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

SPECIFICATIONS (Rev. C 01/02/12)
- Frequency: 2190 - 2500 MHz
- Tuning Voltage: See table below.
- Bias Voltage: +8 VDC @ 28 mA (Max.)
- Output Power: +2 dBm (Min)
- Tuning Sensitivity: 10 - 25 MHz/V (Typ)
- Output Impedance: 50 Ohms (Nom.)
- Harmonic Suppression: 18 dB (Typ.)
- Frequency Pulling: 2 MHz (Typ. @ 1.75:1 VSWR)
- Frequency Pushing: 2 MHz/V (Typ.)
- Tuning Port Capacitance: 55 pF (Typ.)
- Phase Noise @ 10 kHz: -105 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>2190 (Max)</td>
</tr>
<tr>
<td>5</td>
<td>2200 (Min)</td>
</tr>
<tr>
<td>8</td>
<td>2240 (Min)</td>
</tr>
<tr>
<td>12</td>
<td>2300 (Min)</td>
</tr>
<tr>
<td>15</td>
<td>2340 (Min)</td>
</tr>
<tr>
<td>18</td>
<td>2400 (Min)</td>
</tr>
<tr>
<td>24</td>
<td>2500 (Min)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings
- Storage Temp. Range: -55 to +125 °C
- Bias Voltage: +10.5 V
- Tuning Voltage: +30 V
- DC Voltage Applied to RF Out: ±25 V

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; 2,524,751; 7,580,693; 7,612,296; 2,563,174; 7,605,670; 7,636,021; 2,533,623
- Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 1 1/259766; 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; 7,605,670; 7,636,021; 2,533,623
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO219250-8

OPTIMIZED BANDWIDTH 2190 - 2500 MHz

PERFORMANCE PLOTS

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**VOLTAGE CONTROLLED OSCILLATOR**

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2190 - 2500 MHz

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**PERFORMANCE PLOTS**

### Control Voltage (Vdc) vs. Tuning Sensitivity (MHz/V)

- **+25°C**
- **+85°C**
- **-40°C**

### Control Voltage (Vdc) vs. 2nd Harmonic Suppression (dB)

- **+25°C**
- **+85°C**
- **-40°C**