



Smart PLL Frequency Synthesizer

0.045-22.6 GHz

SSG22645LX Rev A1

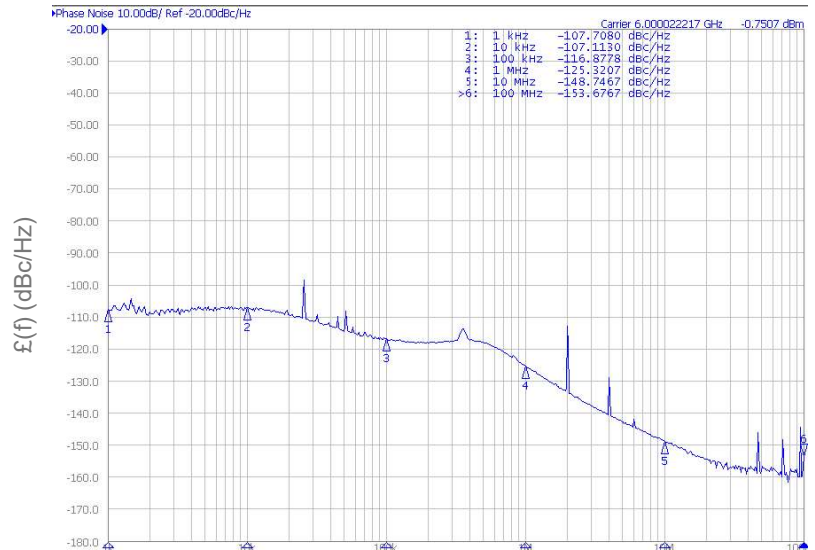
Features

- Two Frequency Outputs
- Bluetooth & USB Interface
- Internal Reference Oscillator & External Reference
- LED Indicators, Easy To Read
- Excellent Phase Noise
- Low Power Consumption
- Metal Enclosure

Applications

- Lab & Production Test Setup
- Frequency Conversion
- Signal Generator
- Test & Measurement
- Radar
- SATCOM

PHASE NOISE (1 Hz BW, typical)



External Reference -140dBc/Hz @ 1kHz Offset

Performance Specifications	Min	Typ	Max	Units
Output Frequency Channel 1	45		22600	MHz
Output Frequency Channel 2	45		22600	MHz
Phase Noise @ 1 kHz offset		-108		dBc/Hz
Phase Noise @ 10 kHz offset (6 GHz)		-107		dBc/Hz
Phase Noise @ 100 kHz offset		-117		dBc/Hz
Harmonic Suppression (2nd)		-20		dBc
User Selectable Power Output	-20		10	dBm
Operating Temperature Range	-30		70	°C
Frequency Resolution		0.0001		KHz

Power Supply Requirements	Min	Typ	Max	Units
Supply Voltage (USB-C)		5		Vdc
Supply Current	200	500	800	mA

Reference Frequency	Min	Typ	Max	Units
<u>Internal Oscillator Frequency Input</u>		100		MHz
Phase Noise @1 kHz Offset		-125		dBc/Hz
Frequency Stability		+/- 25		PPM
<u>External Oscillator Frequency Input (User Provided)</u>		100		MHz

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

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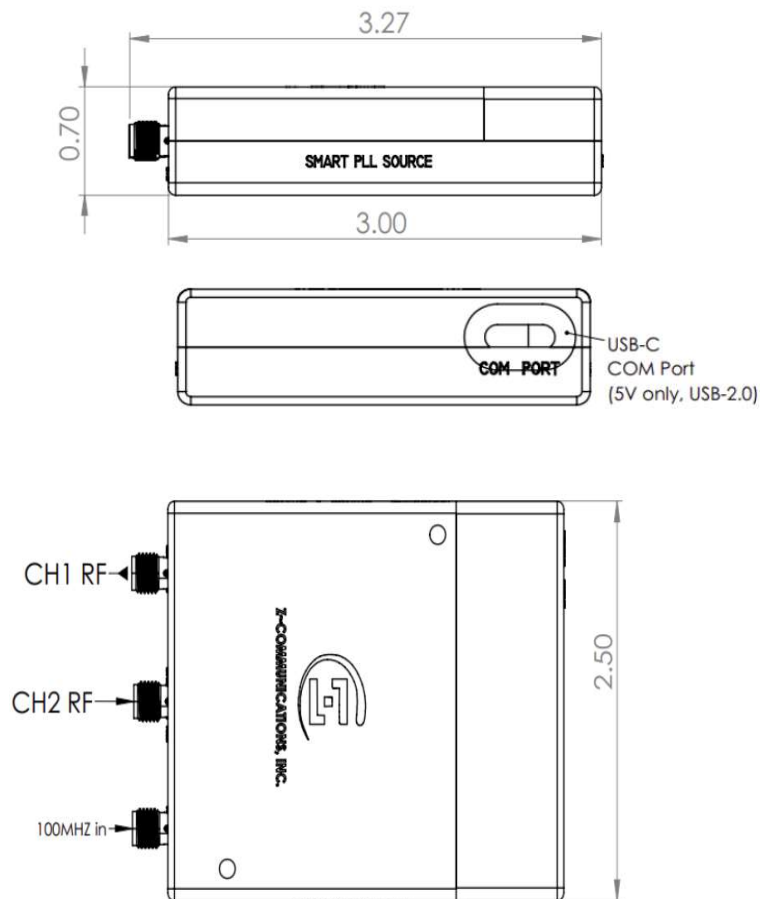


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Description

The Z-COMM SSG series of Smart Phase Locked Loop (PLL) modules provide high performance in a compact, all metal package suitable for any number of applications. Fully programmable through a unique Bluetooth interface, or USB cable, the user may adjust functions such as frequency, sweep mode, dwell time, step size, and power output, among others. LED indicators provide a visual cue of the status of the various functions. Its rugged enclosure lends itself to in-field use as well as bench top testing. The highly reliable output signal, excellent phase noise, and flexibility of an internal reference or input for an external reference, provides RF Engineers with an adaptable RF tool.

Physical Dimensions



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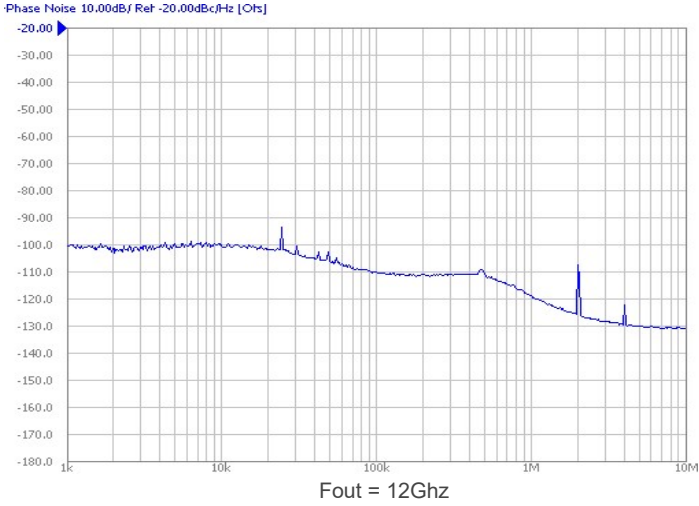
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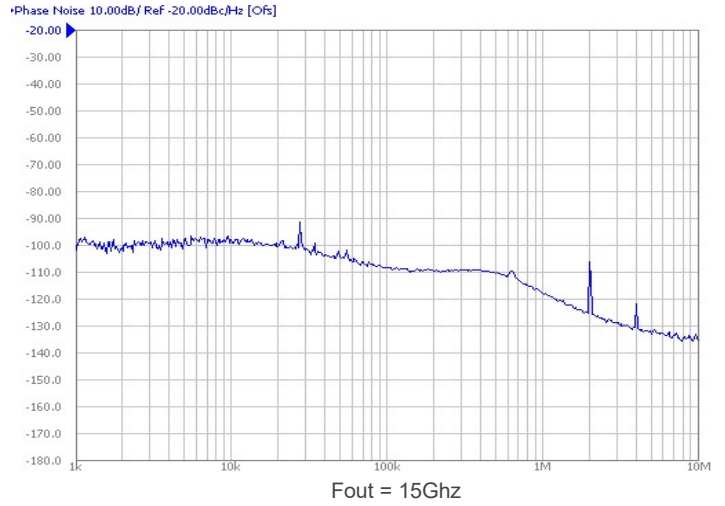


Phase Noise Graphs Supplements

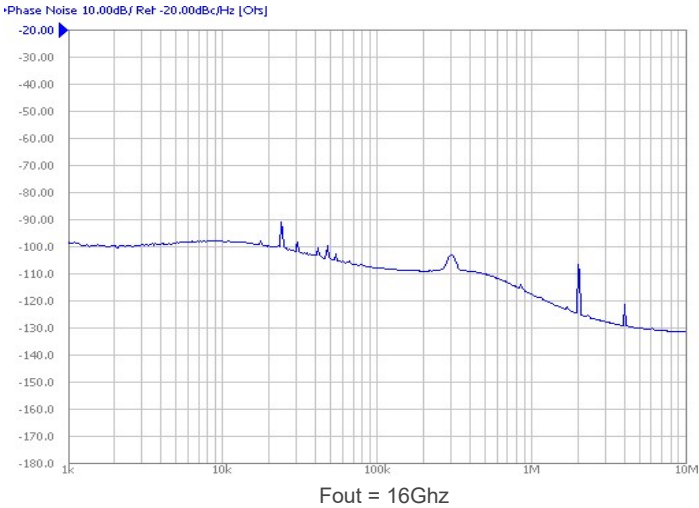
SSG22645LX



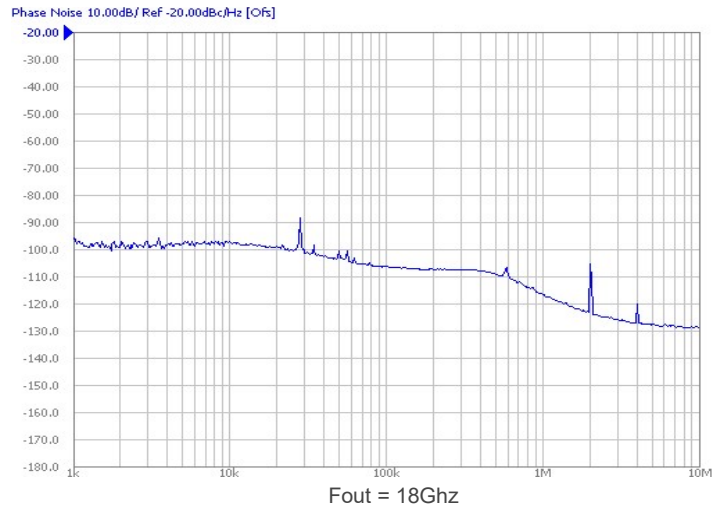
External Reference -140dBc/Hz @ 1kHz Offset



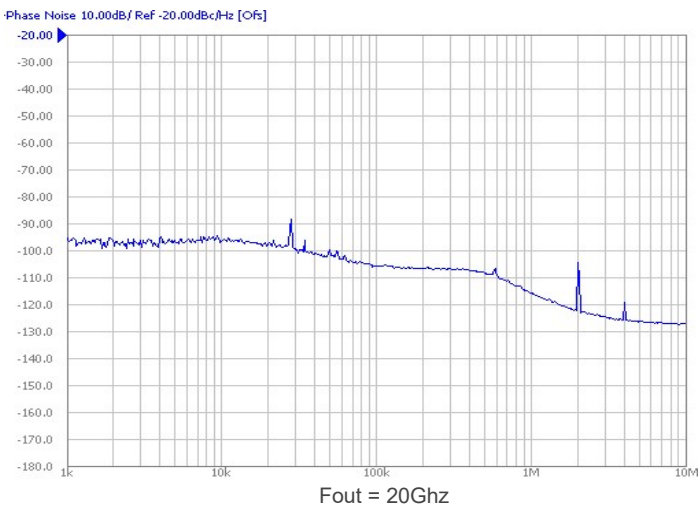
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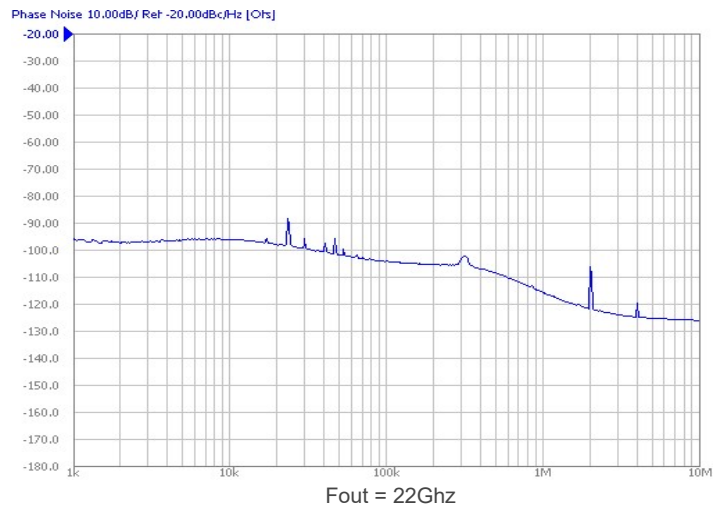
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