

## Programmable Phase Locked Loop Surface Mount Module

Applications	Application Notes
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- Satellite Modems
- Mobile Radios
- CATV

- AN-107: Manual Soldering Technique
- AN-202: Programming Z-COMM PLLs

Performance Specifications	Min	Typ	Max	Units
Frequency	275		325	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-97		dBc/Hz
Harmonic Suppression (2nd)		-7		dBc
Spurious Suppression		-65		dBc
Power Output	1	4	7	dBm
Load Impedance		50		$\Omega$
Step Size		100		kHz
Phase Detector Frequency		100		kHz
Settling Time		5		mS
Charge Pump Output Current		2500		$\mu$ A
Operating Temperature Range	-40		85	$^{\circ}$ C
Package Style		CPLL		

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage 1: PLL (Vcc, nom)		5		Vdc
Supply Voltage 2: VCO (Vcc, nom)		N/A		Vdc
Supply Current 1: PLL (Icc, typ)		30		mA
Supply Current 2: VCO (Icc, typ)		N/A		mA

Reference Oscillator Signal	Min	Typ	Max	Units
Frequency		10		MHz
Phase Noise @1 kHz Offset		-145		dBc/Hz

Additional Notes
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Phase Locked Loop Internal IC: Analog Devices / ADF4113

LFSuffix = RoHS Compliant. All specifications are subject to change without notice.

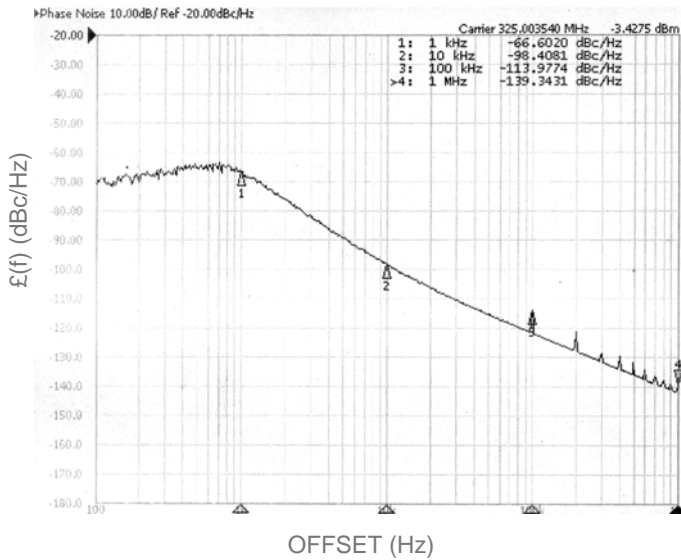
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Surface Mount Module

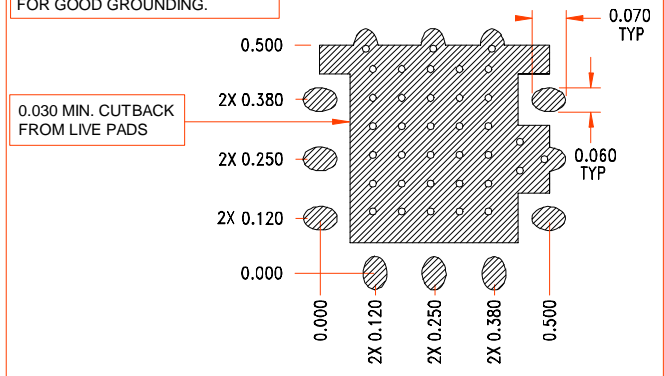
Phase Noise, typ.

Footprint

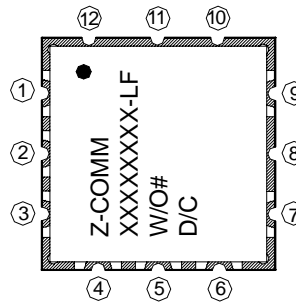
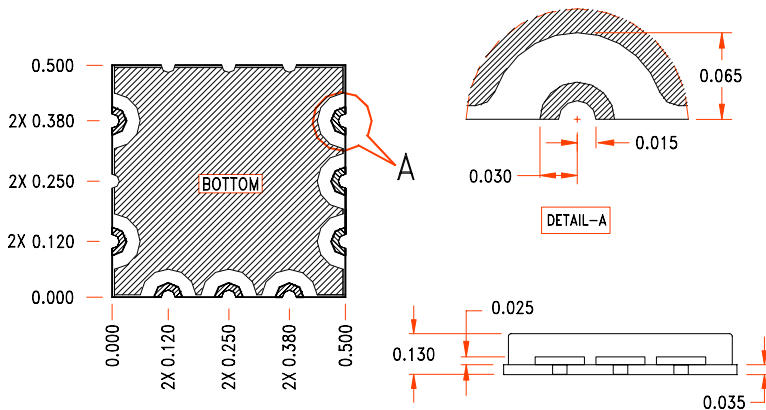
PHASE NOISE (1 Hz BW, typical)



**RECOMMENDED FOOTPRINT**  
SEVERAL HOLES OF  $\phi$  0.015 ON GND. PLANE ARE RECOMMENDED FOR GOOD GROUNDING.



Physical Dimensions



PIN CONFIGURATION	
1	RF OUT
2	REF IN
3	CLOCK
4	DATA
5	ENABLE
6	LOCK DETECT
7	Vcc
8	OPTIONAL
9	N/C
REST	GROUND

NOTE: ALL DIMENSIONS ARE IN INCHES  
TOL: XXX: +/- 0.010