INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW1545-10

WIDE BANDWIDTH
150 - 450 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. A 01/07/11)

Frequency: 150 - 450 MHz
Step Size: 100 kHz
Reference Input Frequency: 10 MHz
Reference Input Voltage: 1.0 V p-p to 3.3 V p-p

Bias Voltage
- Vcc V (Vdc) I (mA Max)
  - Digital: +5 50
  - VCO: +5 35
  - Converter: +5 60

Output Power: +6 dBm (Min.)
Spurious Suppression: 65 dB (Typ.)
Harmonic Suppression: 15 dB (Typ.)
Settling Time: 10 mSec (Typ.)
Output Impedance: 50 Ohms (Nom.)
Lock Detect Indicator: CMOS 3.3 V

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): +5.25 V
- Bias Voltage (VCO): +5.5 V
- Bias Voltage (Converter): +8.0 V
- DC Voltage Applied to RF Out: ±25 V

Package # 197LF

Port Configuration:
- Pin 5 - RF out
- Pin 7 - Lock Detect Out *
- Pin 9 - Data In
- Pin 10 - Error Flag
- Pin 11 - Clock In
- Pin 13 - VCO (On/Off)****
- Pin 19 - Latch Enable In
- Pin 21 - Ref. In
- Pin 23 - Vcc (Digital)
- Pin 24 - Vtune (Output)
- Pin 25 - Vcc (VCO)
- Pin 26 - Vout (Converter) ***
- Pin 27 - Vcc (Tone) ***
- Pin 8, 12, 14, 15, 16, 17 - NC
- All Others - Ground

* High when locked (source/sink 500 uA)
** Connect externally. Bypassed with a 10uF 35V tantalum capacitor.
*** NC if unused.
**** NC if unused.

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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HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION
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PERFORMANCE PLOTS
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