

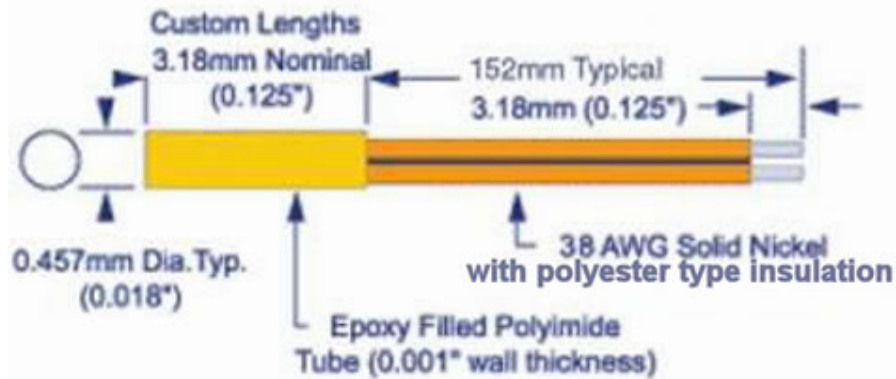
Micro-BetaCHIP Probe (MCD)

Introduction



The Micro-BetaCHIP probe (MCD) is BetaTHERM's smallest packaged thermistor device. The probe is produced for applications that require rapid temperature response and applications where space is very limited. The probes are extremely small (0.457mm dia.) and fragile. The sensor is potted in a polyimide tube with epoxy. Adequate moisture protection should be provided when using the device in high humidity applications. The size of the micro-BetaCHIP thermistors allows it to be installed in 20 AWG (0.914mm dia.) thin wall hypodermic tubing. Custom probe assemblies protect the thermistor element from high humidity and mechanical shock. The small mass of the unit allows the sensor to respond very rapidly to temperature changes. This makes the micro-BetaCHIP thermistor suitable for low volume gas or liquid flow sensing. The probes are also small enough to be mounted inside Medical catheters.

Shape and Dimensions



Features

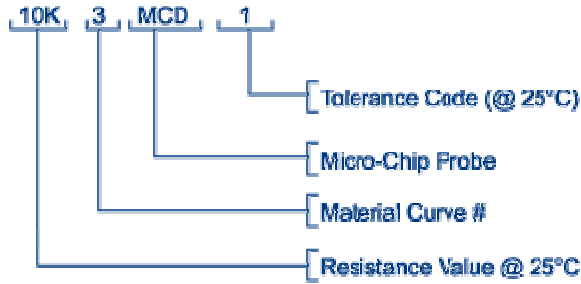
- Rapid Time Constant (200 milliseconds in liquids).
- Custom tolerances available.
- 0.3 mW/°C typ. Dissipation Constant in air at 25°C.
- Smaller than our mini-BetaCURVE device.

Applications

- Low volume flow sensors (liquids or gases).
- Laboratory animal research.
- Peltiere (thermal cooler) temperature tracking sensors.
- Temperature control for bath showers.
- DNA research sensors.
- Medical catheters.



Part Numbering System



Electrical Specifications

Part Number	Resistance @ 25°C (ohms)	Temperature Tolerance	Alpha @25 °C	0/50°C Beta Value	Curve #
<u>2K7MCD1</u>	2000	±0.2 °C @ 25 °C	-3.87%	3422	<u>7</u>
<u>10K3MCD1</u>	10000	±0.2 °C @ 25 °C	-4.39%	3892	<u>3</u>
<u>100K6MCD1</u>	100000	±0.2 °C @ 25 °C	-4.68%	4143	<u>6</u>

For details on the minimum order quantity (MOQ) of this product, please contact BetaTHERM Sensors or your local BetaTHERM Sensors representative