Voltage-Controlled Oscillator Surface Mount Module

### Applications
- Test Equipments
- RF Modems

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

<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>483</td>
<td>543</td>
<td>MHz</td>
<td></td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz offset (1 Hz BW)</td>
<td>-115</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>26</td>
<td>MHz/V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>-5</td>
<td>-2</td>
<td>1 dBm</td>
<td></td>
</tr>
<tr>
<td>Load Impedance</td>
<td>50</td>
<td>Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input Capacitance</td>
<td>400</td>
<td>pF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>1</td>
<td>MHz/V</td>
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<td></td>
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<tr>
<td>Pulling (12 dB Return Loss, Any Phase)</td>
<td>1</td>
<td>MHz</td>
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</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-30</td>
<td>80</td>
<td>°C</td>
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<tr>
<td>Package Style</td>
<td>MINI-14S-LOW</td>
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</table>

<table>
<thead>
<tr>
<th>Power Supply Requirements</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>4.5</td>
<td>Vdc</td>
<td></td>
<td></td>
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<tr>
<td>Supply Current (Icc)</td>
<td>41</td>
<td>50</td>
<td>mA</td>
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</tbody>
</table>

### Test Equipments
- RF Modems
- RF Instruments
- RF Signal Generators

### Applications
- Voltage-Controlled Oscillator
- Surface Mount Module

### V495ME02-LF

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.
**Voltage-Controlled Oscillator**

**Surface Mount Module**

**V495ME02-LF**

**Tuning Curve, typ.**

![Tuning Curve Graph]

- 80°C
- 25°C
- -30°C

**Power Curve, typ.**

![Power Curve Graph]

**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**

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

- PIN CONFIGURATION:
  - P1: Vt
  - P2: RF OUT
  - P3: GND

- PACKAGE:
  - MINI-14S 0.220
  - MINI-145-Low 0.160
  - MINI-145-L 0.130

- NOTE: All dimensions are in inches
  - TOL: XXX +/- 0.010

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