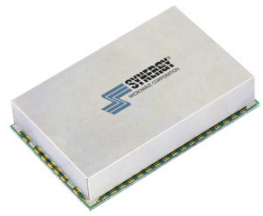
REFERENCE PHASE LOCKED TRANSLATOR SURFACE MOUNT MODEL: FXLNS-1000

FIXED FREQUENCY 1000 MHz

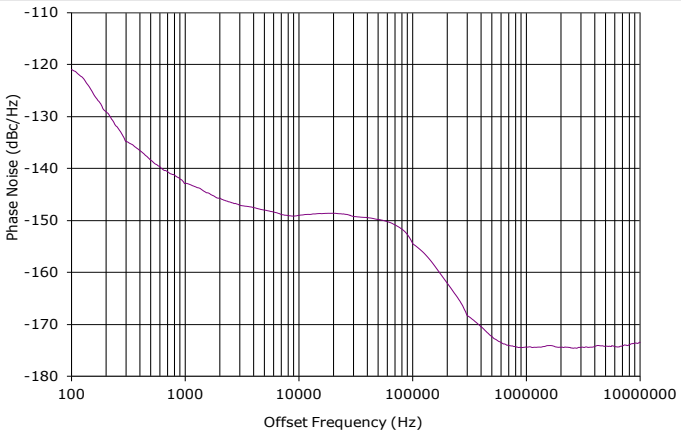
FEATURES:

- Ultra-Low Phase Noise
- No Programming Required



RoHS COMPLIANT

Phase Noise (Measured with Agilent E5052A or R&S FSUP-26/50)



SPECIFICATIONS (Rev. A 04/08/13)

Frequency	1000 MHz
Reference Input Frequency	100 MHz [1]
Reference Input Power	13 ±3 dBm
Bias Voltage	VCC1: +5 VDC @ 200 mA (Max.) VCC2: +12 VDC @ 45 mA (Max.)
Output Power	-2 dBm (Min.)
Spurious Suppression	55 dB (Typ.)
Harmonic Suppression	35 dB (Typ.)
Output Impedance	50 Ohms (Nom.)
Lock Detect Indicator	CMOS 3.3 V

[1] External 100 MHz reference sources should have phase noise better than -143 dBc/Hz @ 100 Hz offset to achieve published specifications.

Patent : http://www.synergymwave.com/patents

Typical Phase Noise	@ 100 Hz: -120 dBc/Hz @ 1 kHz: -140 dBc/Hz @ 10 kHz: -149 dBc/Hz @ 100 kHz: -154 dBc/Hz @ 1 MHz: -174 dBc/Hz
Operating Temperature Range	-20 to +70 °C

Absolute Maximum Ratings

Storage Temp. Range	-40 to +85 ºC
Bias Voltage VCC1 (+5 V)	+6.0 V
Bias Voltage VCC2 (+12 V)	+13.0 V
DC Bias Voltage applied to RF output	±25 V

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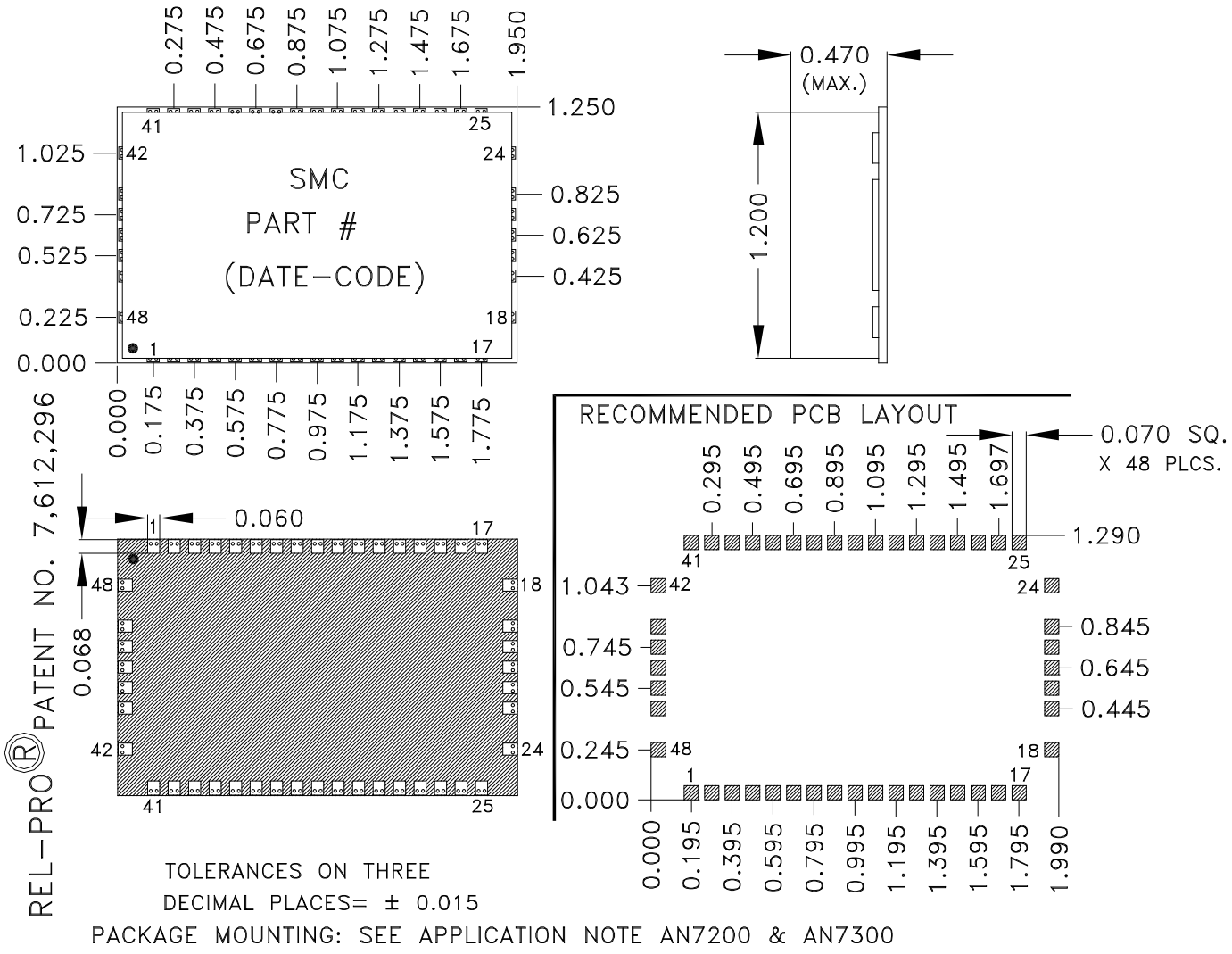
SYNERGY® MICROWAVE CORPORATION

REFERENCE PHASE LOCKED TRANSLATOR
SURFACE MOUNT MODEL: FXLNS-1000

FIXED FREQUENCY — 1000 MHz

Package #	344



PORT CONFIGURATION

Pin 3 - VCC 1 ***	Pin 18,19,20,21 - NC	All others - Ground
Pin 6 - RF OUT	Pin 22 - Reference In	
Pin 8 - NC	Pin 27 - VCC 1 ***	NC - No connection
Pin 9 - NC	Pin 28 - VCC 2	
Pin 10 - NC	Pin 30,31 - NC	
Pin 11 - NC	Pin 35 - NC	
Pin 12 - NC	Pin 39 - VCC 1***	
Pin 13 - NC	Pin 40 - NC	
Pin 14 - Lock Detect (LD) **	Pin 44 - VCC 2	
Pin 15, 16 - NC	Pin 43,45 - NC	

** Connect together externally and bypass with shunt 10 uF, 35 V capacitor to ground.*
*** Positive CMOS levels (unbuffered 3.3 VDC)*
**** Connect together externally and bypass with shunt 10uF, 10 V capacitor to ground*

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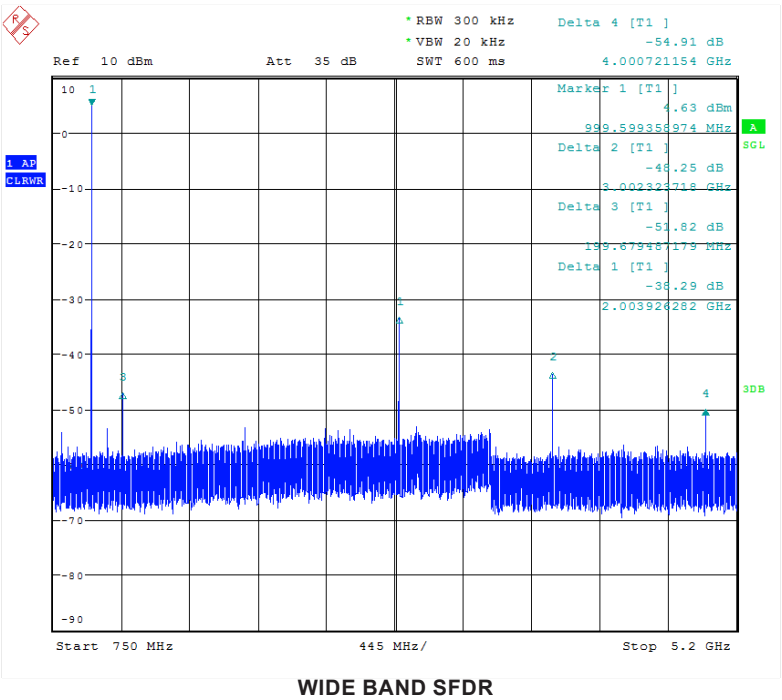
SURFACE MOUNT MODEL: FXLNS-1000

FIXED FREQUENCY — 1000 MHz

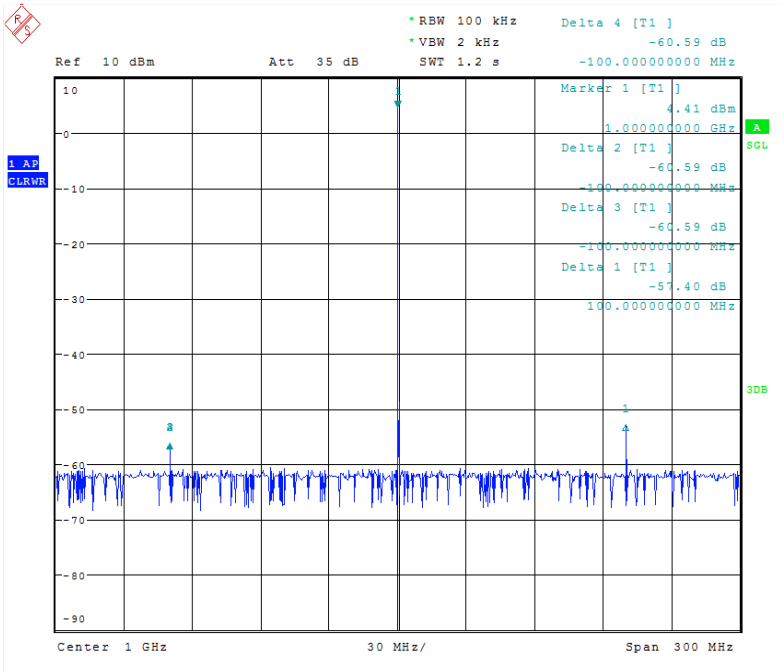
PERFORMANCE PLOTS

@ 25 ºC

HARMONIC SUPPRESSION



WIDE BAND SFDR



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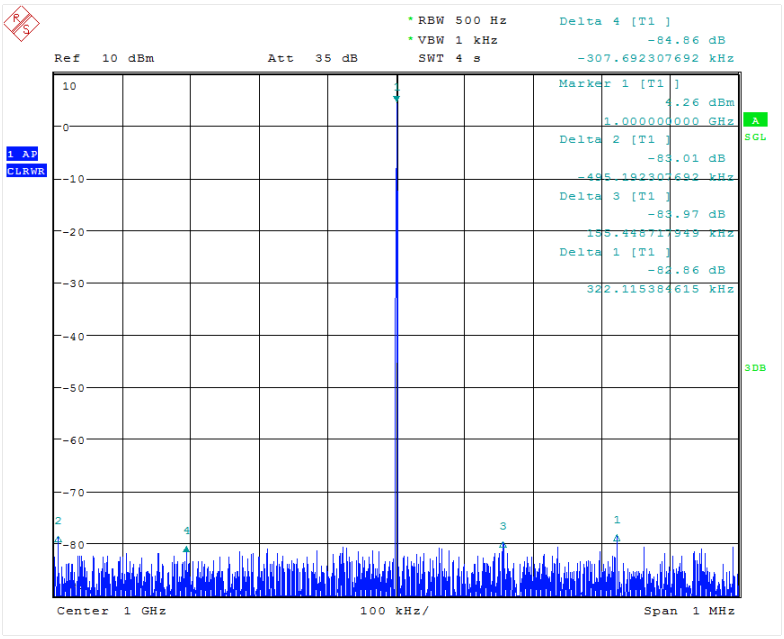
SURFACE MOUNT MODEL: FXLNS-1000

FIXED FREQUENCY 1000 MHz

PERFORMANCE PLOTS

NARROW BAND SFDR

@ 25 ºC



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