| Time response in Liquids | milliseconds | 30 | |
| Dissipation Constant in still air | mW/°C | 0.3 | |

MECHANICAL DETAILS



| Dimension | | | |
|------------|-------------|----------------|--------------|
| A | В | С | D |
| 6.35 ± 1mm | 1830 ± 50mm | 1.75mm Typical | Ø 0.38mm Max |

Figure 1: Glass Bead Fast Time Response Probe

| Temp. °C | Ohms | | Temp. °C | Ohms |
|----------|--------|---|----------|--------|
| | | - | | |
| 0 | 62,150 | | 18 | 28,973 |
| 1 | 59,437 | | 19 | 27,836 |
| 2 | 56,858 | | 20 | 26,750 |
| 3 | 54,406 | | 21 | 25,713 |
| 4 | 52,074 | | 22 | 24,721 |
| 5 | 49,855 | | 23 | 23,773 |
| 6 | 47,743 | | 24 | 22,867 |
| 7 | 45,733 | | 25 | 22,000 |
| 8 | 43,819 | | 26 | 21,171 |
| 9 | 41,995 | | 27 | 20,377 |
| 10 | 40,258 | | 28 | 19,618 |
| 11 | 38,603 | | 29 | 18,891 |
| 12 | 37,025 | | 30 | 18,195 |
| 13 | 35,521 | | 31 | 17,528 |
| 14 | 34,086 | | 32 | 16,890 |
| 15 | 32,717 | | 33 | 16,278 |
| 16 | 31,410 | | 34 | 15,691 |
| 17 | 30,163 | | 35 | 15,129 |

RESISTANCE V TEMPERATURE TABLE

| · • … p. • | • |
|------------|--------|
| | |
| 36 | 14,590 |
| 37 | 14,004 |
| 38 | 13,577 |
| 39 | 13,101 |
| 40 | 12,645 |
| 41 | 12,206 |
| 42 | 11,786 |
| 43 | 11,382 |
| 44 | 10,994 |
| 45 | 10,621 |
| 46 | 10,263 |
| 47 | 9,918 |
| 48 | 9,588 |
| 49 | 9,269 |
| 50 | 8,964 |
| 51 | 8,669 |
| 52 | 8,386 |
| | |

53

Temp. °C Ohms

| Temp. °C | Ohms |
|----------|-------|
| | |
| 54 | 7,852 |
| 55 | 7,599 |
| 56 | 7,357 |
| 57 | 7,123 |
| 58 | 6,897 |
| 59 | 6,680 |
| 60 | 6,471 |
| 61 | 6,270 |
| 62 | 6,076 |
| 63 | 5,889 |
| 64 | 5,708 |
| 65 | 5,534 |
| 66 | 5,366 |
| 67 | 5,204 |
| 68 | 5,048 |
| 69 | 4,897 |
| 70 | 4,752 |

ORDERING INFORMATION

| Part Number | Description | Ω @25°C | MOQ |
|-------------|-------------------------------------|---------|--------|
| G22K7MCD419 | Glass Bead Fast Time response Probe | 22,000 | 1000 * |

* For quantities less than Minimum Order Quantity - contact distribution

NORTH AMERICA

Measurement Specialties, Inc., a TE Connectivity Company 910 Turnpike Road Shrewsbury, MA 01545 Tel: 1-508-842-0516 Fax: 1-508-842-0342 Sales: temperature.cs.amer@meas-spec.com

EUROPE

Measurement Specialties (Europe), Ltd., a TE Connectivity Company Ballybrit Business Park Galway Ireland Tel: +353-91-753238 Fax: +353-91-770789 Sales: temperature.cs.emea@meas-spec.com

ASIA

8,114

Measurement Specialties (China), Ltd., a TE Connectivity Company No. 26 Langshan Road Shenzhen High-Tech Park (North) Nanshan District, Shenzhen 518057 China Sales: temperature.cs.asia@meas-spec.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity: GAG22K7MCD419