VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO307331-10

OPTIMIZED BANDWIDTH

3075 - 3310 MHz

FEATURES:
► Exceptional Phase Noise Performance
► Small Size, Surface Mount
► Lead Free Patented REL-PRO® Technology
► Planar Resonator Construction

SPECIFICATIONS (Rev. E 01/09/12)

Frequency: 3075 - 3310 MHz

Tuning Voltage: See table below.

Bias Voltage: +10 VDC @ 40 mA (Max.)

Output Power: +3 dBm (Min.)

Tuning Sensitivity: 15 - 27 MHz/V (Typ.)

Output Impedance: 50 Ohms (Nom.)

Harmonic Suppression: 25 dB (Typ.)

Frequency Pulling: 12 MHz (Typ. @ 1.75:1 VSWR)

Frequency Pushing: 2 MHz/V (Typ.)

Tuning Port Capacitance: 50 pF (Typ.)

Phase Noise @ 10 kHz: -99 dBc/Hz (Typ.)

Operating Temperature Range: -40 to +85 °C

Guaranteed Tuning Specifications

<table>
<thead>
<tr>
<th>Tuning Voltage (V)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>3075 (Max)</td>
</tr>
<tr>
<td>12</td>
<td>3175 (Min)</td>
</tr>
<tr>
<td>15</td>
<td>3230 (Min)</td>
</tr>
<tr>
<td>18</td>
<td>3280 (Min)</td>
</tr>
<tr>
<td>20</td>
<td>3310 (Min)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temp. Range</td>
<td>-55 to +125 °C</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+10.5 V</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>+25 V</td>
</tr>
<tr>
<td>DC Voltage Applied to RF Out</td>
<td>±25 V</td>
</tr>
</tbody>
</table>

This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 1 1/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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Performance plots:
- Frequency (MHz) vs. Control Voltage (Vdc)
- Output Power (dBm) vs. Control Voltage (Vdc)

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SURFACE MOUNT MODEL: DCRO307331-10

OPTIMIZED BANDWIDTH
3075 - 3310 MHz

Performance Plots

- Tuning Sensitivity (MHz/V)
- 2nd Harmonic Suppression (dB)

Control Voltage (Vdc)