## Voltage-Controlled Oscillator
### Surface Mount Module

### Applications
- Digital Radio Equipment
- Fixed Wireless Access
- Satellite Communication Systems

### 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>2080</td>
<td>2158</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-110</td>
<td>dBc/Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-22</td>
<td>-20</td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0.5</td>
<td>4.75</td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td>22</td>
<td>MHz/V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td>Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Capacitance</td>
<td>50</td>
<td>pF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>1</td>
<td>MHz/V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td>1</td>
<td>MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td>°C</td>
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<tr>
<td>Package Style</td>
<td>MINI-16-SM</td>
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</table>

### 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>Vdc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply Current (Icc)</td>
<td>23</td>
<td>28</td>
<td>mA</td>
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</tr>
</tbody>
</table>

### Additional Notes

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.
**Voltage-Controlled Oscillator**
**Surface Mount Module**

**CRO2120B-LF**

**Tuning Curve, typ.**

- **Temperature Points:**
  - 85°C
  - 25°C
  - -40°C

**FREQUENCY (MHz)**

**TUNING VOLTAGE (Vdc)**

**Power Curve, typ.**

- **Power Output (dBm):**
  - 6.0
  - 5.0
  - 4.0
  - 3.0
  - 2.0
  - 1.0
  - 0.0

**FREQUENCY (MHz):**

**Footprint**

- **Recommended Footprint:**
  - Several holes of 0.015 on GND plane are recommended for good grounding.

**Physical Dimensions**

- **Dimensions:**
  - Z-COMM XXXXXXX-LF
  - WO #
  - D/C

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