

SELECTABLE FREQUENCY SYNTHESIZER

SURFACE MOUNT MODEL: FCPL3239-10

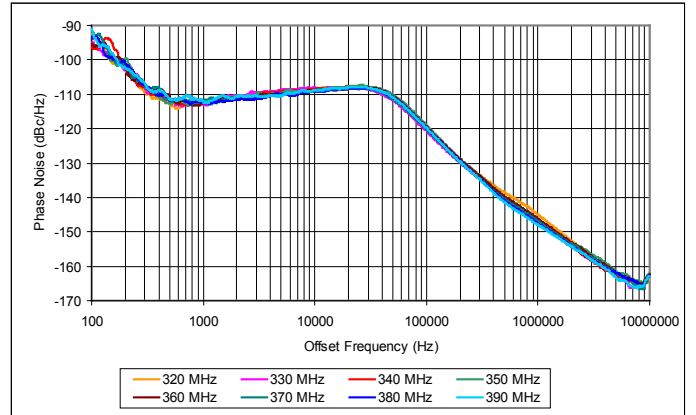
320 - 390 MHz

FEATURES:

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



Phase Noise



SPECIFICATIONS (Rev. D 12/21/10)

Frequency	320 - 390 MHz		
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.)
	Vcc 1 (Digital)	+5	10
	Vcc 2 (Vtune)	+5	30
	Vcc 3 (VCO)	+5	15
D0, D1, D2	0 V / +5 V		
Lock Detect Indicator	CMOS 3.3 V		
Output Power	+1 dBm (Min.)		
Spurious Suppression	90 dB (Typ.)		
Harmonic Suppression	12 dB (Typ.)		
Power Up Time	90 mSec (Typ.) ¹		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 1 kHz	-112 dBc/Hz	
	@ 10 kHz	-108 dBc/Hz	
	@ 100 kHz	-120 dBc/Hz	
Operating Temperature Range	-30 to +70 °C		

¹ From stable power on to stable lock detect.

Binary Frequency Selection Table

D1*	D2*	D3*	Frequency (MHz)
0	0	0	320
1	0	0	330
0	1	0	340
1	1	0	350
0	0	1	360
1	0	1	370
0	1	1	380
1	1	1	390

* Voltage levels: 0V or gnd. / +5V or open.

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (Digital)	+5.25 V
Bias Voltage (Vtune)	+8.0 V
Bias Voltage (VCO)	+5.5 V
DC Voltage Applied to RF Out	± 25 V

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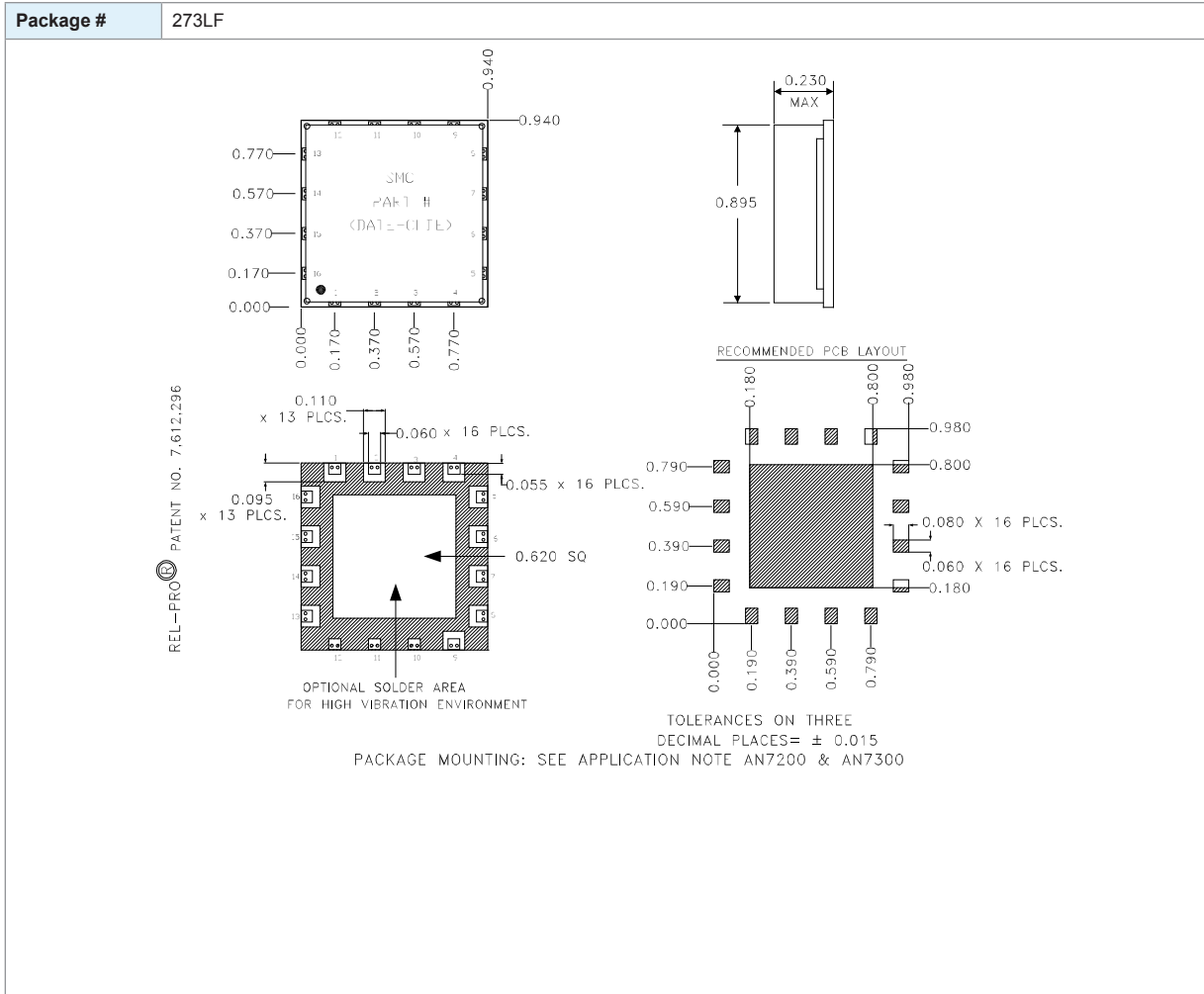


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PERFORMANCE PLOTS



Port Configuration

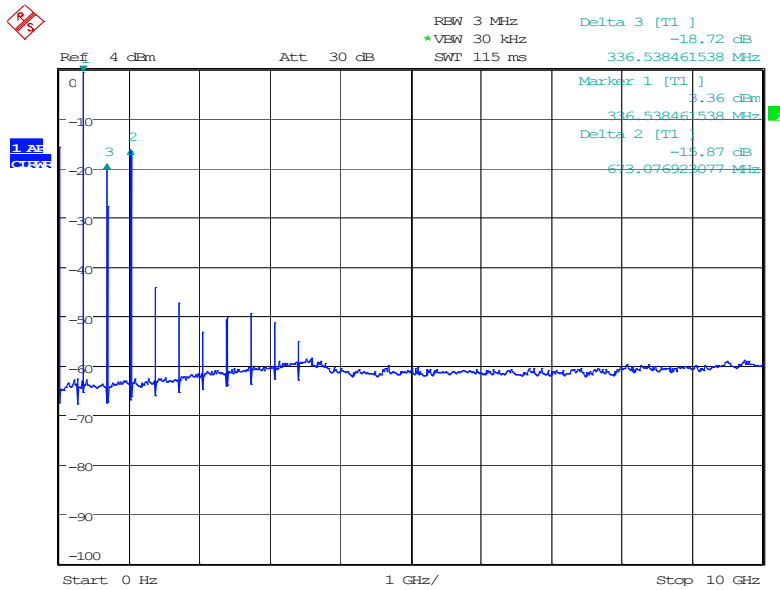
Pin 1 - NC	Pin 6 - Ref. Input	Pin 11 - Ground	Pin 16 - NC
Pin 2 - D1	Pin 7 - VCC1 (Digital)	Pin 12 - Ground	NC - Not Connected
Pin 3 - D2	Pin 8 - VCC2 (Vtune)	Pin 13 - RF Out	
Pin 4 - D3	Pin 9 - VCC3 (VCO)	Pin 14 - Lock Detect	
Pin 5 - NC	Pin 10 - Ground	Pin 15 - NC	

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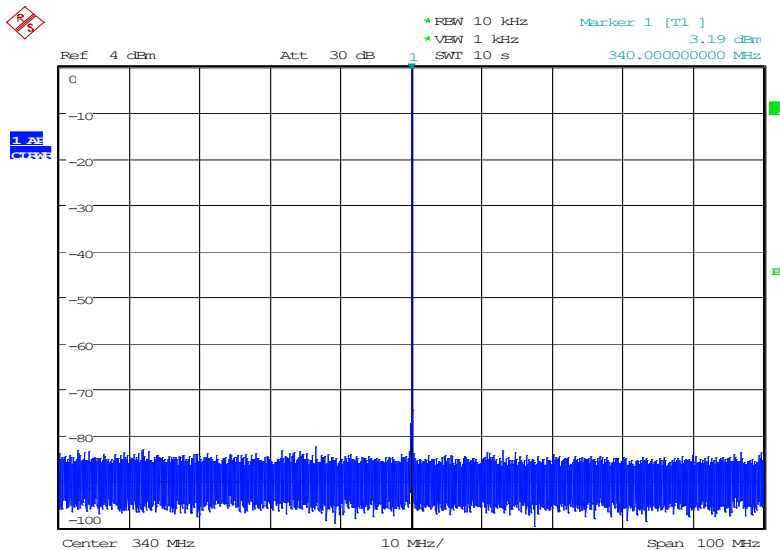
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION

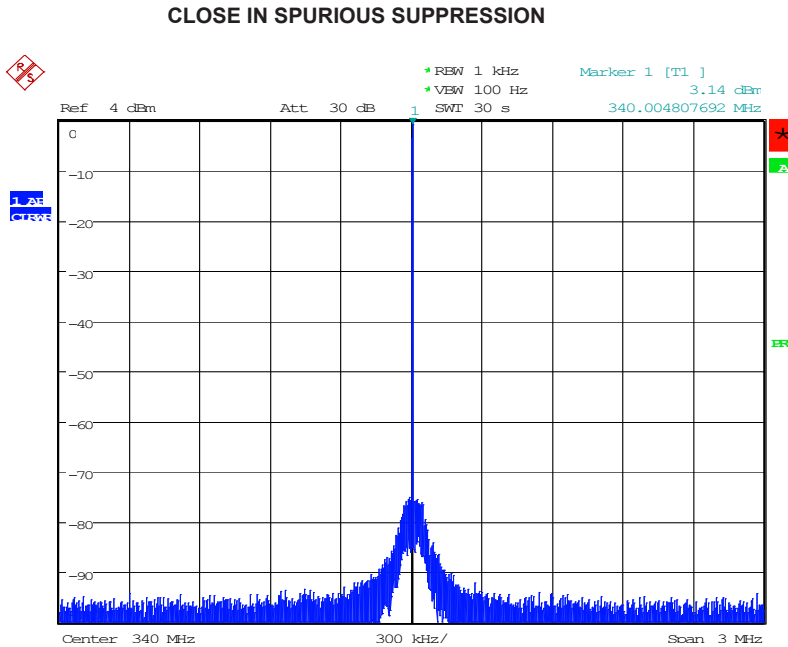


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