Voltage-Controlled Oscillator
Surface Mount Module

Applications

- Test Equipment
- Fixed Wireless Access

Application Notes

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

Performance Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>2500</td>
<td>2560</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-109</td>
<td></td>
<td>dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-25</td>
<td>-20</td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0.5</td>
<td>4.5</td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td>30</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>4</td>
<td>6.5</td>
<td>9</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td></td>
<td>Ω</td>
<td></td>
</tr>
<tr>
<td>Input Capacitance</td>
<td>50</td>
<td></td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>1</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td>1</td>
<td></td>
<td>MHz</td>
<td></td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Package Style</td>
<td>MINI-16</td>
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</table>

Power Supply Requirements

<table>
<thead>
<tr>
<th>Specification</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage (Vcc, nom.)</td>
<td>5</td>
<td></td>
<td>Vdc</td>
<td></td>
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<tr>
<td>Supply Current (Icc)</td>
<td>24</td>
<td>29</td>
<td>mA</td>
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</tbody>
</table>

Additional Notes

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

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Surface Mount Module

**Tuning Curve, typ.**

![Tuning Curve Graph]

- **TUNING VOLTAGE (Vdc)**
- **FREQUENCY (MHz)**

- **85°C**
- **25°C**
- **-40°C**

**Power Curve, typ.**

![Power Curve Graph]

- **POWER OUTPUT (dBm)**
- **FREQUENCY (MHz)**

- **85°C**
- **25°C**
- **-40°C**

**Footprint**

- **RECOMMENDED FOOTPRINT**
- **0.030 MIN. CUTBACK FROM LIVE PADS**
- **SEVERAL HOLES OF 0.015 ON GND. PLANE ARE RECOMMENDED FOR GOOD GROUNDING.**

**Physical Dimensions**

![Physical Dimensions Diagram]

- **Z-COMM XXXXXXX-LF W/O# D/C**
- **MINI-16**
- **MINI-16-LOW**
- **MINI-16-EL**
- **MINI-16-UL**
- **MINI-16-L**
- **MINI-16**
- **TOL: XXX +/- 0.010**

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