# Chip EMIFIL® Inductor Type for GHz Noise Chip Ferrite Beads

## BLM18E Series (0603 Size)

### Dimension

<table>
<thead>
<tr>
<th>1.6±0.15</th>
<th>0.8±0.15</th>
<th>0.4±0.2</th>
</tr>
</thead>
</table>

### Equivalent Circuit

![Equivalent Circuit Diagram](image)

(Resistance element becomes dominant at high frequencies.)

### Packaging

<table>
<thead>
<tr>
<th>Code</th>
<th>Packaging</th>
<th>Minimum Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>180mm Paper Tape</td>
<td>4000</td>
</tr>
<tr>
<td>J</td>
<td>330mm Paper Tape</td>
<td>10000</td>
</tr>
<tr>
<td>B</td>
<td>Bulk(Bag)</td>
<td>1000</td>
</tr>
</tbody>
</table>

### Rated Value (□: packaging code)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Impedance at 100MHz/20°C</th>
<th>Impedance at 1GHz/20°C</th>
<th>Rated Current</th>
<th>DC Resistance (max.)</th>
<th>Operating Temperature Range</th>
<th>Number of Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLM18EG101TN1</td>
<td>100ohm±25%</td>
<td>140ohm(Typ.)</td>
<td>2000mA</td>
<td>0.045ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG121SN1</td>
<td>120ohm±25%</td>
<td>145ohm(Typ.)</td>
<td>2000mA</td>
<td>0.04ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG221SN1</td>
<td>220ohm±25%</td>
<td>260ohm(Typ.)</td>
<td>2000mA</td>
<td>0.05ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG221TN1</td>
<td>220ohm±25%</td>
<td>300ohm(Typ.)</td>
<td>2000mA</td>
<td>0.15ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG331TN1</td>
<td>330ohm±25%</td>
<td>450ohm(Typ.)</td>
<td>2000mA</td>
<td>0.21ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG391TN1</td>
<td>390ohm±25%</td>
<td>520ohm(Typ.)</td>
<td>2000mA</td>
<td>0.3ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG471SN1</td>
<td>470ohm±25%</td>
<td>550ohm(Typ.)</td>
<td>2000mA</td>
<td>0.21ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
<tr>
<td>BLM18EG601SN1</td>
<td>600ohm±25%</td>
<td>700ohm(Typ.)</td>
<td>2000mA</td>
<td>0.35ohm</td>
<td>-55°C to +125°C</td>
<td>1</td>
</tr>
</tbody>
</table>

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**Note:**

1. This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, its specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
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**This data sheet is applied for CHIP FERRITE BEAD used for General Electronics equipment for your design.**

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2006.3.9

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Continued from the preceding page.

**Notice (Rating)**

In operating temperatures exceeding +85°C, derating of current is necessary for chip Ferrite Beads for which rated current is 1200mA or over. Please apply the derating curve shown in chart according to the operating temperature.

![Derating Chart](chart.png)

**Impedance-Frequency Characteristics**

**BLM18EG101TN1**

![Impedance-Frequency Chart](chart1.png)

**BLM18EG121SN1**

![Impedance-Frequency Chart](chart2.png)

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**Impedance-Frequency Characteristics**

- **BLM18EG221SN1**

- **BLM18EG331TN1**

- **BLM18EG471SN1**

- **BLM18EG601SN1**

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⚠️ Caution/Notice

Caution (Rating)
Do not use products beyond the rated current and rated voltage as this may create excessive heat and deteriorate the insulation resistance.

Notice
Solderability of Tin plating termination chip might be deteriorated when low temperature soldering profile where peak solder temperature is below the Tin melting point is used. Please confirm the solderability of Tin plating termination chip before use.

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