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

SPECIFICATIONS (Rev. A 09/10/08)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2488.32 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning Voltage</td>
<td>0.5 - 7 VDC</td>
</tr>
<tr>
<td>Bias Voltage</td>
<td>+8 VDC @ 38 mA (Max.)</td>
</tr>
<tr>
<td>Output Power</td>
<td>+1.5 dBm (Min.)</td>
</tr>
<tr>
<td>Tuning Sensitivity</td>
<td>1.3 - 1.8 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ohms (Nom.)</td>
</tr>
<tr>
<td>Harmonic Suppression</td>
<td>-20 dB (Typ.)</td>
</tr>
<tr>
<td>Frequency Pulling</td>
<td>0.25 MHz (Max. @ 1.75:1 VSWR)</td>
</tr>
<tr>
<td>Frequency Pushing</td>
<td>0.2 MHz/V (Typ.)</td>
</tr>
<tr>
<td>Tuning Port Capacitance</td>
<td>42 pF (Typ.)</td>
</tr>
<tr>
<td>Phase Noise @ 10 kHz</td>
<td>-117 dBC/Hz (Typ.)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 to +85 °C</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings:
- Storage Temp. Range: -55 to +125 °C
- Bias Voltage: +8.5 V
- Tuning Voltage: +15 V
- DC Voltage Applied to RF Out: ± 25 V

Phase Noise:
- Offset Frequency (Hz)
- Phase Noise (dBc/Hz)

Package:
- Package #: 278LF

CCMATE® PATENT NO. 7,612,296

RECOMMENDED PCB LAYOUT

OPTIMAL SUDDER AREA FOR HIGH VIBRATION ENVIRONMENT

TOLERANCES ON THREE DECIMAL PLACES = ± 0.005

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E-Mail: sales@synergymwave.com • World Wide Web: http://www.synergymwave.com
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR2488-8
OPTIMIZED BANDWIDTH
2488.32 MHz
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR2488-8

Optimized Bandwidth

2488.32 MHz

Performance Plots

Tuning Sensitivity (MHz/V)

Control Voltage (Vdc)

+25°C  +85°C  -40°C

2nd Harmonic Suppression (dB)

Control Voltage (Vdc)

+25°C  +85°C  -40°C

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; 6,052,023; 6,053,675; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,548,311; 7,548,317; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623; 60/493075; 60/501371; 60/501790; 60/527957; 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/622485; 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,580,693; 7,612,296; 2,524,751

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