INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: FSW2476-10

WIDE BANDWIDTH

240 - 760 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

SPECIFICATIONS (Rev. D 03/24/11)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>240 - 760 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Size</td>
<td>100 kHz</td>
</tr>
<tr>
<td>Reference Input Frequency</td>
<td>10 MHz</td>
</tr>
<tr>
<td>Reference Input Voltage</td>
<td>1.0 V p-p to 3.3 V p-p</td>
</tr>
</tbody>
</table>

- **Bias Voltage**
  - **Vcc**
    - **V (Vdc)**: Digital +5, VCO +5, Tune +25
    - **I (mA Max.)**: 15, 35, 10

- **Output Power**: 0 dBm (Min.)
- **Spurious Suppression**: 70 dB (Typ.)
- **Harmonic Suppression**: 12 dB (Typ.)
- **Settling Time**: 10 mSec (Typ.)
- **Output Impedance**: 50 Ohms (Nom.)
- **Lock Detect Indicator**: CMOS 3.3 V

- **Typical Phase Noise**
  - **Offset Phase noise**
    - @ 1 kHz: -88 dBc/Hz
    - @ 10 kHz: -98 dBc/Hz
    - @ 100 kHz: -124 dBc/Hz

- **Operating Temperature Range**: -40 to +85 °C

- **Programming**: See Application Note: AN7100

- **Absolute Maximum Ratings**
  - **Storage Temp. Range**: -55 to +125 °C
  - **Bias Voltage (Digital)**: +28 V
  - **Bias Voltage (VCO)**: +5.5 V
  - **DC Voltage Applied to RF Out**: ±25 V

- **Package #**: 273LF

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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; 2,563,174; 7,580,693; 7,612,296; 2,524,751

1 Reference input frequency is programmable (see AN7100) in multiples of the step size, 10 MHz is the factory default setting. 100 MHz (Max.)

2 From the rising edge of LE to stable lock detect

* High when locked (source/sink 500 uA)
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PERFORMANCE PLOTS

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

Start 100 MHz  200 MHz  Stop 1 GHz

Ref. 10 dBm  * Att. 35 dB  SM 500 m

Date: 12.FEB.2007  17:44:12

Ref. 5 dBm  * Att. 30 dB  SM 16 m

Date: 12.FEB.2007  17:57:55
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REFERENCE SIDEBAND SUPPRESSION

PERFORMANCE PLOTS
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REFERENCE SIDEBAND SUPPRESSION
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HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

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