VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO640675-8

OPTIMIZED BANDWIDTH

6400 - 6750 MHz

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

SPECIFICATIONS (Rev. B 01/09/12)

Frequency: 6400 - 6750 MHz
Tuning Voltage: See table below.
Bias Voltage: +8 VDC @ 27 mA (Max.)
Output Power: 0 dBm (Min.)
Tuning Sensitivity: 42 - 52 MHz/V (Typ.)
Output Impedance: 50 Ohms (Nom.)
Harmonic Suppression: 20 dB (Typ.)
Frequency Pulling: 20 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing: 10 MHz/V (Typ.)
Tuning Port Capacitance: 12 pF (Typ.)
Phase Noise @ 10 kHz: -85 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>6400 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>6450 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>6600 (Min.)</td>
</tr>
<tr>
<td>11</td>
<td>6750 (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>+8.5 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; 5,450,754; 5,505,421; 5,535,025; 5,805,431; 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; 2,563,174; 2,563,176; 2,563,178; 7,383,863; 7,495,525; 2,548,311; 2,548,317; 2,563,174; 2,563,176; 2,563,178
Pending: 60/493075; 60/501767 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/589090; 60/601823; 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 2,563,174; 2,563,176; 2,563,178
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PERFORMANCE PLOTS

- Frequency (MHz) vs. Control Voltage (Vdc)
- Output Power (dBm) vs. Control Voltage (Vdc)
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PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V) vs. Control Voltage (Vdc)
-25°C, +85°C, -40°C

2nd Harmonic Suppression (dB) vs. Control Voltage (Vdc)
-25°C, +85°C, -40°C