FEATURES:
► Small Size, Surface Mount (0.5” x 0.5”)
► Exceptional Phase Noise Performance
► Lead Free Patented REL-PRO® Technology
► Planar Resonator Construction

SPECIFICATIONS (Rev. A 10/09/08)

Frequency 1580 - 1600 MHz
Tuning Voltage See table below.
Bias Voltage +8 VDC @ 38 mA (Max.)
Output Power +2 dBm (Min.)
Tuning Sensitivity 5 - 8 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 17 dB (Typ.)
Frequency Pulling 3 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 2 MHz (Typ.)
Tuning Port Capacitance 63 pF (Typ.)
Phase Noise @ 10 kHz -116 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>1580 (Max.)</td>
</tr>
<tr>
<td>7</td>
<td>1600 (Min.)</td>
</tr>
<tr>
<td>10</td>
<td>1610 (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>+8.5 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 ± 0.005 TO BE GROUNDED.
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCMO158160-8

OPTIMIZED BANDWIDTH
1580 - 1600 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)
Frequency (MHz)

Control Voltage (Vdc)
Output Power (dBm)
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR0158160-8

OPTIMIZED BANDWIDTH

1580 - 1600 MHz

PERFORMANCE PLOTS