Features
- 50 Ohms Unbalanced/200 Ohms Unbalanced
- Fast Rise Time: 0.35 nS
- Low Insertion Loss: 0.75 dB Typical
- MIL-STD-202 Screening Available

Description
The transformer coupled balun can provide a wide frequency range. DC isolation from primary coil to secondary coil is also a feature of this device.

Schematic/Pin Configuration

```
50 Ohms Unbalanced
2

200 Ohms Unbalanced

Pins 1, 3, 4, 6 are grounded to case
```

Electrical Specifications: $T_A = -55°C$ to $+85°C$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Conditions</th>
<th>Frequency</th>
<th>Units</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impedance</td>
<td>Input - 50 Ohms Unbalanced</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Output - 200 Ohms Unbalanced</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>—</td>
<td>10 - 50 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>0.75</td>
</tr>
<tr>
<td>VSWR</td>
<td>—</td>
<td>5 MHz - 250 MHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>1.3:1</td>
</tr>
<tr>
<td></td>
<td>2 MHz - 500 MHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>1.6:1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - 2 MHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>2:1</td>
<td></td>
</tr>
<tr>
<td>Input Power</td>
<td>1 MHz - 5 MHz</td>
<td>Watts</td>
<td>—</td>
<td>—</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 GHz - 1 GHz</td>
<td>Watts</td>
<td>—</td>
<td>—</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Rise Time</td>
<td>10 - 90%</td>
<td>nS</td>
<td>—</td>
<td>0.35</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Droop (10%)</td>
<td>—</td>
<td>nS</td>
<td>—</td>
<td>150</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

FP-1

```
```

Dimensions in mm unless otherwise noted

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

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

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

North America Tel: 800.366.2266 | Europe Tel: +353.21.244.8400
India Tel: +91.80.41557221 | China Tel: +86.21.2407.1599
Visit www.macomtech.com for additional data sheets and product information.
TP-102

RF Pulse Transformer,
1 - 500 MHz

Typical Performance Curves

**insertion Loss**

![Insertion Loss Graph]

**VSWR**

![VSWR Graph]

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP-102 PIN</td>
<td>FP-1</td>
</tr>
</tbody>
</table>

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

North America  Tel: 800.366.2266  Europe  Tel: +353.21.244.6400
India  Tel: +91.80.4155721  China  Tel: +86.21.2407.1588

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