VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO250300-8

SPECIFICATIONS (Rev. A 05/11/09)

Frequency
2500 - 3000 MHz

Tuning Voltage
See table below.

Bias Voltage
+8 VDC @ 38 mA (Max.)

Output Power
+3.5 dBm (Min.)

Tuning Sensitivity
38 - 58 MHz/V (Typ.)

Output Impedance
50 Ohms (Nom.)

Harmonic Suppression
28 dB (Typ.)

Frequency Pulling
5 MHz (Typ. @ 1.75:1 VSWR)

Frequency Pushing
1.5 MHz/V (Typ.)

Tuning Port Capacitance
47 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>2500 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>2600 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>2700 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>3000 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

Storage Temp. Range
-55 to +125 °C

Bias Voltage
+8.5 V

Tuning Voltage
+18 V

DC Voltage Applied to RF Out
± 25 V

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VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO250300-8

OPTIMIZED BANDWIDTH

2500 - 3000 MHz

PERFORMANCE PLOTS

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; 6,255,025; 6,425,578; 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
Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; 60/710310; 10/937525/60/736901; 60/732787; 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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OPTIMIZED BANDWIDTH

2500 - 3000 MHz

PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)

2nd Harmonic Suppression (dB)

+25°C  +85°C  -40°C

PERFORMANCE PLOTS