TRIPLE-BALANCED MIXER
SURFACE MOUNT MODEL: STM-3500

WIDE BANDWIDTH
1-3500 MHz

FEATURES:
► High Performance
► High Interport Isolation
► Broad Bandwidth IF

APPLICATIONS:
► Narrow Band & Broadband
  Up/Down Conversion

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>LO/RF</th>
<th>IF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conversion Loss (dB)</th>
<th>Freq (MHz)</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 100</td>
<td>7.5</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>100 - 1750</td>
<td>8.5</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>1750 - 3500</td>
<td>9.5</td>
<td>10.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Isolation (dB)</th>
<th>LO/RF Typ.</th>
<th>Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

| LO Power¹     | +15 to +23 dBm (Nom.) |
| 1 dB Compression Point | +14 dBm (Typ.) |
| Input IP¹     | +22 dBm (Typ.)¹ |
| Impedance     | 50 Ohms (Nom.) |
| Operating Temperature Range | -40 to +85 °C |

¹ Typical measurements made with LO at +15 dBm

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TRIPLE-BALANCED MIXER
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Performance Plots:

- Conversion Loss (dB) vs. Frequency (MHz) for IF=500 MHz (LO>RF)
- Conversion Loss (dB) vs. Frequency (MHz) for IF=2000 MHz (LO>RF)
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PERFORMANCE PLOTS

Isolation (dB) vs Frequency (MHz)

- LO-IF
- LO-RF

Isolation (dB) vs Frequency (MHz)

- RF-IF
TRIPLE-BALANCED MIXER
SURFACE MOUNT MODEL: STM-3500
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PERFORMANCE PLOTS

**IF=50 MHz (LO>RF)**

**IF=500 MHz (LO>RF)**
TRIPLE-BALANCED MIXER
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PERFORMANCE PLOTS

IF=2000 MHz (LO>RF)