### Voltage-Controlled Oscillator

**Surface Mount Module**

#### Applications
- Test Instrumentation
- CATV Headend Equipment
- Satellite Communication Systems

#### 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>2700</td>
<td>5400</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-75</td>
<td>dBc/Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic Suppression (2nd)</td>
<td>-20</td>
<td>-17</td>
<td>dBc</td>
<td></td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>0</td>
<td>24</td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Tuning Sensitivity (avg.)</td>
<td></td>
<td>140</td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>3</td>
<td>7</td>
<td>11</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></td>
<td>50</td>
<td>pF</td>
<td></td>
</tr>
<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td></td>
<td>53</td>
<td>MHz/V</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40</td>
<td>85</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Package Style</td>
<td>MINI-16-LOW</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Power Supply Requirements

<table>
<thead>
<tr>
<th>Parameter</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>
<td></td>
<td>Vdc</td>
<td></td>
</tr>
<tr>
<td>Supply Current (Icc)</td>
<td>25</td>
<td>30</td>
<td>mA</td>
<td></td>
</tr>
</tbody>
</table>

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**Test Instrumentation**

- CATV Headend Equipment
- Satellite Communication Systems

**Applications**

- Voltage-Controlled Oscillator

**Surface Mount Module**

- **V600ME31-LF 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

Power Curve, typ.

双脚线控振荡器
表面安装模块

TUNING VOLTAGE (Vdc)

FREQUENCY (MHz)

0 2 4 6 8 10 12 14 16 18 20 22 24

-40°C  25°C  85°C

Power Curve, typ.

FREQUENCY (MHz)

POWER OUTPUT (dBm)

-40 25 85

Physical Dimensions

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

0.030 MIN. CUTBACK FROM LIVE PADS

0.100  MINI-16-UL

0.085  MINI-16-EL

0.220  Mini-16

0.160  MINI-16-L

0.130  MINI-16-UL

0.085  MINI-16-EL

PACKAGES:
H
W/O# D/C

NOTE: ALL DIMENSIONS ARE IN INCHES
TOL: XXX ±0.010

Z-COMM XXXXXXXX-LF
W/O# D/C

PIN CONFIGURATION
P1  Vt
P2  RF OUT
P3  Vcc
REST  GROUND

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