VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCMO40110-5
WIDE BANDWIDTH

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

SPECIFICATIONS (Rev. D 11/23/09)

Frequency: 400 - 1100 MHz
Tuning Voltage: See table below.
Bias Voltage: +5 VDC @ 45 mA (Max.)
Output Power: +4 dBm (Min.)
Tuning Sensitivity: 17 - 55 MHz/V (Typ.)
Output Impedance: 50 Ohms (Nom.)
Harmonic Suppression: 8 dB (Typ.)
Frequency Pulling: 5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pulling: 5 MHz/V (Typ.)
Tuning Port Capacitance: 194 pF (Typ.)
Phase Noise @ 10 kHz: -103 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>400 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>490 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>620 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>780 (Min.)</td>
</tr>
<tr>
<td>15</td>
<td>890 (Min.)</td>
</tr>
<tr>
<td>18</td>
<td>975 (Min.)</td>
</tr>
<tr>
<td>24</td>
<td>1100 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temp. Range</td>
<td>-55 to +125 °C</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+5.5 V</td>
</tr>
<tr>
<td>Tuning Voltage</td>
<td>+26 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; 5,805,431; 6,253,029; 6,265,642; 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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SURFACE MOUNT MODEL: DCMO40110-5

WIDE BANDWIDTH

400 - 1100 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)

Frequency (MHz)

+25ºC +85ºC -40ºC

Control Voltage (Vdc)

Output Power (dBm)

+25ºC +85ºC -40ºC
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400 - 1100 MHz

PERFORMANCE PLOTS

0 2 4 6 8 10 12 14 16 18 20 22 24
Control Voltage (Vdc)

0 10 20 30 40 50 60
Tuning Sensitivity (MHz/V)

+25ºC  +85ºC  -40ºC

0 2 4 6 8 10 12 14 16 18 20 22 24
Control Voltage (Vdc)

0 5 10 15 20 25 30 35
2nd Harmonic Suppression (dB)

+25ºC  +85ºC  -40ºC