PHASE NOISE (1 Hz BW, typical)

Voltage-Controlled Oscillator
Surface Mount Module

Applications

• Digital Radios
• Fixed Broadband Wireless
• Satellite Communications

Application Notes

• AN-101: Mounting and Grounding
• AN-102: Output Loading
• AN-107: Manual Soldering

Performance Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>2851</td>
<td>2851</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-114</td>
<td></td>
<td></td>
<td>dBC/Hz</td>
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<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-18</td>
<td>-16</td>
<td>dBC</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0.5</td>
<td></td>
<td>4.5</td>
<td>Vdc</td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td></td>
<td>10</td>
<td></td>
<td>MHz/V</td>
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<tr>
<td>Power Output</td>
<td>4</td>
<td>6.25</td>
<td>8.5</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
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<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Input Capacitance</td>
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<td>50</td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>Pushing</td>
<td></td>
<td>.5</td>
<td></td>
<td>MHz/V</td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
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<td>.5</td>
<td></td>
<td>MHz</td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
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<td>85</td>
<td>°C</td>
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<td>Package Style</td>
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<td>MINI-16</td>
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Power Supply Requirements

<table>
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<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Supply Voltage (Vcc, nom.)</td>
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<td>Vdc</td>
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<td>Supply Current (Icc)</td>
<td>18</td>
<td>26</td>
<td>mA</td>
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</tr>
</tbody>
</table>

Additional Notes

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.

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Voltage-Controlled Oscillator
Surface Mount Module

Tuning Curve, typ.

**TUNING VOLTAGE (Vdc)**

Power Curve, typ.

Footprint

**FREQUENCY (MHz)**

- **25 °C**

**RECOMMENDED FOOTPRINT**

Several holes of 0.015 inch on GND plane are recommended for good grounding.

- 0.030 min. cutback from live pads

- 0.470
- 0.415
- 0.315
- 0.215
- 0.115
- 0.000

Typ

- 0.470
- 0.415
- 0.315
- 0.215
- 0.115
- 0.000

**POWER OUTPUT (dBm)**

- 85°C
- 25°C
- -40°C

**Physical Dimensions**

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