**Voltage-Controlled Oscillator**  
**Surface Mount Module**

### Applications
- Satellite Communications
- Portable Radios
- RF Modems

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

### Performance Specifications

<table>
<thead>
<tr>
<th>Performance Specification</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oscillation Frequency Range</td>
<td>750</td>
<td>770</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-103</td>
<td></td>
<td>dBc/Hz</td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-10</td>
<td></td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0.5</td>
<td>2.5</td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td>60</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>1.5</td>
<td>4.5</td>
<td>7.5</td>
<td>dBm</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td></td>
<td>Ω</td>
<td></td>
</tr>
<tr>
<td>Input Capacitance</td>
<td>150</td>
<td></td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>5</td>
<td></td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Pulling (20. dB Return Loss, Any Phase)</td>
<td>10</td>
<td></td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td></td>
<td>85</td>
<td>°C</td>
</tr>
</tbody>
</table>

### Power Supply Requirements

<table>
<thead>
<tr>
<th>Power Supply Requirement</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage (Vcc, nom.)</td>
<td>2.7</td>
<td></td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Supply Current (Icc)</td>
<td>11</td>
<td>14</td>
<td>mA</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Notes

- Voltage-Controlled Oscillator: SMV0760L  
- A1Rev

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

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Voltage-Controlled Oscillator
Surface Mount Module

SMV0760L
Revised A1

Tuning Curve, typ.

![Tuning Curve Chart]

- **TUNING VOLTAGE (Vdc)**

Power Curve, typ.

![Power Curve Chart]

- **FREQUENCY (MHz)**
  - 25 °C

Footprint

- **RECOMMENDED FOOTPRINT**
  - Several holes of 0.015 on GND. Plane are recommended for good grounding.

- **0.030 MIN. CUTBACK FROM LIVE PADS**
  - 0.065 TYP
  - 0.242 TYP

Physical Dimensions

- **NOTICE:** All dimensions are in inches.
- **TOL:** XXX: +/- 0.010

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