VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCO1198-8

OPTIMIZED BANDWIDTH

1195 - 1205 MHz

FEATURES:
► Miniature Size, Surface Mount (0.3”x0.3”)
► Superb Phase Noise Performance
► Optimized Narrow Band Tuning

SPECIFICATIONS (Rev. B 01/09/14)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1195 - 1205 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning Voltage</td>
<td>0.5 - 8 V</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+8 VDC @ 30 mA (Max.)</td>
</tr>
<tr>
<td>Output Power</td>
<td>10 dBm (Min.)</td>
</tr>
<tr>
<td>Tuning Sensitivity</td>
<td>5 - 7 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>Harmonic Suppression</td>
<td>12 dB (Typ.)</td>
</tr>
<tr>
<td>Frequency Pulling</td>
<td>2 MHz (Typ. @ 1.75:1 VSWR)</td>
</tr>
<tr>
<td>Frequency Pushing</td>
<td>1 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Tuning Port Capacitance</td>
<td>33 pF (Typ.)</td>
</tr>
<tr>
<td>Typical Phase Noise</td>
<td>Offset</td>
</tr>
<tr>
<td></td>
<td>10 kHz</td>
</tr>
<tr>
<td></td>
<td>100 kHz</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 | +8.5 V |
| Tuning Voltage | +15 V |
| DC Voltage Applied to RF Out | ± 25 V |

Phase Noise

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SURFACE MOUNT MODEL: DCO1198-8

OPTIMIZED BANDWIDTH

1195 - 1205 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)

Output Power (dBm)

+25°C  +85°C  -40°C
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCO1198-8
OPTIMIZED BANDWIDTH
1195 - 1205 MHz

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PERFORMANCE PLOTS

**Tuning Sensitivity (MHz/V)**

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

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**2nd Harmonic Rejection (dB)**

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

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