VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCYS200400-5
YIG REPLACEMENT SERIES

2000 - 4000 MHz

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

SPECIFICATIONS (Rev. G 08/20/09)

Frequency
2000 - 4000 MHz

Tuning Voltage
See table below.

Bias Voltage
+5 VDC @ 50 mA (Max.)

Output Power
+1 dBm (Min.)

Tuning Sensitivity
100 - 250 MHz/V (Typ.)

Output Impedance
50 Ohms (Nom.)

Harmonic Suppression
15 dB (Typ.)

Frequency Pulling
4 MHz (Typ. @ 1.75:1 VSWR)

Frequency Pushing
4 MHz (Typ.)

Tuning Port Capacitance
74 pF (Typ.)

Phase Noise @ 10 kHz
-90 dBc/Hz (Typ.)

Operating Temperature Range
-40 to +85 ºC

Guaranteed Tuning Specifications

<table>
<thead>
<tr>
<th>Tuning Voltage (V)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>2000 (Max.)</td>
</tr>
<tr>
<td>5</td>
<td>2400 (Min.)</td>
</tr>
<tr>
<td>8</td>
<td>2800 (Min.)</td>
</tr>
<tr>
<td>12</td>
<td>3400 (Min.)</td>
</tr>
<tr>
<td>16</td>
<td>4000 (Min.)</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings

Storage Temp. Range
-55 to +125 ºC

Bias Voltage
+5.5 V

Tuning Voltage
+18 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; 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; 2,563,174; 7,580,693; 7,605,670; 7,636,021; 2,533,623

Recommended PCB Layout

Dimensions are in inches.

Tolerances on three decimal places = ±0.015

Package Mounting: See application note AN7200 & AN7300
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PERFORMANCE PLOTS

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Pending: 60/493075; 60/501790; 60/501371; 60/501371 & 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 7,580,693; 7,612,296; 2,524,751

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