INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW50120-50

WIDE 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. D 04/07/11)

Frequency: 500 - 1200 MHz
Step Size: 500 kHz
Reference Input Frequency: 10 MHz
Reference Input Voltage: 1.0 V p-p to 3.3 V p-p
Bias Voltage:
- Vcc (Vdc): +5 V
- VCO: +5 V
- Converter: +5 V

Output Power: +7 dBm (Min.)
Spurious Suppression: 75 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:
- Offset Phase Noise
  @ 1 kHz: -95 dBc/Hz
  @ 10 kHz: -95 dBc/Hz
  @ 100 kHz: -118 dBc/Hz

Operating Temperature Range: -40 to +85 °C
Programming:
- See Application Note: AN7100
  1 Reference input frequency is programmable (see AN7100) in multiples of the step size, 10 MHz is the default setting. 150 MHz (Max.)

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 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; 2,563,174; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623
| Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 1/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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INTELLIGENT INTERACTIVE SYNTHESIZER
SURFACE MOUNT MODEL: LFSW50120-50

WIDE BANDWIDTH
500 - 1200 MHz

REFERENCE SIDEBAND SUPPRESSION

PERFORMANCE PLOTS

Date: 21.MAY.2007  09:36:49
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SURFACE MOUNT MODEL: LFSW50120-50

WIDE BANDWIDTH

500 - 1200 MHz

HARMONIC SUPPRESSION

REFERENCE SIDEBAND SUPPRESSION

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