VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCR0172174-12

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

SPECIFICATIONS (Rev. B 09/16/08)

- Frequency: 1710 - 1740 MHz
- Tuning Voltage: See table below.
- Bias Voltage: +12 VDC @ 35 mA (Max.)
- Output Power: +3 dBm (Min.)
- Tuning Sensitivity: 4.5 - 5.5 MHz/V (Typ.)
- Output Impedance: 50 Ohms (Nom.)
- Harmonic Suppression: 30 dB (Typ.)
- Frequency Pulling: 3 MHz (Typ. @ 1.75:1 VSWR)
- Frequency Pushing: 1 MHz/V (Typ.)
- Tuning Port Capacitance: 33 pF (Typ.)
- Phase Noise @ 10 kHz: -116 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>
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<tbody>
<tr>
<td>0.5</td>
<td>1710 (Max)</td>
</tr>
<tr>
<td>12</td>
<td>1740 (Min)</td>
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Absolute Maximum Ratings

- Storage Temp. Range: -55 to +125 °C
- Bias Voltage: +12.5 V
- Tuning Voltage: +15 V
- DC Voltage Applied to RF Out: ± 25 V

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; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,612,296; 7,636,021; 2,524,751

SEE SYNERGY MICROWAVE CORPORATION FOR COMPLETE INFORMATION ON THIS PRODUCT.
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO172174-12

OPTIMIZED BANDWIDTH 1710 - 1740 MHz

PERFORMANCE PLOTS

PERFORMANCE PLOTS
VOLTAGE CONTROLLED OSCILLATOR
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OPTIMIZED BANDWIDTH
1710 - 1740 MHz

PERFORMANCE PLOTS

<table>
<thead>
<tr>
<th>Control Voltage (Vdc)</th>
<th>Tuning Sensitivity (MHz/V)</th>
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<tbody>
<tr>
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<td>+25ºC</td>
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<tr>
<th>Control Voltage (Vdc)</th>
<th>2nd Harmonic Suppression (dB)</th>
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<tr>
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<td>+25ºC</td>
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