VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCMO110250-8
WIDE BANDWIDTH
1100 - 2500 MHz

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

SPECIFICATIONS (Rev. C 08/06/07)
Frequency 1100 - 2500 MHz
Tuning Voltage See table below.
Bias Voltage +8 VDC @ 35 mA (Max.)
Output Power +4 dBm (Min.)
Tuning Sensitivity 30 - 90 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 -102 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>1100 (Max)</td>
</tr>
<tr>
<td>5</td>
<td>1250 (Min)</td>
</tr>
<tr>
<td>8</td>
<td>1500 (Min)</td>
</tr>
<tr>
<td>12</td>
<td>1800 (Min)</td>
</tr>
<tr>
<td>15</td>
<td>2050 (Min)</td>
</tr>
<tr>
<td>18</td>
<td>2200 (Min)</td>
</tr>
<tr>
<td>24</td>
<td>2400 (Min)</td>
</tr>
<tr>
<td>28</td>
<td>2500 (Min)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings
Storage Temp. Range -55 to +125 °C
Bias Voltage +8.5 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; 7,495,529; 7,580,693; 7,612,296; 2,524,751

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PERFORMANCE PLOTS

**Plot 1:**
- Frequency (MHz) vs. Control Voltage (Vdc)
- Lines for +25°C, +85°C, -40°C

**Plot 2:**
- Output Power (dBm) vs. Control Voltage (Vdc)
- Lines for +25°C, +85°C, -40°C
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PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)

Control Voltage (Vdc)

-25ºC  +85ºC  -40ºC

2nd Harmonic Suppression (dB)

Control Voltage (Vdc)

-25ºC  +85ºC  -40ºC