VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCMO40110-8

WIDE BANDWIDTH

400 - 1100 MHz

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

SPECIFICATIONS (Rev. C 08/10/09)
Frequency 400 - 1100 MHz
Tuning Voltage See table below.
Bias Voltage +8 VDC @ 45 mA (Max.)
Output Power +5 dBm (Min.)
Tuning Sensitivity 17 - 55 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 10 dB (Typ.)
Frequency Pulling 5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 5 MHz/V (Typ.)
Tuning Port Capacitance 190 pF (Typ.)
Phase Noise @ 10 kHz -104 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>400 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>490 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>620 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>780 (Min.)</td>
</tr>
<tr>
<td>15</td>
<td>890 (Min.)</td>
</tr>
<tr>
<td>18</td>
<td>975 (Min.)</td>
</tr>
<tr>
<td>24</td>
<td>1100 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings
Storage Temp. Range -55 to +125 °C
Bias Voltage +8.5 V
Tuning Voltage +28 V
DC Voltage Applied to RF Out ± 25 V
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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; 6,523,620; 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; 7,580,693; 7,586,381; 7,605,431; 7,636,021; 2,524,751
Pending: 60/493075; 60/501371; 60/501790; 60/527957; 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; 60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,548,229; 7,586,381; 7,621,296; 2,524,751

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PERFORMANCE PLOTS

Control Voltage (Vdc) vs Frequency (MHz)

+25°C +85°C -40°C

Control Voltage (Vdc) vs Output Power (dBm)

+25°C +85°C -40°C
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCMO40110-8

WIDE BANDWIDTH

400 - 1100 MHz

PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)

Control Voltage (Vdc)

2nd Harmonic Suppression (dB)

Control Voltage (Vdc)