INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW170225-1M

OPTIMIZED BANDWIDTH

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. F 01/16/12)

Frequency 1700 - 2250 MHz
Step Size 10 MHz
Reference Input Frequency 100 MHz
Reference Input Voltage 1 V p-p to 3.3 V p-p

Bias Voltage

<table>
<thead>
<tr>
<th>Voltage</th>
<th>(Vdc)</th>
<th>I (mA Max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital</td>
<td>+5</td>
<td>50</td>
</tr>
<tr>
<td>VCO</td>
<td>+5</td>
<td>40</td>
</tr>
<tr>
<td>Converter</td>
<td>+5</td>
<td>60</td>
</tr>
</tbody>
</table>

Lock Detect Indicator CMOS 3.3 V
Output Power +5 dBm (Min.)
Spurious Suppression 75 dB (Typ.)
Harmonic Suppression 25 dB (Typ.)
Settling Time 5 mSec (Typ.)
Output Impedance 50 Ohms (Nom.)

Typical Phase Noise

<table>
<thead>
<tr>
<th>Offset Phase Noise</th>
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</thead>
<tbody>
<tr>
<td>1 kHz</td>
</tr>
<tr>
<td>102 dBc/Hz</td>
</tr>
<tr>
<td>10 kHz</td>
</tr>
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<tr>
<td>102 dBc/Hz</td>
</tr>
</tbody>
</table>

Operating Temperature Range -40 to +85 ºC
Programming See Application Note: AN7100

Absolute Maximum Ratings

Storage Temp. Range -55 to +125 ºC
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

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SURFACE MOUNT MODEL: LFSW170225-1M

OPTIMIZED BANDWIDTH

1700 - 2250 MHz

PERFORMANCE PLOTS

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION
INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW170225-1M

1700 - 2250 MHz

OPTIMIZED BANDWIDTH

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

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; 2,563,174; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,612,296; 2,524,751

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