1.77:1 Flux Coupled Balun Transformer
5 - 100 MHz

Features
- Surface Mount Package
- 1.77:1 Impedance
- 75 Ω Single Ended to 133 Ω Balance
- RoHS Compliant, Lead Free
- Available on Tape and Reel

Description
The MABA-009573-CF1A40 is a 1.77:1 RF flux coupled balun transformer in a surface mount package.

Ideally suited for high volume CATV/Broadband applications.

Electrical Specifications: Freq. = 5 - 100 MHz, $T_A = 25°C$, $Z_0 = 75 \Omega$, $P_{IN} = 0$ dBm

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Conditions</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
</table>
| Insertion Loss 1 (Pin 4 to Pin 1)  | 5 - 50 MHz  
50 - 100 MHz                      | dB    | 0.3  | 0.3  | 0.4  |
| Insertion Loss 2 (Pin 4 to Pin 3) | 5 - 50 MHz  
50 - 100 MHz                      | dB    | 0.3  | 0.4  | 0.4  |
| Amplitude Balance                  | —                                            | dB    | 0.01 | ±0.1 |
| Phase Balance                      | —                                            | °     | 0.2  | ±2.0 |
| Input Return Loss (Pin 4)          | —                                            | dB    | 24   | 27   |

Ordering Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABA-009573-CF1A40</td>
<td>2000 piece reel</td>
</tr>
<tr>
<td>MABA-009573-CF1ATB</td>
<td>Customer Test Board</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Absolute Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Input Power</td>
<td>250 mW</td>
</tr>
<tr>
<td>DC Current</td>
<td>30 mA</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to +85°C</td>
</tr>
</tbody>
</table>
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Typical Performance: \( T_A = 25^\circ C, \ Z_0 = 75 \ \Omega, \ P_{IN} = 0 \ \text{dBm} \)

**Insertion Loss 1 (Pin4 - Pin1)**

**Insertion Loss 2 (Pin4 - Pin3)**

**Amplitude Balance**

**Phase Balance**

**Return Loss: Input (Pin4)**
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Case Style SM-164

Dimensions are inches (millimetres) ±0.015 (0.38) unless otherwise specified.
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