VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR03845-5

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

SPECIFICATIONS (Rev. F 11/25/09)

Frequency: 380 - 445 MHz
Tuning Voltage: See table below.
Bias Voltage: +5 VDC @ 33 mA (Max.)
Output Power: -6 dBm (Min.)
Tuning Sensitivity: 15 - 21 MHz/V (Typ.)
Output Impedance: 50 Ohms (Nom.)
Harmonic Suppression: 14 dB (Typ.)
Frequency Pulling: 0.05 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing: 0.1 MHz/V (Typ.)
Tuning Port Capacitance: 100 pF (Typ.)
Phase Noise @ 10 kHz: -120 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>0.3</td>
<td>380 (Max.)</td>
</tr>
<tr>
<td>4.7</td>
<td>445 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

Storage Temp. Range: -55 to +125 °C
Bias Voltage: ±5.5 V
Tuning Voltage: ±7 V
DC Voltage Applied to RF Out: ± 25 V
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO3845-5

OPTIMIZED BANDWIDTH
380 - 445 MHz

PERFORMANCE PLOTS

Frequency (MHz)

Output Power (dBm)

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; 6,525,623; 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; 2,563,174; 7,495,525; 2,548,317; 7,545,229; 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; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,563,174; 7,495,525; 2,548,317; 7,545,229; 2,524,751
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OPTIMIZED BANDWIDTH
380 - 445 MHz

PERFORMANCE PLOTS

Tuning Voltage (VDC)
Tuning Sensitivity (MHz/V)
2nd Harmonic Suppression (dB)

25 deg C  85 deg C  -40 deg C

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