VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO170230-10

OPTIMIZED BANDWIDTH 1700 - 2300 MHz

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

SPECIFICATIONS (Rev. B 07/03/07)
Frequency 1700 - 2300 MHz
Tuning Voltage See table below.
Bias Voltage +10V @ 32 mA (Max.)
Output Power +1 dBm (Min.)
Tuning Sensitivity 12 - 42 MHz/V (Typ.)
Output Impedance 50 Ohms (Nom.)
Harmonic Suppression 10 dB (Typ.)
Frequency Pulling 4 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing 4 MHz/V (Typ.)
Tuning Port Capacitance 68 pF (Typ.)
Phase Noise @ 10 kHz -107 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>1700 (Max.)</td>
</tr>
<tr>
<td>8</td>
<td>1780 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>1850 (Min.)</td>
</tr>
<tr>
<td>15</td>
<td>1950 (Min.)</td>
</tr>
<tr>
<td>18</td>
<td>2100 (Min.)</td>
</tr>
<tr>
<td>24</td>
<td>2300 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings
Storage Temp. Range -55 to +125 °C
Bias Voltage +10.5 V
Tuning Voltage +25 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; 6,523,620; 6,852,573; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 7,580,693; 7,612,296; 7,636,021; 2,548,311; 2,548,317; 7,545,229; 7,586,381; 2,563,174; 7,580,693; 7,605,670; 7,636,021; 2,533,623; 7,545,229; 7,563,174; 7,580,693; 7,612,296; 7,636,021; 2,524,751

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SURFACE MOUNT MODEL: DCRO170230-10
OPTIMIZED BANDWIDTH
1700 - 2300 MHz

PERFORMANCE PLOTS

+25°C  +85°C  -40°C

Control Voltage (Vdc)

Frequency (MHz)

Output Power (dBm)

Control Voltage (Vdc)
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR0170230-10

OPTIMIZED BANDWIDTH
1700 - 2300 MHz

PERFORMANCE PLOTS