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

SPECIFICATIONS (Rev. C 11/12/09)

Frequency 2250 - 2750 MHz
Tuning Voltage See table below.
Bias Voltage +10 VDC @ 35 mA (Max.)
Output Power +3 dBm (Min.)
Tuning Sensitivity 5 - 40 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 15 dB (Typ.)
Frequency Pulling 5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 5 MHz/V (Typ.)
Tuning Port Capacitance 50 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>2250 (Max.)</td>
</tr>
<tr>
<td>7</td>
<td>2270 (Min.)</td>
</tr>
<tr>
<td>14</td>
<td>2460 (Min.)</td>
</tr>
<tr>
<td>21</td>
<td>2655 (Min.)</td>
</tr>
<tr>
<td>28</td>
<td>2750 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Storage Temp. Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>-55 to +125 °C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bias Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10.5 V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tuning Voltage</th>
<th>DC Voltage Applied to RF Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>+30 V</td>
<td>±25 V</td>
</tr>
</tbody>
</table>

OPTIMIZED BANDWIDTH 2250 - 2750 MHz

Phase Noise

2250 MHz 2394 MHz 2581 MHz 2752 MHz

RECOMMENDED PCB LAYOUT

TOLERANCES ON THREE DECMAL PLACES ± 0.015
ALL UNLABELED PINS TO BE GROUNDED.
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO225275-10

OPTIMIZED BANDWIDTH
2250 - 2750 MHz

PERFORMANCE PLOTS

Frequency (MHz)

Control Voltage (Vdc)

Output Power (dBm)

Control Voltage (Vdc)

+25°C  +85°C  -40°C
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO225275-10

OPTIMIZED BANDWIDTH 2250 - 2750 MHz

PERFORMANCE PLOTS

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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; 6,253,620; 6,253,625; 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; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 7,641,274; Pending: 60/493075; 60/501371 & 60/501790; 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; 7,495,525; 2,524,751