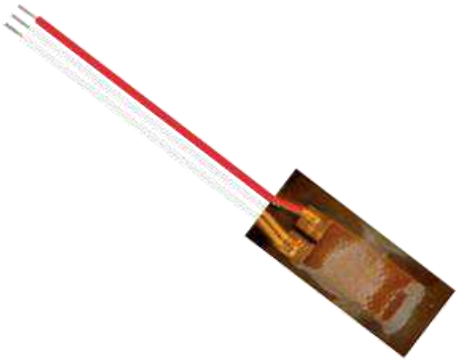
Configure-To-Order



MODEL 321M

POLYIMIDE/ACRYLIC SURFACE RTD SENSOR

Temperature Sensor

- Fast Response
- Surface Sensing
- Noninvasive, Simple Installation
- Flat and Flexible

The Polyimide Surface RTD Sensor is a flat, flexible, rectangular sensor with a sensing element laminated in Polyimide. They are used to monitor or measure temperature on round or uneven surfaces. For motor and generator applications, they are commonly used in the end turns of the windings.

Features

- Temperature Range:
  - » -50° to 155°C (-58° to 311°F)
- Elements:
  - » Platinum
  - » Style: Plotted
- Optional Adhesive Backing

Applications

- Industrial
- Electric Motors
- Generators
- HVACR
- Aerospace & Defense

Performance Specifications

Time Constant:
0.85 second maximum for 63.2% response
to change in temperature per ASTM E644

Repeatability:
Less than ± .06% change in ice point resistance after
10 consecutive cycles between ice point and 155°C

Long Term Stability:
Less than ± .2% ice point resistance
shift after 1000 hours at 155°C

Self-Heating:
10 mW/C in water moving 3 feet/sec

Dielectric Strength:
1,000 Volts RMS at 60 Hz, for one minute, element
to outer surfaces, with 1 mA leakage current

Insulation Material:
Polyimide with Acrylic Binders

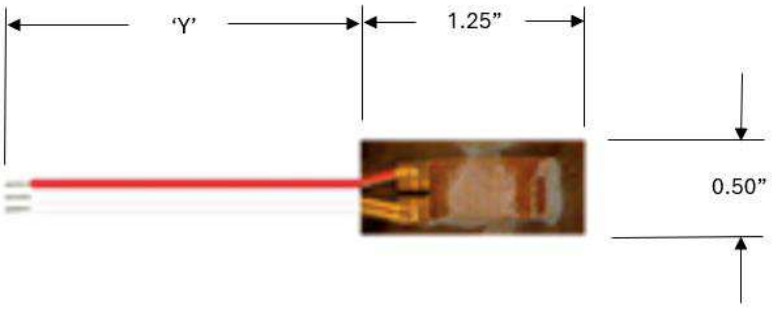
Element Style:
Plotted Element

Leadwire Type:
Teflon Insulated, 26AWG, Stranded, Silver Plated Copper

Application Temperature Range:
Plotted Element: -50 to 155°C (-58 to 311°F)

	RTD TEMPERATURE ACCURACY SPECIFICATIONS:			
Element Material	TCR	Standard Tolerances		
		±.12%	±.2%	±.5%
Platinum	0.00385	0.30°C, .12Ω	N/A	1.20°C, 0.46Ω
Platinum	0.00392	N/A	N/A	1.20°C, 0.46Ω

Dimensions



THICKNESS = 0.055"

Configuration Model Number

321M –__ – __ – __ – __

Element / Accuracy

P2B	Platinum 100 Ohm ±0.12% at 0°C Temp Coefficient: .00385
P2C	Platinum 100 Ohm ±0.5% at 0°C Temp Coefficient: .00385
G2C	Platinum 100 Ohm ±0.5% at 0°C Temp Coefficient: .00392

Lead Wires / Element Configuration

2S	2 Wire Single (Red/White)
3S	3 Wire Single (Red/White/White)
4S	4 Wire Single (Red/Red/White/White)

Mounting Option

A	No PSA Backing
B	Include PSA Backing

Lead Wire Length 'Y'

###	Define Length in Whole Inches Note: Minimum 6" / Maximum 120" Example: (6" = 006; 96" = 096)