Voltage-Controlled Oscillator
Surface Mount Module

Applications
- Backhaul Radios
- Satcom Equipment

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>2360</td>
<td></td>
<td>2430</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>-15</td>
<td>-12</td>
<td></td>
<td>dBc</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0.4</td>
<td></td>
<td>5.4</td>
<td>Vdc</td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td></td>
<td>18</td>
<td></td>
<td>MHz/V</td>
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<tr>
<td>Power Output</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>dBm</td>
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<tr>
<td>Load Impedance</td>
<td></td>
<td>50</td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Input Capacitance</td>
<td></td>
<td>50</td>
<td></td>
<td>pF</td>
</tr>
<tr>
<td>Pushing</td>
<td></td>
<td>1</td>
<td></td>
<td>MHz/V</td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td></td>
<td>1.5</td>
<td></td>
<td>MHz</td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td></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>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>
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<td></td>
<td>Vdc</td>
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<tr>
<td>Supply Current (Icc)</td>
<td>20</td>
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<td>25</td>
<td>mA</td>
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</table>

Additional Notes

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

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**Power Curve, typ.**

- **Power Output (dBm)**
  - 85°C
  - 25°C
  - -40°C

- **FREQUENCY (MHz)**
  - 2330
  - 2340
  - 2350
  - 2360
  - 2370
  - 2380
  - 2390
  - 2400
  - 2410
  - 2420
  - 2430
  - 2440
  - 2450

**Footprint**

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

- **Power Output (dBm)**
  - 0.030 min. cutback from live pads

**Physical Dimensions**

- Z-COMM
  - XXXXXXXX-LF
  - WO #
  - D/C

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