Z~Communications

SFS8300Z-LF

Rev A1

Fixed Frequency Synthesizer
Surface Mount Module

Applications

- Broadband transmission
- Optical Transmitter
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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	8300		8300	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-85		dBc/Hz
Harmonic Suppression (2nd)		-25		dBc
Spurious Suppression		-70		dBc
Power Output	-3	0	3	dBm
Load Impedance		50		Ω
Settling Time		3		mS
Operating Temperature Range	-30		75	°C
Package Style		SFS-L1		

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)		11		mA
Supply Current 2: VCO (Icc, typ)		90		mA

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

Additional Notes

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

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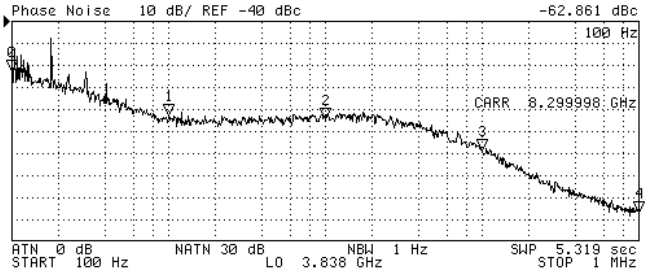
Phase Noise, typ.

PHASE NOISE (1 Hz BW, typical)

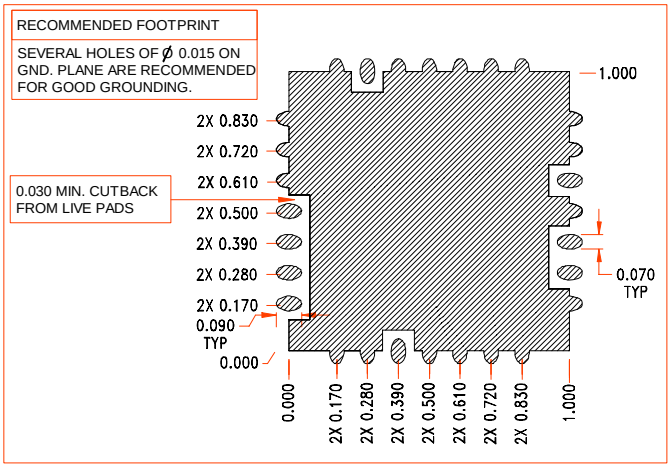


£(f) (dBc/Hz)

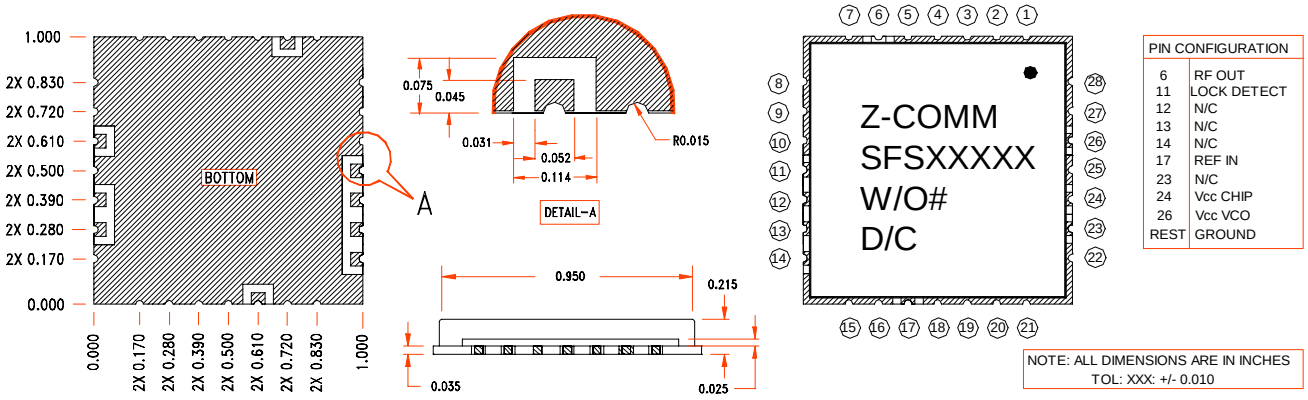
N	SWP PARAM	VAL
0	100 Hz	-62.861 dBc
1	1 kHz	-83.258 dBc
2	10 kHz	-85.062 dBc
3	100 kHz	-98.977 dBc
4	1 MHz	-127.45 dBc

OFFSET (Hz)

Footprint



Physical Dimensions



PIN CONFIGURATION	
6	RF OUT
11	LOCK DETECT
12	N/C
13	N/C
14	N/C
17	REF IN
23	N/C
24	Vcc CHIP
26	Vcc VCO
REST	GROUND

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

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