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

**SPECIFICATIONS (Rev. A 08/19/11)**

**Frequency**
- 2456 - 2772 MHz

**Tuning Voltage**
- See table below.

**Bias Voltage**
- +8 VDC @ 37 mA (Max.)

**Output Power**
- +2 dBm (Min.)

**Tuning Sensitivity**
- 38 - 55 MHz/V (Typ.)

**Output Impedance**
- 50 Ohms (Nom.)

**Harmonic Suppression**
- 26 dB (Typ.)

**Frequency Pulling**
- 1.5 MHz (Typ. @ 1.75:1 VSWR)

**Frequency Pushing**
- 0.15 MHz/V (Typ.)

**Tuning Port Capacitance**
- 47 pF (Typ.)

**Phase Noise @ 10 kHz**
- -102 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>1</td>
<td>2456 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>2510 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>2650 (Min.)</td>
</tr>
<tr>
<td>11</td>
<td>2772 (Min.)</td>
</tr>
</tbody>
</table>

**Absolute Maximum Ratings**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temp. Range</td>
<td>-55 to +125 °C</td>
</tr>
<tr>
<td>Bias Voltage @ RF Out</td>
<td>±8.5 V</td>
</tr>
<tr>
<td>Tuning Voltage (Max.)</td>
<td>±16 V</td>
</tr>
<tr>
<td>DC Voltage Applied to RF Out</td>
<td>±25 V</td>
</tr>
</tbody>
</table>

**Phase Noise**

![Phase Noise Graph]

**Package #**
- 278LF

**Recommended PCB Layout**

![Recommended PCB Layout]

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; 7,580,693; 7,586,381; 7,605,670; 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; EV31369834; 11/259766; 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
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO245277-8

OPTIMIZED BANDWIDTH
2456 - 2772 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)

Frequency (MHz)

Control Voltage (Vdc)

Output Power (dBm)
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO245277-8

OPTIMIZED BANDWIDTH

2456 - 2772 MHz

PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)

Control Voltage (Vdc)

+25°C  +85°C  -40°C

2nd Harmonic Suppression (dB)

Control Voltage (Vdc)

+25°C  +85°C  -40°C