Voltage-Controlled Oscillator
Surface Mount Module

Applications

- Microwave Radios
- Radar Systems
- Reference Clock

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>1070</td>
<td>1070</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-120</td>
<td></td>
<td>dBc/Hz</td>
<td></td>
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<tr>
<td>Harmonic Supression (2nd)</td>
<td>-10</td>
<td>-8</td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0</td>
<td>5</td>
<td>Vdc</td>
<td></td>
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<tr>
<td>Tuning Sensitivity (avg.)</td>
<td>3</td>
<td></td>
<td>MHz/V</td>
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<tr>
<td>Power Output</td>
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<td>10</td>
<td>12</td>
<td>dBm</td>
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<tr>
<td>Load Impedance</td>
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<td></td>
<td>Ω</td>
<td></td>
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<tr>
<td>Input Capacitance</td>
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<td></td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>1</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td>1</td>
<td></td>
<td>MHz</td>
<td></td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td>°C</td>
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<td>Package Style</td>
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</table>

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>
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<td>Vdc</td>
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<tr>
<td>Supply Current (Icc)</td>
<td>22</td>
<td>25</td>
<td>mA</td>
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</tr>
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</table>

Additional Notes

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

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- Additional Notes

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

- Oscillation Frequency Range:
  - Min: 1070 MHz
  - Typ: 1070 MHz
  - Max: MHz

- Phase Noise @ 10 kHz offset (1 Hz BW):
  - Min: -120 dBc/Hz
  - Typ: dBc/Hz
  - Max: dBc/Hz

- Harmonic Supression (2nd):
  - Min: -10 dBc
  - Typ: dBc
  - Max: dBc

- Tuning Voltage:
  - Min: 0 Vdc
  - Typ: Vdc
  - Max: Vdc

- Tuning Sensitivity (avg.):
  - Min: 3 MHz/V
  - Typ: MHz/V
  - Max: MHz/V

- Power Output:
  - Min: 8 dBm
  - Typ: 10 dBm
  - Max: 12 dBm

- Load Impedance:
  - Min: 50 Ω
  - Typ: Ω
  - Max: Ω

- Input Capacitance:
  - Min: 50 pF
  - Typ: pF
  - Max: pF

- Pushing:
  - Min: 1 MHz/V
  - Typ: MHz/V
  - Max: MHz/V

- Pulling (12 dB Return Loss, Any Phase):
  - Min: 1 MHz
  - Typ: MHz
  - Max: MHz

- Operating Temperature Range:
  - Min: -40 °C
  - Typ: °C
  - Max: °C

- Package Style:
  - MINI-16-SM
Voltage-Controlled Oscillator
Surface Mount Module

Tuning Curve, typ.

Power Curve, typ.

Footprint

Physical Dimensions

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

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