# CRO2211B-LF

**Rev A1**

## Voltage-Controlled Oscillator

**Surface Mount Module**

### Applications

- WiMAX
- Fixed Wireless Access

### Application Notes

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

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### 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>2184</td>
<td>2238</td>
<td></td>
<td>MHz</td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-110</td>
<td></td>
<td></td>
<td>dBc/Hz</td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-16</td>
<td>-12</td>
<td></td>
<td>dBc</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>22</td>
<td></td>
<td>MHz/V</td>
</tr>
<tr>
<td>Power Output</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Input Capacitance</td>
<td>50</td>
<td></td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>Pushing</td>
<td>1</td>
<td></td>
<td></td>
<td>MHz/V</td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td>1</td>
<td></td>
<td></td>
<td>MHz</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td></td>
<td>85</td>
<td>°C</td>
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</tbody>
</table>

### Package Style

- MINI-16-SM

### Power Supply Requirements

<table>
<thead>
<tr>
<th>Parameter</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></td>
<td>Vdc</td>
</tr>
<tr>
<td>Supply Current (Icc)</td>
<td>22</td>
<td></td>
<td>26</td>
<td>mA</td>
</tr>
</tbody>
</table>

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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

CRO2211B-LF
Rev A1

Tuning Curve, typ.

FREQUENCY (MHz)

TUNING VOLTAGE (Vdc)

- 85°C
- 25°C
- -40°C

Power Curve, typ.

FREQUENCY (MHz)

- 85°C
- 25°C
- -40°C

Footprint

Recommended footprint: several holes of 0.015 in GND. Plane are recommended for good grounding.

Power output (dBm)

Physical Dimensions

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