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

SPECIFICATIONS (Rev. B 08/27/08)
Frequency: 2110 - 2170 MHz
Tuning Voltage: See table below.
Bias Voltage: +5 VDC @ 25 mA (Max.)
Output Power: -1.5 dBm (Min.)
Tuning Sensitivity: 30 - 40 MHz/V (Typ.)
Output Impedance: 50 Ohms (Nom.)
Harmonic Suppression: 30 dB (Typ.)
Frequency Pulling: 3 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing: 0.5 MHz/V (Typ.)
Tuning Port Capacitance: 50 pF (Typ.)
Phase Noise @ 10 kHz: -108 dBC/Hz (Typ.)
Operating Temperature Range: -40 to +85 ºC

Guaranteed Tuning Specifications
<table>
<thead>
<tr>
<th>Tuning Voltage (V)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>2110 (Max.)</td>
</tr>
<tr>
<td>4.5</td>
<td>2170 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings
Storage Temp. Range: -55 to +125 ºC
Bias Voltage: +6.5 V
Tuning Voltage: +7.0 V
DC Voltage Applied to RF Out: ±25 V

Phase Noise

Package # 278LF

RECOMMENDED PCB LAYOUT

Dimensions are in inches.

TOLERANCES ON THREE DECIMAL PLACES ± 0.015

ALL UNLABELED FINS TO BE GROUNDED.

PACKAGE MOUNTING: SEE APPLICATION NOTE AM7200 & AM7300
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO211217-5

OPTIMIZED BANDWIDTH
2110 - 2170 MHz

PERFORMANCE PLOTS
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO211217-5

OPTIMIZED BANDWIDTH

2110 - 2170 MHz

PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)

Control Voltage (Vdc)

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

+25°C  +85°C  -40°C

2nd Harmonic Suppression (dB)

Control Voltage (Vdc)

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

+25°C  +85°C  -40°C

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; 6,335,625; 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; 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,495,525; 2,548,311; 2,548,317; 2,548,311; 2,548,317.