RF Pulse Transformer
500 kHz - 1.5 GHz

Features
- 50 Ω Unbalanced / 50 Ω Balanced
- 0.4 dB Insertion Loss
- 0.18 ns Rise Time
- MIL-STD-202 Screening Available

Applications
- Aerospace & Defense
- ISM

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.

Electrical Specifications: $T_A = -55^\circ C - +85^\circ C$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Conditions</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impedance</td>
<td>Input: Unbalanced</td>
<td>Ω</td>
<td>—</td>
<td>50</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Output: Balanced</td>
<td></td>
<td>50</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>10 - 50 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>0.5</td>
</tr>
<tr>
<td>VSWR</td>
<td>1 MHz - 1 GHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>1.4:1</td>
</tr>
<tr>
<td></td>
<td>750 kHz - 1.5 GHz</td>
<td></td>
<td></td>
<td>1.6:1</td>
<td></td>
</tr>
<tr>
<td>Input Power</td>
<td>750 kHz - 1 MHz</td>
<td>W</td>
<td>—</td>
<td>—</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>1 MHz - 5 MHz</td>
<td></td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 MHz - 1.5 GHz</td>
<td></td>
<td></td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Rise Time</td>
<td>10% - 90%</td>
<td>ns</td>
<td>—</td>
<td>0.18</td>
<td>—</td>
</tr>
<tr>
<td>Droop (10%)</td>
<td></td>
<td>ns</td>
<td>—</td>
<td>300</td>
<td>—</td>
</tr>
</tbody>
</table>

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP-101-PIN</td>
<td>tape &amp; reel</td>
</tr>
</tbody>
</table>
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Typical Performance Curves

**Insertion Loss**

**VSWR**

Outline (FP-1)

Identifying information on pin 1:

- 375 ± 0.20
- 9.5 ± 0.51

Dimensions in 0 are in mm:

- Unless otherwise noted: XXX = ±0.0010 LXX = ±0.25 JX = ±0.5
- Weight (approx): 0.07 ounces 2 grams

For further information and support please visit:
https://www.macom.com/support
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