MABA-008965-CF1160

1:1 Flux Coupled Balun Transformer
5 - 120 MHz

Rev. V3

MABA

008965

CF1160

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part # description
MABA-008965-CF1160 2000 piece reel
MABA-008965-CF11TB customer test board

Reference Application Note M513 for reel size information.

Features
- 1:1 Impedance Ratio
- 75 Ω
- Surface Mount Package
- RoHS* Compliant

Description
The MABA-008965-CF1160 is a 1:1 RF flux coupled transformer in a surface mount package.

Ideally suited for high volume CATV application.

1:1 Impedance Ratio
75 Ω
Surface Mount Package
RoHS* Compliant

Electrical Specifications: Freq. = 5 - 120 MHz, \( T_A = 25°C \), \( Z_0 = 75 \ Ω \), \( P_{IN} = 0 \ dBm \)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
</table>
| Insertion Loss 1 (Pin 5 to Pin 1) | 5 - 80 MHz
80 - 120 MHz | dB | — | 0.1 | 0.4 |
| Insertion Loss 2 (Pin 5 to Pin 3) | 5 - 80 MHz
80 - 120 MHz | dB | — | 0.2 | 0.4 |
| Amplitude Un-Balance | 5 - 80 MHz
80 - 120 MHz | dB | — | ±0.06 | ±0.2 |
| Phase Un-Balance | 5 - 80 MHz
80 - 120 MHz | ° | — | ±0.05 | ±1.5 |
| Input Return Loss (Pin 5) | 5 - 80 MHz
80 - 120 MHz | dB | 19 | 25 | |

Ordering Information

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABA-008965-CF1160</td>
<td>2000 piece reel</td>
</tr>
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<td>MABA-008965-CF11TB</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 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>
Typical Performance Curves: $T_A = 25^\circ C$, $Z_0 = 75 \, \Omega$, $P_{IN} = 0 \, \text{dBm}$

- **Insertion Loss 1 (Pin5 - Pin1)**
  - Frequency (MHz): 5 to 120 MHz
  - dB: -0.1 to 0.0

- **Insertion Loss 2 (Pin5 - Pin3)**
  - Frequency (MHz): 5 to 120 MHz
  - dB: 0.0 to 0.1

- **Amplitude Balance**
  - Frequency (MHz): 5 to 120 MHz
  - dB: -0.5 to 0.5

- **Phase Balance**
  - Frequency (MHz): 5 to 120 MHz
  - degree: 175 to 185

- **Return Loss: Input**
  - Frequency (MHz): 5 to 120 MHz
  - dB: -35 to 0

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Case Style SM-22A

Dimensions are inches [millimeters] ±0.015 [0.38] unless otherwise specified.