VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRQ205242-10

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: 2050 - 2420 MHz
Tuning Voltage (Full Band): 0.5 - 15 VDC
Bias Voltage: +10 VDC @ 40 mA (Max)
Output Power: +1 dBm (Min)
Tuning Sensitivity: 30 - 45 MHz/V (Typ)
Output Impedance: 50 Ohms (Nom)
Harmonic Suppression: 20 dBc (Typ)
Frequency Pulling: 4 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing: 4 MHz/V (Typ)
Tuning Port Capacitance: 40 pF
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>2050 (Max)</td>
</tr>
<tr>
<td>5</td>
<td>2110 (Min)</td>
</tr>
<tr>
<td>8</td>
<td>2225 (Min)</td>
</tr>
<tr>
<td>10</td>
<td>2350 (Min)</td>
</tr>
<tr>
<td>12</td>
<td>2390 (Min)</td>
</tr>
<tr>
<td>15</td>
<td>2420 (Min)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Storage Temp. Range</th>
<th>-55 to +125 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bias Voltage</td>
<td>+10.5 V</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>+15 V</td>
</tr>
<tr>
<td>DC Voltage Applied to RF Out</td>
<td>±25 V</td>
</tr>
</tbody>
</table>

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; 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; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO205242-10

OPTIMIZED BANDWIDTH
2050 - 2420 MHz

PERFORMANCE PLOTS
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO205242-10

OPTIMIZED BANDWIDTH

2050 - 2420 MHz

PERFORMANCE PLOTS

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