VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO150210-10

OPTIMIZED BANDWIDTH

1500 - 2100 MHz

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

SPECIFICATIONS (Rev. A 08/19/09)

Frequency 1500 - 2100 MHz
Tuning Voltage See table below.
Bias Voltage +10 VDC @ 27 mA (Max.)
Output Power +2 dBm (Typ.)
Tuning Sensitivity 20 - 50 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 15 dB (Typ.)
Frequency Pulling 3 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 0.4 MHz/V (Typ.)
Tuning Port Capacitance 56 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>1500 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>1540 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>1660 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>1785 (Min.)</td>
</tr>
<tr>
<td>15</td>
<td>1850 (Min.)</td>
</tr>
<tr>
<td>18</td>
<td>2000 (Min.)</td>
</tr>
<tr>
<td>24</td>
<td>2100 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

Storage Temp. Range -55 to +125 ºC
Bias Voltage +10.5 V
Tuning Voltage +26 V
DC Voltage Applied to RF Out ±25 V

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PERFORMANCE PLOTS
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PERFORMANCE PLOTS

Performance plots showing tuning sensitivity and 2nd harmonic rejection over a range of control voltages and temperatures.