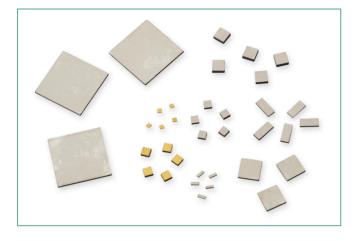
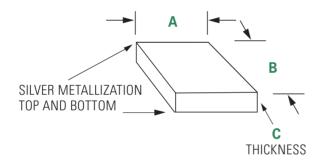


# BC Series Leadless Top/Bottom Terminated Chip Thermistors



### **Dimensions**



Dimensions shown in inches

| А       | В       | С       |  |  |
|---------|---------|---------|--|--|
| See Dim | See Dim | See Dim |  |  |
| "L"     | "W"     | "T"     |  |  |

### Description

Littelfuse leadless top/bottom terminated chip thermistor elements are designed for use on hybrid substrates, integrated circuits and printed circuit boards. They have silver metallization on their top and bottom surfaces which are suitable for various contact techniques including epoxy or solder. Other metallization materials are available as well. Since they are manufactured using the most advanced equipment and technology available, their dimensional parameters are extremely uniform, making the devices especially suitable for use with automatic handling and placement equipment.

## Options

- Non-standard resistance values and tolerances
- Special lead materials and lengths

#### **Features**

- Surface mountable
- Small size
- Very low profile

## **Part Numbering System**

 $\begin{array}{c|c} BC & 10 & 1 & B & 1 & K \\ Series \\ \hline \\ Resistance @ 25^{\circ}C \\ Base Value \\ \hline \\ Multiplier, power of 10 \\ \hline \\ Ex. 101 = 10 \ \Omega \times 10^{1} = 100 \ \Omega \end{array}$ 

Note: Not all combinations of Part Number codes are available. Contact Littelfuse for details.

- Special encapsulants or probe housings
- Tape and reel packaging

Low cost

• Rapid response time



# BC Series Leadless Top/Bottom Terminated Chip Thermistors

## Specifications

| Part<br>Number | Resistance<br>Ohms<br>@25°C | *Resistance<br>Tol. ± %<br>@ 25°C | R-T<br>Curve | Temperature<br>Coefficient<br>{%/°C) @ 25°C | Beta (K)<br>0-50°C | Dissipation<br>Constant,<br>Nominal<br>(mW/°C) | Thermal<br>Time<br>Constant,<br>Max Still<br>Air (seconds) | Temperature<br>Rating<br>(°C) |
|----------------|-----------------------------|-----------------------------------|--------------|---|--------------------|--|--|-------------------------------|
| BC101B1K       | 100                         | 10                                | В            | -3.31                                       | 2941               | 1  | 2  | -55 to +150                   |
| BC501B1K       | 500                         | 10                                | В            | -3.31                                       | 2941               | 1  | 2  | -55 to +150                   |
| BC102F1K       | 1000                        | 10                                | F            | -3.86                                       | 3419               | 1  | 2  | -55 to +150                   |
| BC222J1K       | 2252                        | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC302J1K       | 3000                        | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC502J1K       | 5000                        | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC103J1K       | 10000                       | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC203J1K       | 20000                       | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC303J1K       | 30000                       | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC503J1K       | 50000                       | 10                                | J            | -4.4  | 3892               | 1  | 2  | -55 to +150                   |
| BC104R1K       | 100000                      | 10                                | R            | -4.68                                       | 4140               | 1  | 2  | -55 to +150                   |

\*Resistance tolerances of ± 1%, 2%, and 5% are available upon request

## Packaging

| Packaging Option | Packaging Code | Standard |
|------------------|----------------|----------|
| ESD Waffle Pack  | -WF            | NA       |

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