Z~Communications

PCA0090A
Rev A1

Programmable Phase Locked Loop Surface Mount Module

Applications

- Telecommunications
- Satellite
- Telemetry

Application Notes

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

Performance Specifications	Min	Typ	Max	Units
Frequency	85		95	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-101		dBc/Hz
Harmonic Suppression (2nd)		-10		dBc
Spurious Suppression		-65		dBc
Power Output	-2	0.5	3	dBm
Load Impedance		50		Ω
Step Size		50		kHz
Phase Detector Frequency		50		kHz
Settling Time		3		mS
Charge Pump Output Current		1250		μA
Operating Temperature Range	-40		85	°C
Package Style		CPLL		

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage 1: PLL (Vcc, nom)		3.3		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

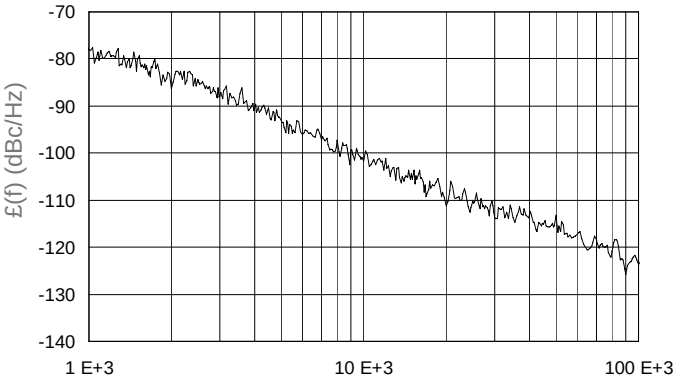
Phase Locked Loop Internal IC: Analog Devices / ADF4001

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14118 Stowe Drive, Suite B | Poway, CA 92064 | TEL: (858) 621-2700 | FAX: (858) 486-1927
URL: www.zcomm.com | EMAIL: applications@zcomm.com

Programmable Phase Locked Loop
Surface Mount Module

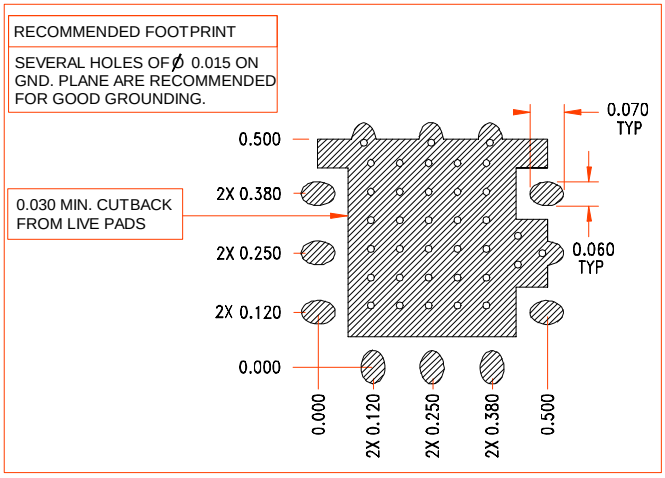
Phase Noise, typ.

PHASE NOISE (1 Hz BW, typical)

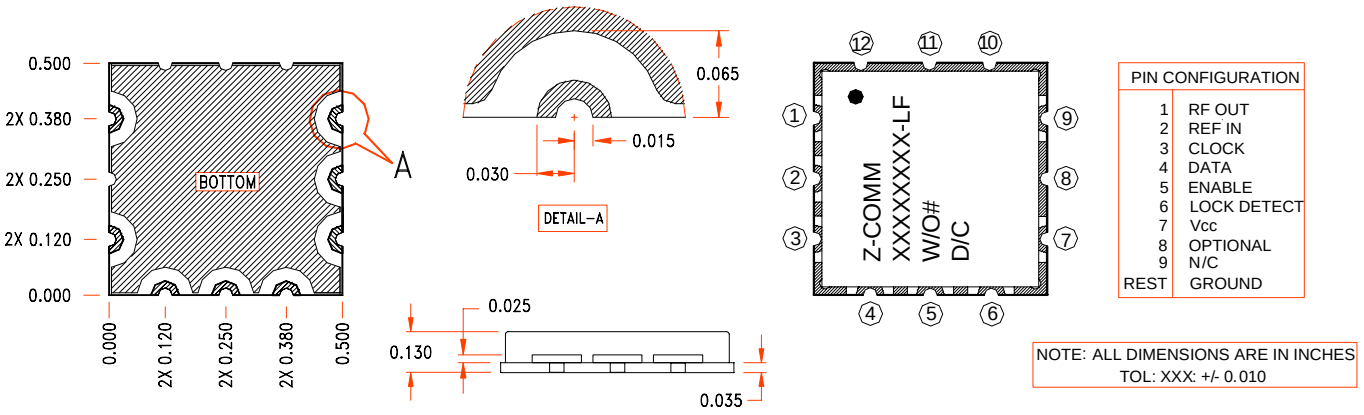


OFFSET (Hz)

Footprint



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

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