**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>Performance Specifications</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>1910</td>
<td>2050</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-108</td>
<td></td>
<td>dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-20</td>
<td>-17</td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>2</td>
<td>12</td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td></td>
<td>20</td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>0</td>
<td>3.5</td>
<td>7</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>2</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Pulling (14 dB Return Loss, Any Phase)</td>
<td>1</td>
<td></td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td>°C</td>
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</tbody>
</table>

**Package Style**
- MINI-16

**Power Supply Requirements**

<table>
<thead>
<tr>
<th>Power Supply Requirements</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>20</td>
<td>25</td>
<td>mA</td>
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</tr>
</tbody>
</table>

**Additional Notes**

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

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

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Voltage-Controlled Oscillator
Surface Mount Module

Tuning Curve, typ.

FREQUENCY (MHz)

TUNING VOLTAGE (Vdc)

85°C
25°C
-40°C

Power Curve, typ.

FREQUENCY (MHz)

POWER OUTPUT (dBm)

Footprint

RECOMMENDED FOOTPRINT
SEVERAL HOLES OF 0.015 ON GND. PLANES ARE RECOMMENDED FOR GOOD GROUNDING.

0.030 MIN. CUTBACK FROM LIVE PADS

Physical Dimensions

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