

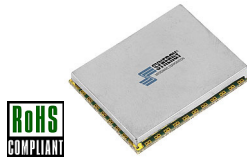
# FIXED FREQUENCY SYNTHESIZER

## SURFACE MOUNT MODEL: FCPH3210-10

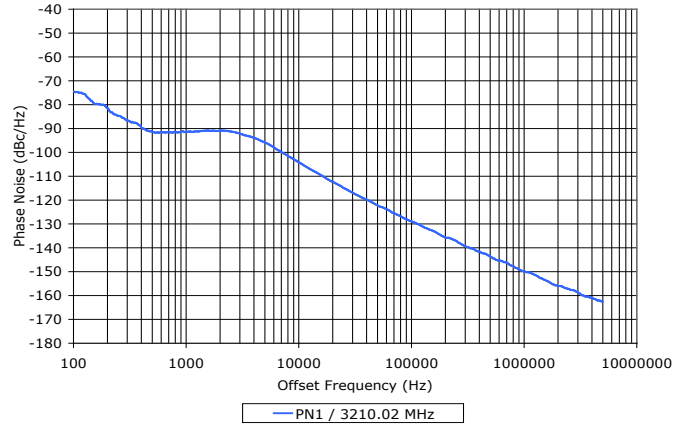
3210 MHz

**FEATURES:**

- ▶ Exceptionally Low Phase Noise
- ▶ No Programming Required
- ▶ Lead Free - RoHS Compliant
- ▶ Patented REL-PRO® Technology
- ▶ Small Size, Surface Mount



**Phase Noise**



**SPECIFICATIONS (Rev. C 07/13/20)**

Frequency	3210 MHz		
Reference Input Frequency	10 MHz		
Reference Input Voltage	1.0 V p-p to 3.3 V p-p		
Bias Voltage	<b>Vcc</b>	<b>V (Vdc)</b>	<b>I (mA Max.)</b>
	Digital	+5	65
	VCO	+8	35
	Vtune	+8	10
Output Power	+5 dBm ±2 dB		
Spurious & Ref. Sideband	84 dB (Typ.)		
Harmonic Suppression	10 dBc (Typ.)		
Settling Time	90 mSec (Max.)		
Output Impedance	50 Ohms (Nom.)		
Lock Detect Indicator	CMOS		
Typical Phase Noise	<b>Offset</b>	<b>Phase Noise</b>	
	@ 1 kHz	-90 dBc/Hz	
	@ 10 kHz	-103 dBc/Hz	
	@ 100 kHz	-129 dBc/Hz	
Operating Temperature Range	-40 to +85 °C		

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage (Digital)	+5.25 V
Bias Voltage (Tune)	+12.0 V
Bias Voltage (VCO)	+8.5 V
DC Voltage Applied to RF Out	±25 V

**Package #** 197LF

TOP VIEW

BOTTOM VIEW

SIDE VIEW

RECOMMENDED PCB LAYOUT

REL-PRO® PATENT NO. 7,612,296

OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT

TOLERANCES ON THREE DECIMAL PLACES= ± 0.015

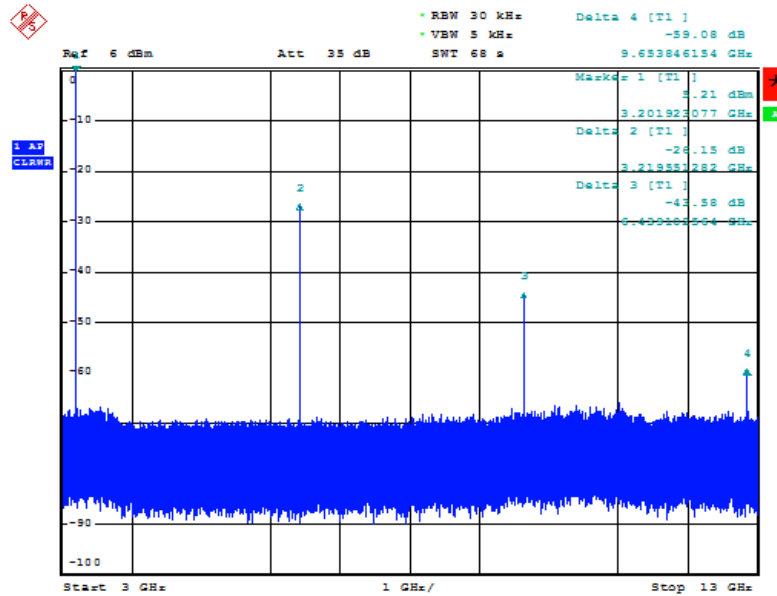
PACKAGE MOUNTING: SEE APPLICATION NOTES AN7200 & AN7300

Port Configuration		
Pin 5 - RF Out	Pin 25 - Vcc (VCO)	All Others - Ground
Pin 7 - Lock Detect	Pin 27 - Vcc (Vtune)	NC - No Connection
Pin 21 - Ref. In	Pin 8 to 19, 24, 26, 28 - NC	
Pin 23 - Vcc (Digital)		

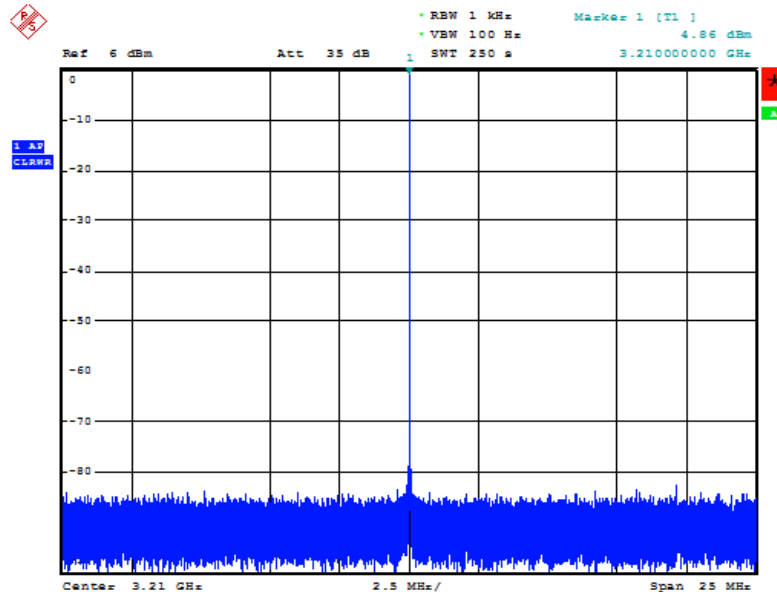
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3210 MHz

## HARMONIC SUPPRESSION



## REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS