Transformers, 1:1.33
5 MHz - 1200 MHz

Features
- 1:1.33 impedance ratio
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTx applications.

Electrical Specifications: \( Z_0 = 75\Omega, T_A = 25^\circ C, P_{in} = 0\text{dBm} \)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Conditions</th>
<th>Units</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td></td>
<td>MHz</td>
<td>5</td>
<td></td>
<td>1200</td>
</tr>
<tr>
<td>Impedance</td>
<td></td>
<td>Ω</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impedance Ratio</td>
<td></td>
<td></td>
<td></td>
<td>1:1.33</td>
<td></td>
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<tr>
<td>Insertion Loss 1 (Pin6 - Pin1)</td>
<td>5 - 1200 MHz</td>
<td>dB</td>
<td>-</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Insertion Loss 2 (Pin6 - Pin3)</td>
<td>5 - 500 MHz 500 - 1000 MHz 1000 - 1200 MHz</td>
<td>dB</td>
<td>-</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Amplitude Balance</td>
<td>5 - 500 MHz 500 - 1000 MHz 1000 - 1200 MHz</td>
<td>dB</td>
<td>-</td>
<td>0.05</td>
<td>0.2</td>
</tr>
<tr>
<td>Phase Balance</td>
<td>5 - 50 MHz 50 - 500 MHz 500 - 1200 MHz</td>
<td>o</td>
<td>-</td>
<td>0.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Input Return Loss (Pin6)</td>
<td>5 - 100 MHz 100 - 1200 MHz</td>
<td>dB</td>
<td>14</td>
<td>15</td>
<td>-</td>
</tr>
</tbody>
</table>

Pin Configuration

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Secondary Dot</td>
</tr>
<tr>
<td>2</td>
<td>Not Used</td>
</tr>
<tr>
<td>3</td>
<td>Secondary</td>
</tr>
<tr>
<td>4</td>
<td>Primary</td>
</tr>
<tr>
<td>6</td>
<td>Primary Dot</td>
</tr>
</tbody>
</table>

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Visit www.macomtech.com for additional data sheets and product information.

• North America  Tel: 800.366.2266 / Fax: 978.366.2266
• Europe  Tel: 44.1908.574.200 / Fax: 44.1908.574.300
• Asia/Pacific Tel: 81.44.844.8290 / Fax: 81.44.844.8298
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ C$, $P_{in} = 0$dBm
Outline Drawing

1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG

Application Circuit

Recommended Footprint

Visit www.macomtech.com for additional data sheets and product information.

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### Transformer, 1:1.33
5 MHz - 1200 MHz

#### Tape & Reel Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty per reel</td>
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<td>2000</td>
</tr>
<tr>
<td>Reel size</td>
<td>mm</td>
<td>330</td>
</tr>
<tr>
<td>Tape width (W)</td>
<td>mm</td>
<td>12.00</td>
</tr>
<tr>
<td>Pitch (P₁)</td>
<td>mm</td>
<td>8.00</td>
</tr>
<tr>
<td>A₀</td>
<td>mm</td>
<td>4.50</td>
</tr>
<tr>
<td>B₀</td>
<td>mm</td>
<td>4.50</td>
</tr>
<tr>
<td>K₀</td>
<td>mm</td>
<td>2.73</td>
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<tr>
<td>Orientation</td>
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<td>F31</td>
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Reference Application note ANI-019 for orientation

#### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>MABA-011051</td>
<td>Tape &amp; Reel</td>
</tr>
<tr>
<td>MABA-011051-TB</td>
<td>Customer Evaluation Board</td>
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</tbody>
</table>

#### Recommended Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>mW</td>
<td>250</td>
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</tr>
<tr>
<td>DC Current</td>
<td>mA</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>°C</td>
<td>-40</td>
<td>+85</td>
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Temperature data available on request