

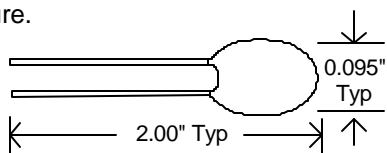
THERMISTORS

Standard Interchangeable & Point-Matched Series



Interchangeable thermistors have tight tolerances guaranteed to track a specific resistance temperature (R/T) curve over a temperature range.

Point Matched thermistors are tested at a given temperature and guaranteed to be within a specified percentage of the nominal resistance at that temperature.



Features:

- Usable at temperatures from -50°C to 125°C
- Interchangeable tolerances available as tight as $\pm 0.10^\circ\text{C}$
- Point-Matched tolerances available as tight as $\pm 1\%$
- Durable, easy to handle
- Proven stability and quality

Specifications:

Available in Beta 0/50 Values of 3889, 3809, 3571, 4137, and 3401. (See Resistance/Temperature Charts A, B, C, D, and K)

Tolerances:

- Interchangeable: $\pm 0.10^\circ\text{C}$, $\pm 0.20^\circ\text{C}$, $\pm 0.50^\circ\text{C}$, & $\pm 1.00^\circ\text{C}$
- Available over Temperature Range of -20°C to 100°C depending on tolerance (See Chart Below)
- Point Matched: $\pm 1.0\%$, $\pm 2\%$, $\pm 5\%$, & $\pm 10\%$

Dissipation constant:

- 2mW/°C in still air
- 13mW/°C in stirred oil

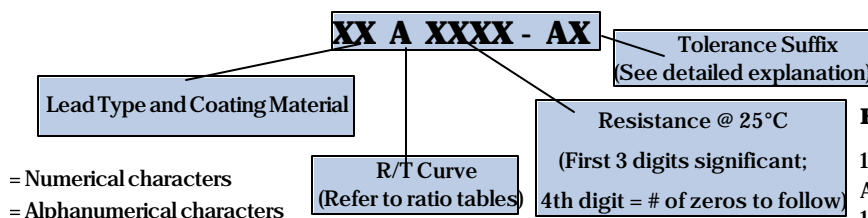
Thermal time constant: 0.75 sec. typical in stirred oil

Thermistor coating: Epoxy, 0.095" max. O. D. typical

Lead Materials: Uninsulated tinned copper, AWG 30

(Other sensor configurations & specifications available upon request)

ALPHA TECHNICS THERMISTOR PART NUMBERING SYSTEM



Example: 14A1002 - C3

14 = AWG 30, tinned copper, epoxy coating

A = Curve "A"

1002 = 10,000 Ohms @ 25°C

C3 = $\pm 0.2^\circ\text{C}$ from 0°C to 70°C

Tolerance:

- A $\pm 1.0^\circ\text{C}$
- B $\pm 0.5^\circ\text{C}$
- C $\pm 0.2^\circ\text{C}$
- D $\pm 0.1^\circ\text{C}$

Temperature Range:

- 1 +20°C to 45°C
- 2 -20°C to 50°C
- 3 0°C to 70°C
- 4 0°C to 100°C
- 8 0°C to 50°C

Part Number	Resistance in OHMS @ 25°C	R/T Curve	Beta 0/50	Tolerance
14A1002-C3	10,000	A	3889	$\pm 0.2^\circ\text{C}$ 0 to 70°C
14B3002-1	30,000	B	3809	$\pm 1\%$ @ 25°C
14C1002-B4	10,000	C	3571	$\pm 0.5^\circ\text{C}$ 0 to 100°C
14D2002-2	20,000	D	4137	$\pm 2\%$ @ 25°C
14K2001-A8	2000	K	3401	$\pm 1.0^\circ\text{C}$ 0 to 50°C
14A2251-5	2252	A	3889	$\pm 5\%$ @ 25°C