Z~Communications

SFS4250A-LF

Rev A1

Fixed Frequency Synthesizer
Surface Mount Module

Applications

- Satellite Communication
- Downconvertors
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Application Notes

- AN-107: Manual Soldering Technique
- AN-205: Measuring Phase Noise for SFS Series

Performance Specifications	Min	Typ	Max	Units
Frequency	4250		4250	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-84		dBc/Hz
Harmonic Suppression (2nd)		-25		dBc
Spurious Suppression		-65		dBc
Power Output	-2	2.5	7	dBm
Load Impedance		50		Ω
Settling Time		.3		mS
Operating Temperature Range	-20		80	°C
Package Style		PLL-V12N		

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage 1: PLL (Vcc, nom)		3		Vdc
Supply Voltage 2: VCO (Vcc, nom)		5		Vdc
Supply Current 1: PLL (Icc, typ)		15		mA
Supply Current 2: VCO (Icc, typ)		33		mA

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

Additional Notes

Note1: Phase noise measurement was performed using a 10MHz CMOS reference oscillator with a phase noise of -145dBc/Hz @1KHz.

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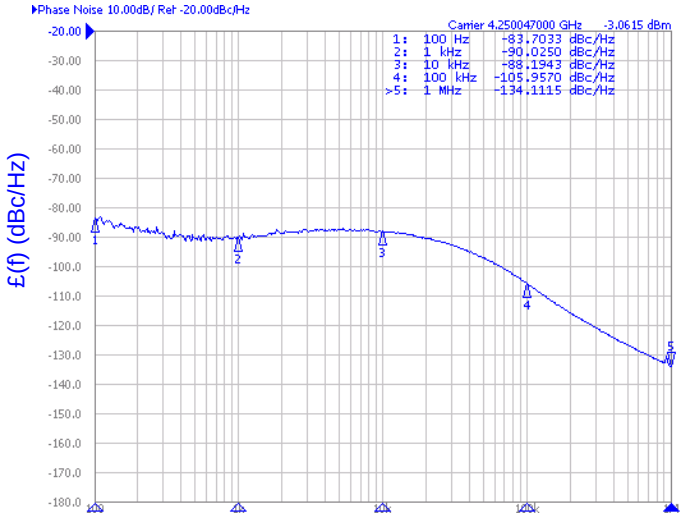
Phase Noise, typ.

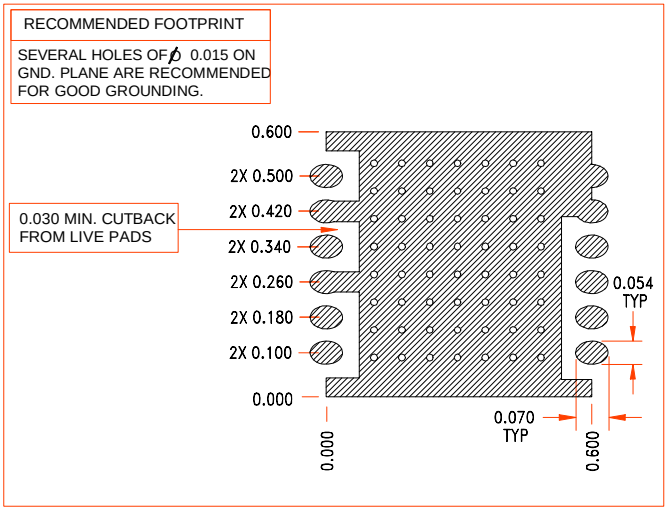
PHASE NOISE (1 Hz BW, typical)



Footprint

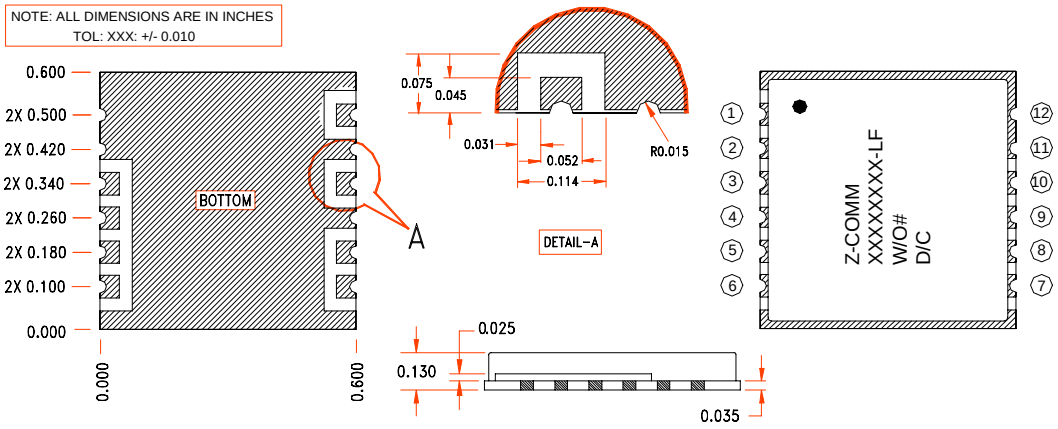
RECOMMENDED FOOTPRINT

SEVERAL HOLES OF ⌀ 0.015 ON GND. PLANE ARE RECOMMENDED FOR GOOD GROUNDING.



Physical Dimensions

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



SFS PIN CONFIGURATION	
1	Vcc (VCO)
3	RF OUT
5	MUX OUT
6	Vcc (CHIP)
8	N/C
10	REF IN
REST	GROUND

PVA PIN CONFIGURATION	
1	Vcc (VCO)
3	RF OUT
5	MUX OUT
6	Vcc (CHIP)
7	CLOCK
8	DATA
9	ENABLE
10	REF IN
REST	GROUND