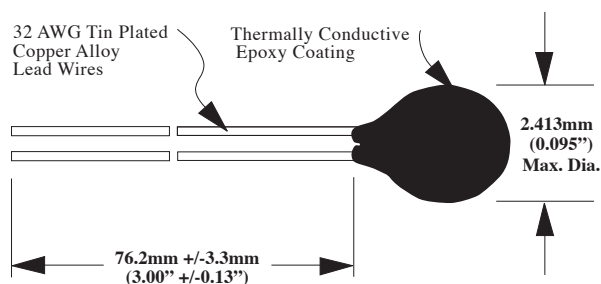
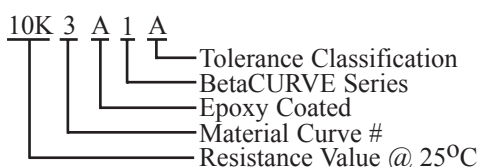


Thermistor Configuration



Example: BetaCURVE Series I Part Number



BetaCurve Interchangeable Thermistor Series I Applications

- Temperature sensing, control and compensation.
- Medical equipment and patient monitoring.
- Aerospace instrumentation and crystal oscillator compensation.
- Liquid or gas temperature control and monitoring.
- Assembly into probes for a wide variety of applications.

Features

- Rapid Time Response (1 second typical in liquids).
- DC (Dissipation Constant) = $0.75\text{mW}/^\circ\text{C}$ typical in still air at 25°C .
- Min./Max. Temperature Exposure = -80°C to 150°C .
- Available in custom probe assemblies.
- Proven Stability and Reliability.
- Alloy Lead Wires for reduced thermal conductivity ("stem effect").
- Choice of 4 temperature tolerance classifications.

Tolerance Code:

Specification:

A	$\pm 0.1^\circ\text{C}$, 0°C to 70°C
B	$\pm 0.2^\circ\text{C}$, 0°C to 70°C
C	$\pm 0.5^\circ\text{C}$, 0°C to 70°C
D	$\pm 1.0^\circ\text{C}$, 0°C to 70°C

The BetaCURVE Thermistor Series I are small epoxy coated devices with solid tin plated lead wires. The series offers a choice of precision temperature tolerance classifications for a wide variety of customer applications, such as temperature measurements, temperature indication, temperature control, and thermal compensation.

The BetaCURVE Series history of "long term" stability and reliability performance have been demonstrated in critical medical, scientific instrumentation, military/aerospace and industrial applications.

Thermistor interchangeability has become an important factor for cost efficiency in advanced thermal performance applications. The need for expensive individual thermistor calibration is not necessary. The BetaCURVE Series interchangeability means that each device will match the published Resistance-Temperature Characteristics (R-T Tables pages 43 to 47) for a given thermistor and will be within the specified deviation (tolerance, ie. $\pm 0.1^\circ\text{C}$, $\pm 0.2^\circ\text{C}$, $\pm 0.5^\circ\text{C}$ and $\pm 1.0^\circ\text{C}$) limits over the temperature range 0°C to 70°C .

With the demands of JIT (just in time) deliveries expected in today's manufacturing sector. BetaTHERM maintains high finished goods inventory and dedicated manufacturing to continuously produce the BetaCURVE Series.

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url: www.beta.dk, www.beata.se, www.betafinland.fi, www.betatherm.com

BetaCURVE Series I Part Numbers and Specifications

Part Number	Color Code	Resistance ohms @ 25°C	Resistance Tolerance@ 25°C	Temperature Tolerance and Range	Alpha @ 25°C	0/50 °C Beta Value	Curve #
2.2K3A1A	Brown	2252	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.39 %/°C	3892	3
2.2K3A2B	Brown	2252	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.39 %/°C	3892	3
2.2K3A3C	Brown	2252	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.39 %/°C	3892	3
2.2K3A4D	Brown	2252	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.39 %/°C	3892	3
3K3A1A	Red	3000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.39 %/°C	3892	3
3K3A1B	Red	3000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.39 %/°C	3892	3
3K3A1C	Red	3000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.39 %/°C	3892	3
3K3A1D	Red	3000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.39 %/°C	3892	3
5K3A1A	Orange	5000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.39 %/°C	3892	3
5K3A1B	Orange	5000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.39 %/°C	3892	3
5K3A1C	Orange	5000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.39 %/°C	3892	3
5K3A1D	Orange	5000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.39 %/°C	3892	3
10K3A1A	Yellow	10000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.39 %/°C	3892	3
10K3A1B	Yellow	10000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.39 %/°C	3892	3
10K3A1C	Yellow	10000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.39 %/°C	3892	3
10K3A1D	Yellow	10000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.39 %/°C	3892	3
10K4A1A	Black	10000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.04 %/°C	3575	4
10K4A1B	Black	10000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.04 %/°C	3575	4
10K4A1C	Black	10000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.04 %/°C	3575	4
10K4A1D	Black	10000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.04 %/°C	3575	4
30K5A1A	White	30000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.30 %/°C	3811	5
30K5A1B	White	30000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.30 %/°C	3811	5
30K5A1C	White	30000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.30 %/°C	3811	5
30K5A1D	White	30000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.30 %/°C	3811	5
30K6A1A	Green	30000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.68 %/°C	4143	6
30K6A1B	Green	30000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.68 %/°C	4143	6
30K6A1C	Green	30000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.68 %/°C	4143	6
30K6A1D	Green	30000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.68 %/°C	4143	6
50K6A1A	Blue	50000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.68 %/°C	4143	6
50K6A1B	Blue	50000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.68 %/°C	4143	6
50K6A1C	Blue	50000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.68 %/°C	4143	6
50K6A1D	Blue	50000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.68 %/°C	4143	6
100K6A1A	Violet	100000	+/- 0.25%	+/- 0.1 °C (0 to 70 °C)	-4.68 %/°C	4143	6
100K6A1B	Violet	100000	+/- 0.50%	+/- 0.2 °C (0 to 70 °C)	-4.68 %/°C	4143	6
100K6A1C	Violet	100000	+/- 1.00%	+/- 0.5 °C (0 to 70 °C)	-4.68 %/°C	4143	6
100K6A1D	Violet	100000	+/- 2.00%	+/- 1.0 °C (0 to 70 °C)	-4.68 %/°C	4143	6