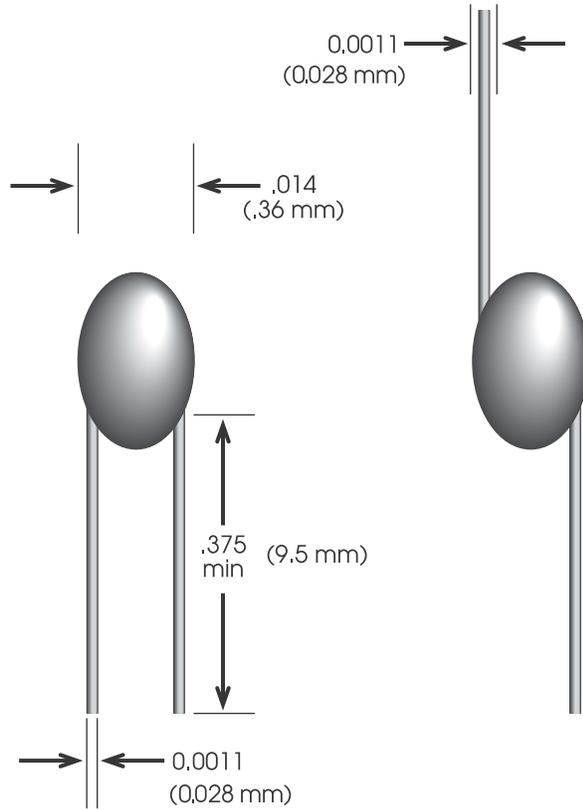


Sensor Scientific, Inc.

SMALL BEAD THERMISTORS



FEATURES:

- Superior Stability
- Very Fast Response Time
- Low Thermal Mass

OPTIONS:

- Custom Lead Lengths
- Non-Standard Resistance Tolerances
- Precision Calibration At Multiple Temperatures
- Custom Value-Added Assembly Options

SPECIFICATIONS

- Operating Temperature Range: -40°C to 300°C.
- Standard Resistance Tolerance: ±25%
- Time Constant: 1 Sec. Typ. In Still Air
- Dissipation Constant: 0.1mW/°C In Still Air

Sensor Scientific small bead thermistors offer the advantages of small size and mass, very fast thermal response time, extreme sensitivity to current and voltage changes, and high stability. Typical applications include thermodilution cardiac catheters and other biomedical assemblies, fluid flow and fluid level measurement, thermal conductivity measurement, gas analysis, and small surface area temperature measurement.

Recommended Storage Conditions:

- Temperature 10-30 C, Humidity less than 60% RH (without dewing)
- After unpacking, reseal and/or store product in a dry environment
- Do not store near corrosive materials or direct sunlight

SMALL BEAD THERMISTORS

MECHANICAL AND THERMAL PROPERTIES

BODY DIMENSIONS		
Diameter, nominal	inches	0.014
	mm	0.36
Length, nominal	inches	0.02
	mm	0.5
LEAD WIRES		
Material: Platinum Alloy		
Diameter, nominal	inches	0.0011
	mm	0.028
Length, minimum	inches	0.375
	mm	9.5
THERMAL PROPERTIES		
Time constant, still air	sec.	1
Dissipation constant, still air	mW/°C	0.1

Call us toll-free at 800-524-1610 (in the US) – or check us out on the web at www.sensorsci.com

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 eMail: sales@sensorsci.com • web: www.sensorsci.com

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RESISTANCE RATIO TABLE

Resistance at 25 Deg. C. ¹	Beta ₂₅₋₁₂₅	R ₂₅ /R ₁₂₅	α at 25 Deg. C. ²	Part Number ³	
ohms	Deg. Kelvin	Ratio	%/°C	Adjacent Leads	Opposite Leads
1000	3000	12.5	-3.33%	S14A10225	S14B10225
2500	3090	13.5	-3.48%	S14A25225	S14B25225
5000	3385	17.3	-3.71%	S14A50225	S14B50225
10000	3550	19.8	-3.88%	S14A10325	S14B10325
25000	3550	19.8	-3.88%	S14A25325	S14B25325
50000	3690	22.4	-4.04%	S14A50325	S14B50325
100000	4015	29.4	-4.40%	S14A10425	S14B10425

Note 1: The listed resistance values are a representative sample only. Other resistance values are available upon request.

Note 2: Alpha values are for reference only. Actual values are dependent upon specific resistance at 25 Deg. C.

Note 3: The listed part numbers indicate the standard resistance tolerance of $\pm 25\%$ at 25 Deg. C. To specify a different tolerance, replace the "25" characters at the end of the part number with "10" for "10%", etc.

PART NUMBER SPECIFICATION:

To specify a part number, the following sequence should be used:

S14A10325 specifies a small bead thermistor with adjacent leads, 10000 ohms at 25 Deg. C., with a resistance tolerance of $\pm 25\%$.

- **S14A10325** indicates small bead thermistor, .014" (0.36mm) nominal diameter
- **S14A10325** indicates lead configuration A: Adjacent leads B: Opposite leads
- **S14A 10325** indicates zero power resistance at 25°C. The first two digits indicate significant figures, and the last digit indicates the number of zeros following the significant figures. In this example, "103" represents 10000 ohms.
- **S14A103 25** indicates the resistance tolerance at 25°C, expressed in $\pm\%$. In this example, "25" indicates the standard tolerance of $\pm 25\%$. Other typical tolerances include $\pm 10\%$, 15%, 20%, and 30%. Non-standard tolerances available upon request