Multilayer Common Mode Choke Coils  MCF0605BF2-Series

1. Scope

- MCF0605BF2-120T01 is a thin film common mode filter designed to suppress common mode noise for high speed differential data lines, such as Display Port, e-SATA, USB3.0, HDMI, MIPI, and MHL USB3.1.

- MCF0605BF2-900T01 is a thin film common mode filter designed to suppress common mode noise for high speed differential data lines, such as USB 2.0.

These differential interfaces can be used in personal computers, notebooks, mobile phone, LCD/PDP/DLP TVs, Blu-ray/DVD players, personal handheld equipments, etc.

2. Dimensions

<table>
<thead>
<tr>
<th>Chip Size</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>P</th>
<th>D1</th>
<th>D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0605</td>
<td>0.67±0.05</td>
<td>0.52±0.05</td>
<td>0.32±0.05</td>
<td>0.45±0.05</td>
<td>0.20±0.05</td>
<td>0.15±0.10</td>
<td></td>
</tr>
</tbody>
</table>

Units: mm

3. Part Numbering

<table>
<thead>
<tr>
<th>MCF</th>
<th>0605</th>
<th>BF2</th>
<th>-</th>
<th>900</th>
<th>T</th>
<th>01</th>
</tr>
</thead>
</table>

A: Series  
B: Dimension  
C: Material  
D: Impedance  
E: Packaging  
F: Rated Current

A: Series  
B: Dimension  
C: Material  
D: Impedance  Common Mode Impedance 900=90Ω  
E: Packaging  T=Taping and Reel, B=Bulk(Bags)  
F: Rated Current 01=100mA

4. Specification

<table>
<thead>
<tr>
<th>Tai-Tech Part Number</th>
<th>Common Mode Impedance (Ω)</th>
<th>Test Frequency (MHz)</th>
<th>Rated Voltage (Vdc) max.</th>
<th>Insulation Resistance (MΩ) min.</th>
<th>Cut-off Frequency (GHz) typ.</th>
<th>DC Resistance (Ω) max.</th>
<th>Rated Current (mA) max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCF0605BF2-120T01</td>
<td>12±5Ω</td>
<td>250mV / 100</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>2.0</td>
<td>100</td>
</tr>
<tr>
<td>MCF0605BF2-900T01</td>
<td>90±30%</td>
<td>250mV / 100</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>6.0</td>
<td>100</td>
</tr>
</tbody>
</table>

• Rated current: based on temperature rise test
Impedance-Frequency Characteristics

**MCF0605BF2-120T01**
- **Common Mode**
- **Differential Mode**

**MCF0605BF2-900T01**
- **Common Mode**
- **Differential Mode**

www.tai-tech.com.tw
1. Scope

- MCF0806BF2-120T01 is a thin film common mode filter designed to suppress common mode noise for high speed differential data lines, such as Display Port, e-SATA, USB3.0, HDMI, MIPI, and MHL. USB3.1

- MCF0806BF2-900T01 is a thin film common mode filter designed to suppress common mode noise for high speed differential data lines, such as USB 2.0, IEEE 1394, LVDS, DVI, HDMI, and MIPI. These differential interfaces can be used in personal computers, notebooks, mobile phone, LCD/PDP/DLP TVs, Blu-ray/DVD players, personal handheld equipments, etc.

2. Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>P</th>
<th>D1</th>
<th>D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0806</td>
<td>0.85±0.05</td>
<td>0.65±0.05</td>
<td>0.40 ±0.05</td>
<td>0.50±0.1</td>
<td>0.27±0.1</td>
<td>0.20±0.1</td>
</tr>
</tbody>
</table>

Units: mm

3. Part Numbering

MCF 0806 BF2 - 900 T 01

A: Series
B: Dimension
C: Material
D: Impedance
E: Packaging
F: Rated Current

4. Specification

<table>
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<tr>
<th>Tai-Tech Part Number</th>
<th>Common Mode Impedance (Ω)</th>
<th>Test Frequency (MHz)</th>
<th>Rated Voltage (Vdc) max.</th>
<th>Insulation Resistance (MΩ) min.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MCF0806BF2-120T01</td>
<td>12±5Ω</td>
<td>250mV / 100</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>2.0</td>
<td>100</td>
</tr>
<tr>
<td>MCF0806BF2-900T01</td>
<td>90±25%</td>
<td>250mV / 100</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>3.5</td>
<td>100</td>
</tr>
</tbody>
</table>

- Rated current: based on temperature rise test
Impedance-Frequency Characteristics

MCF0806BF2-120T01
Common Mode
Differential Mode

MCF0806BF2-900T01
Common Mode
Differential Mode
1. Scope
This specification applies to Multilayer Common Mode Choke Coil, MCF Series Its Application is limited for the High speed differential transmission line like as followings.
USB, LVDS, MIPI, MDDI, MHL, HDMI, DVI.

2. Dimensions

<table>
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<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>P</th>
<th>D1</th>
<th>D2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1210</td>
<td>1.25±0.15</td>
<td>1.00±0.15</td>
<td>0.55±0.10</td>
<td>0.55±0.10</td>
<td>0.30±0.10</td>
<td>0.20±0.10</td>
</tr>
</tbody>
</table>

Units: mm

3. Part Numbering

MCF 1210 NF2 - 900 T 01
A: Series
B: Dimension A x B
C: Material Lead Free Code
D: Impedance Common Mode Impedance 900=90\(\Omega\)
E: Packaging T=Taping and Reel, B=Bulk(Bags)
F: Rated Current 01=100mA

4. Specification

<table>
<thead>
<tr>
<th>Tai-Tech Part Number</th>
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<th>Test Frequency (MHz)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MCF1210NF2-400T01</td>
<td>40±25%</td>
<td>100</td>
<td>5</td>
<td>100</td>
<td>2.5</td>
<td>100</td>
</tr>
<tr>
<td>MCF1210NF2-900T01</td>
<td>90±25%</td>
<td>100</td>
<td>5</td>
<td>100</td>
<td>4.5</td>
<td>100</td>
</tr>
</tbody>
</table>

● Rated current: based on temperature rise test
Impedance-Frequency Characteristics

MCF1210NF2-400T01
Common Mode
Differential Mode

MCF1210NF2-900T01
Common Mode
Differential Mode