



Series 2 BetaCurve Insulated Thermistor

Introduction

Similar to the BetaCURVE Thermistor Series I, the Series II thermistors are small epoxy coated devices. The same quality thermistor elements are used during assembly. Series II are manufactured using 30 AWG teflon insulated copper lead wires. They offer the same choice of precision temperature tolerance classifications for a wide variety of customer applications.

The Series II differs from Series I marginally with respect to D.C. The typical value of $0.85\text{mW}/^\circ\text{C}$ in still air at 25°C is due to the larger lead wire diameter made of pure copper. The insulated lead wires offer customers the added protection of TFE teflon insulation that has the highest temperature rating (150°C) of the most common insulating materials. TFE teflon is a material that does not bond easily with epoxies or adhesives. For this reason the surface of the teflon wire is etched, which enhances bondability for applications that require mounting or potting the thermistor with epoxies or adhesives.

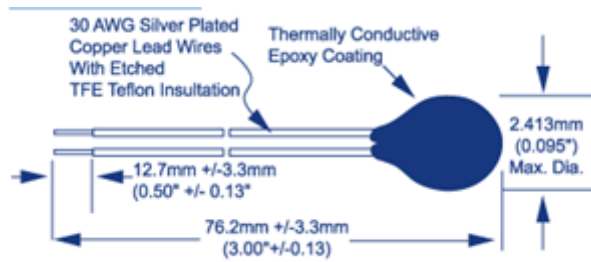
The series is produced in high volume as a Standard configuration. Other configurations are available on a custom basis. Larger or smaller lead wires can be used with the same chip elements and with insulating materials of PVC, Kynar, Tefzel, Nylon/Polyurethane, etc. Contact

Applications Engineering Group for support if requirements differ from the standard configurations shown above.

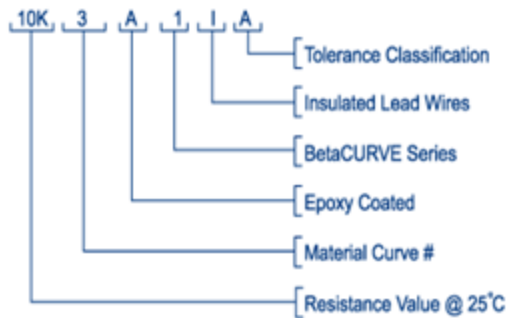
Applications

- Temperature sensing, control and
- P.C. board mounted for temperature protection
- Automotive car seat heater control and engine management
- Assembly into probes for a wide variety of applications in industrial temperature control and instrumentation

Dimensions



Part Numbering System



Pt No	Colour	Res	Tolerance	Alpha	Beta
2.2K3A1IB	Brown	2252± 0.50%± 0.2 °C	(0 to 70 °C)	-4.39 %/°C	3892
3K3A1IB	Red	3000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.39 %/°C	3892
5K3A1IB	Orange	5000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.39 %/°C	3892
10K3A1IB	Yellow	10000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.39 %/°C	3892
30K5A1IB	White	30000ohms ± 0.50%± 0.2 °C	(0 to 70 °C)	-4.30 %/°C	3811
30K6A1IB	Green	30000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.68 %/°C	4143
50K6A1IB	Blue	50000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.68 %/°C	4143
100K6A1IB	Violet	100000± 0.50%± 0.2 °C	(0 to 70 °C)	-4.68 %/°C	4143

Other resistance tolerance range available from +/- 0.1C to 1.0C
Resistance versus temperature charts available

SALES: sales@thermalcomponents.com.au ; Tel: 07 55641282 ; Fax: 07 55296027
www.thermalcomponents.com.au