

INTELLIGENT INTERACTIVE SYNTHESIZER

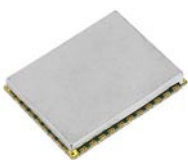
SURFACE MOUNT MODEL: LFSW60170-50

WIDE BANDWIDTH

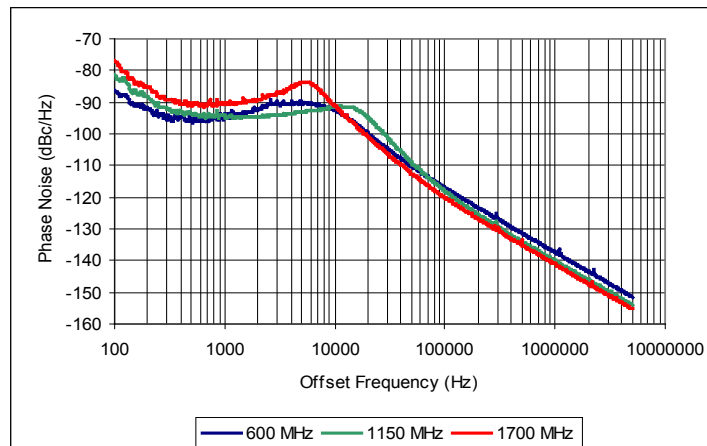
600 - 1700 MHz

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ Interactive Communication
- ▶ Standard Programming Interface
- ▶ Ultra Wide Tuning Range
- ▶ Lead Free - RoHS Compliant
- ▶ Patent Pending REL-PRO® Technology
- ▶ Small Size, Surface Mount



Phase Noise

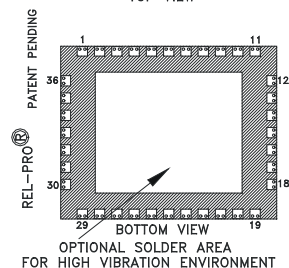
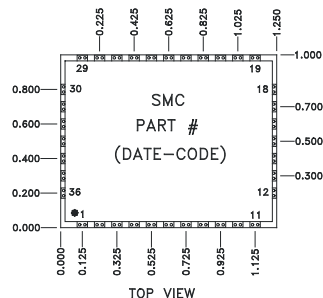


SPECIFICATIONS (Rev. H 11/04/05)

Frequency	600-1700 MHz		
Step Size	500 kHz		
Reference Input Frequency	10 MHz		
Reference Input Voltage	1 V p-p to 3.3 V p-p		
Bias Voltage	Vcc	V (Vdc)	I (mA Max)
	Digital	+5	65
	VCO	+5	30
	Converter	+5	55
Output Power	+7 dBm (Min)		
Spurious Suppression	-70 dBc (Typ)		
Harmonic Suppression	-10 dBc (Typ)		
Settling Time	10 mSec (Typ)		
Output Impedance	50 Ohms		
Typical Phase Noise	Offset		Phase Noise
	@ 1 kHz		-90 dbc/Hz
	@ 10 kHz		-90 dbc/Hz
	@ 100 kHz		-117 dbc/Hz
Operating Temperature Range	-30 to +75 °C		
Programming	See Application Note: AN7100		

Package # 197LF

Package Style Surface Mount

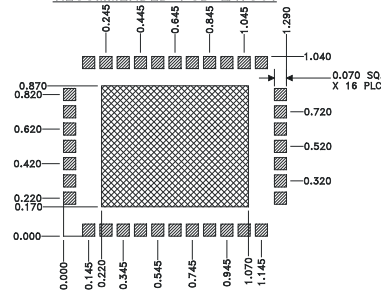


OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT

PIN-OUT
 Pin 5 - RF Out
 Pin 7 - Lock Detect Out
 Pin 9 - Data In
 Pin 10 - Error Flag
 Pin 11 - Clock In
 Pin 16 - Reset
 Pin 19 - Latch Enable In
 Pin 21 - Ref In
 Pin 23 - Vcc(Digital)
 Pin 24 - Vtune
 Pin 25 - Vcc(VCO)
 Pin 26* - Vout(Converter)
 Pin 27* - Vcc(Tune)
 Pin 28 - Vcc(Converter)
 Pin 5,12,13 - No Connection
 Pin 14,15,17 - No Connection
 All Others - Ground

*Connect externally. Bypassed with a 10uF 35V Tantalum Capacitor.

RECOMMENDED PCB LAYOUT



TOLERANCES ON THREE DECIMAL PLACES= ± 0.015

PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

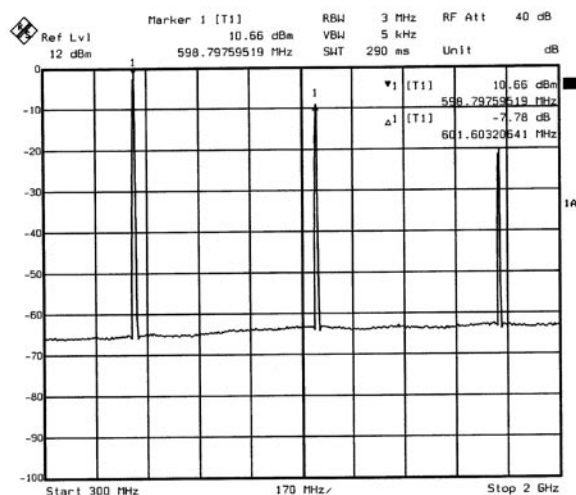
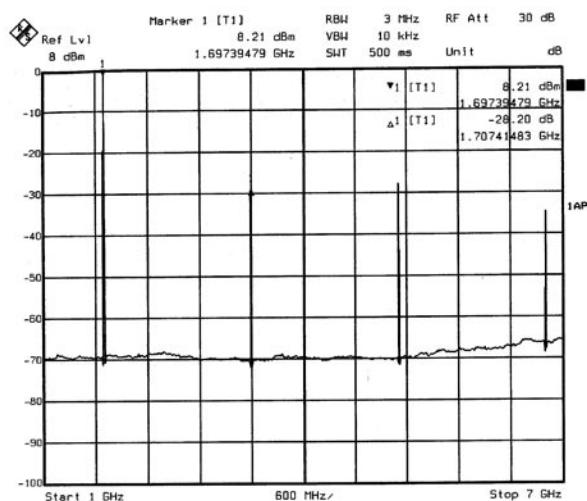
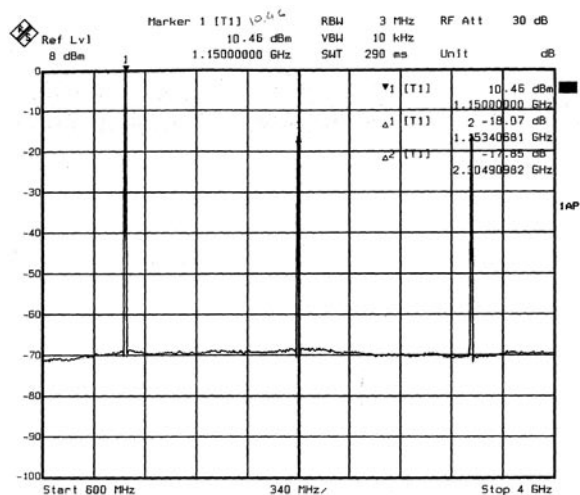
INTELLIGENT INTERACTIVE SYNTHESIZER

SURFACE MOUNT MODEL: LFSW60170-50

WIDE BANDWIDTH

600 - 1700 MHz

TYPICAL HARMONIC REJECTION



PERFORMANCE PLOTS

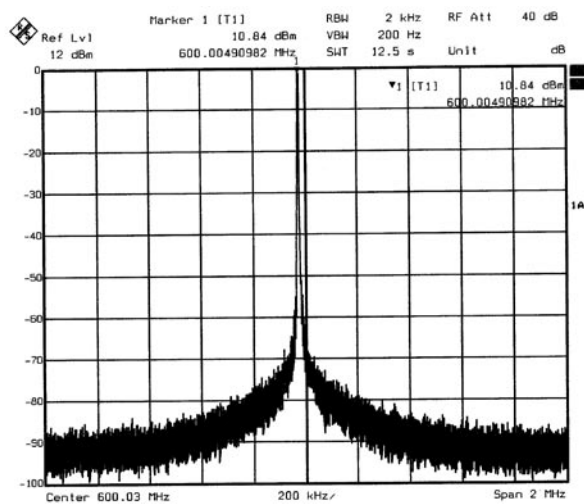
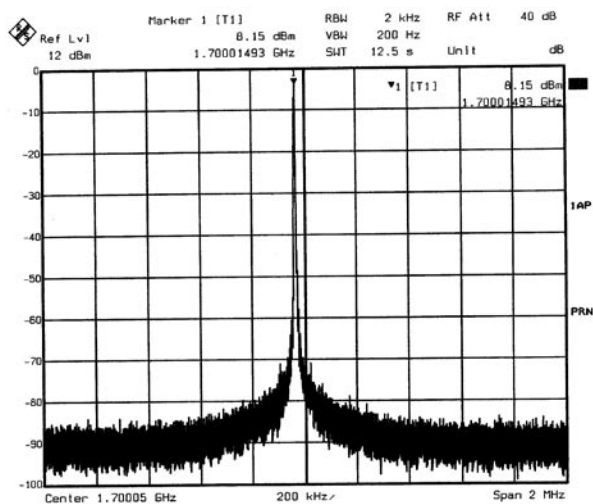
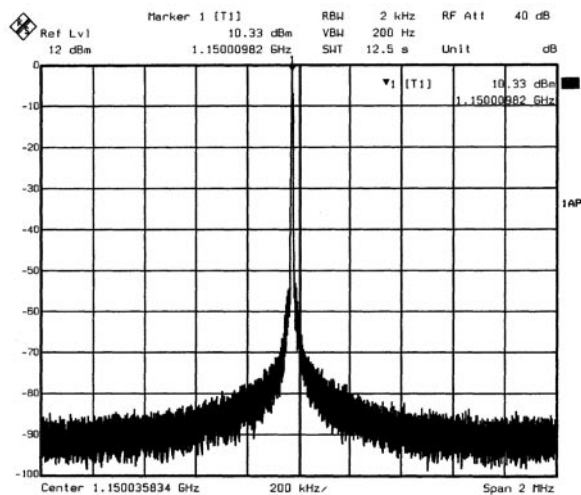
INTELLIGENT INTERACTIVE SYNTHESIZER

SURFACE MOUNT MODEL: LFSW60170-50

WIDE BANDWIDTH

600 - 1700 MHz

REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS