Voltage-Controlled Oscillator
Surface Mount Module

Applications
Satellite Communications
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>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>1734</td>
<td></td>
<td>1774</td>
<td>MHz</td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-95</td>
<td></td>
<td></td>
<td>dBC/Hz</td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-10</td>
<td>-10</td>
<td></td>
<td>dBC</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0</td>
<td></td>
<td>2.8</td>
<td>Vdc</td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td>65</td>
<td></td>
<td></td>
<td>MHz/V</td>
</tr>
<tr>
<td>Power Output</td>
<td>-2</td>
<td>1</td>
<td>4</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>6</td>
<td></td>
<td>8</td>
<td>MHz/V</td>
</tr>
<tr>
<td>Pulling (20. dB Return Loss, Any Phase)</td>
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<td></td>
<td></td>
<td>MHz</td>
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<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
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<td>85</td>
<td>°C</td>
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<td>Package Style</td>
<td>SUB-L</td>
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Power Supply Requirements

<table>
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<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>
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<td>Vdc</td>
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<tr>
<td>Supply Current (Icc)</td>
<td>10</td>
<td>12</td>
<td>mA</td>
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Additional Notes
Voltage-Controlled Oscillator
Surface Mount Module

SMV1754A-LF
Rev A1

Tuning Curve, typ.

Power Curve, typ.

Footprint

Physical Dimensions

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