INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW190410-100

WIDE BANDWIDTH

1900 - 4100 MHz

FEATURES:
► Exceptionally Low Phase noise
► Interactive Communication
► Standard Programming Interface
► Ultra Wide Tuning Range
► Lead Free - RoHS Compliant
► Patented REL-PRO® Technology
► Small Size, Surface Mount
► Buffered Output

SPECIFICATIONS (Rev. I 01/02/12)

Frequency 1900 - 4100 MHz
Step Size 1000 kHz
Reference Input Frequency 10 MHz
Reference Input Voltage 1.0 V p-p to 3.3 V p-p

Bias Voltage |
<table>
<thead>
<tr>
<th>Vcc (Vdc)</th>
<th>V (Vdc)</th>
<th>I (mA Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital</td>
<td>+5</td>
<td>65</td>
</tr>
<tr>
<td>VCO</td>
<td>+5</td>
<td>50</td>
</tr>
<tr>
<td>Converter</td>
<td>+5</td>
<td>25</td>
</tr>
</tbody>
</table>

Output Power +7 dBm (Min.)
Spurious Suppression 70 dB (Typ.)
Harmonic Suppression 10 dB (Typ.)
Settling Time 10 mSec (Typ.)
Output Impedance 50 Ohms (Nom.)
Lock Detect Indicator CMOS 3.3 V

Typical Phase Noise
<table>
<thead>
<tr>
<th>Offset</th>
<th>Phase Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 1 kHz</td>
<td>-85 dBc/Hz</td>
</tr>
<tr>
<td>@ 10 kHz</td>
<td>-85 dBc/Hz</td>
</tr>
<tr>
<td>@ 100 kHz</td>
<td>-110 dBc/Hz</td>
</tr>
</tbody>
</table>

Operating Temperature Range -20 to +70 °C
Programming See Application Note: AN7100

Absolute Maximum Ratings

Storage Temp. Range -55 to +125 °C
Bias Voltage (Digital) +5.25 V
Bias Voltage (VCO) +5.5 V
Bias Voltage (Converter) +8.0 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; 7,605,670; 7,636,021; 2,533,623

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SURFACE MOUNT MODEL: LFSW190410-100

WIDE BANDWIDTH

1900 - 4100 MHz

REFERENCE SIDEBAND SUPPRESSION

PERFORMANCE PLOTS
INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW190410-100

WIDE BANDWIDTH
1900 - 4100 MHz

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Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 1 1/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,593,174; 7,586,603; 7,612,286; 2,524,751

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