FEATURES:
- Optimized Tuning Frequency Band
- Exceptional Phase Noise Performance
- Small Size, Surface Mount
- Patented REL-PRO® Technology
- Planar Resonator Construction

SPECIFICATIONS (Rev. A 02/24/09)

**Frequency**
- 957 MHz

**Tuning Voltage**
- 0.5 - 10 VDC

**Bias Voltage**
- +10 VDC @ 44 mA (Max.)

**Output Power**
- +7 dbm (Typ.)

**Tuning Sensitivity**
- 1.5 - 2 MHz/V (Typ.)

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

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

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

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

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

**Phase Noise @ 10 kHz**
- -126 dBc/Hz (Typ.)

**Operating Temperature Range**
- -40 to +85 °C

**Absolute Maximum Ratings**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</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>+15 V</td>
</tr>
<tr>
<td>DC Voltage Applied to RF Out</td>
<td>±25 V</td>
</tr>
</tbody>
</table>

**Package #**
- 278LF

**Recommended PCB Layout**

Dimensions are in inches.

**Tolerances on Three Decimal Places**

All unlabeled pins to be grounded.

Package Mounting: See Application Note AM7200 & AM7300
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR957-10

OPTIMIZED BANDWIDTH

957 MHz

PERFORMANCE PLOTS

Frequency (MHz)

Control Voltage (Vdc)

Output Power (dBm)

Control Voltage (Vdc)
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR957-10

OPTIMIZED BANDWIDTH

957 MHz

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0
0 1 2 3 4 5 6 7 8 9 10

Control Voltage (Vdc)

Tuning Sensitivity (MHz/V)

+25ºC  +85ºC  -40ºC

0 1 2 3 4 5 6 7 8 9 10

Control Voltage (Vdc)

2nd Harmonic Suppression (dB)

+25ºC  +85ºC  -40ºC