VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR4000-5

OPTIMIZED FREQUENCY

4000 MHz

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

Phase Noise

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency</th>
<th>4000 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning Voltage</td>
<td>0.5 - 5 VDC</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+5 VDC @ 32 mA (Max.)</td>
</tr>
<tr>
<td>Output Power</td>
<td>+6 dBm (Min.)</td>
</tr>
<tr>
<td>Tuning Sensitivity</td>
<td>23 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>Harmonic Suppression</td>
<td>18 dB (Typ.)</td>
</tr>
<tr>
<td>Frequency Pulling</td>
<td>5 MHz (Typ. @ 1.75:1 VSWR)</td>
</tr>
<tr>
<td>Frequency Pushing</td>
<td>0.8 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Tuning Port Capacitance</td>
<td>48 pF (Typ.)</td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz</td>
<td>-102 dBc/Hz (Typ.)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 to +85 ºC</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

| Storage Temp. Range | -55 to +125 ºC |
| Bias Voltage        | +5.5 V |
| Tuning Voltage      | +6.0 V |
| DC Voltage Applied to RF Out | ± 25 V |

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201 McLean Boulevard • Paterson, New Jersey 07504 USA
Tel: (973) 881-8800 • Fax: (973) 881-8361
E-Mail: sales@synergymwave.com • Website: http://www.synergymwave.com
Patents: http://www.synergymwave.com/patents
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SURFACE MOUNT MODEL: DCSR4000-5

OPTIMIZED FREQUENCY

4000 MHz

PERFORMANCE PLOTS

**Frequency (MHz)**

- Control Voltage (Vdc)
  - +25°C
  - +85°C
  - -40°C

**Output Power (dBm)**

- Control Voltage (Vdc)
  - +25°C
  - +85°C
  - -40°C
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR4000-5
OPTIMIZED FREQUENCY 4000 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)
- Tuning Sensitivity (MHz/V)
- 2nd Harmonic Suppression (dB)

Temperature:
+25°C, +85°C, -40°C

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201 McLean Boulevard • Paterson, New Jersey 07504 USA
Tel: (973) 881-8800 • Fax: (973) 881-8361
E-Mail: sales@synergymwave.com • Website: http://www.synergymwave.com
Patents: http://www.synergymwave.com/patents