Voltage-Controlled Oscillator
Surface Mount Module

Applications

- Portable Radios
- Test Equipment

Application Notes

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

Performance Specifications

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>1250</td>
<td>1400</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-100</td>
<td>dBc/Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-15</td>
<td>-12</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>75</td>
<td>MHz/V</td>
<td></td>
<td></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>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>3</td>
<td>MHz/V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulling (dB Return Loss, Any Phase)</td>
<td>3</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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</table>

Package Style

USSP

Power Supply Requirements

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
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</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>23</td>
<td>28</td>
<td>mA</td>
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</tbody>
</table>

Additional Notes

AN-101: Mounting and Grounding
AN-102: Output Loading
AN-107: Manual Soldering
Voltage-Controlled Oscillator
Surface Mount Module

Tuning Curve, typ.

TUNING VOLTAGE (Vdc)

FREQUENCY (MHz)

85°C
25°C
-40°C

Power Curve, typ.

FREQUENCY (MHz)

POWER OUTPUT (dBm)

85°C
25°C
-40°C

Footprint

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

0.030 MIN. CUTBACK FROM LIVE PADS

Physical Dimensions

NOTE: ALL DIMENSIONS ARE IN INCHES
TOL. XXX +/- 0.010

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

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