

## Fractional-N Phase-Locked Loop Surface Mount Module

### Applications

- Fixed Wireless
- Test Equipments
- 

### Application Notes

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

### Performance Specifications

	Min	Typ	Max	Units
Frequency	1050		1850	MHz
Phase Noise @ 10 kHz offset (1 Hz BW)		-100		dBc/Hz
Harmonic Suppression (2nd)		-10		dBc
Spurious Suppression		-75		dBc
Power Output	4	6	8	dBm
Load Impedance		50		$\Omega$
Step Size		1000		kHz
Phase Detector Frequency		32000		kHz
Settling Time		.01		mS
Charge Pump Output Current		940		$\mu$ A
Operating Temperature Range	0		70	$^{\circ}$ C
Package Style		PLL-24S1		

### Power Supply Requirements

	Min	Typ	Max	Units
Supply Voltage 1: PLL (Vcc, nom)		5		Vdc
Supply Voltage 2: VCO (Vcc, nom)		15		Vdc
Supply Current 1: PLL (Icc, typ)		25		mA
Supply Current 2: VCO (Icc, typ)		40		mA

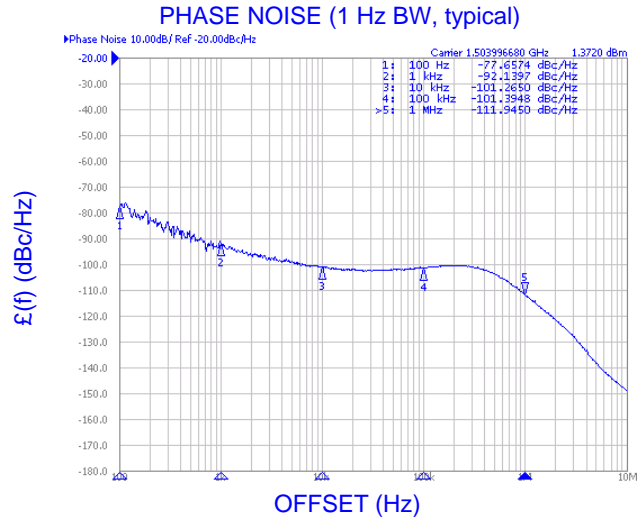
### Reference Oscillator Signal

	Min	Typ	Max	Units
Frequency		32		MHz
Phase Noise @1 kHz offset		-145		dBc/Hz

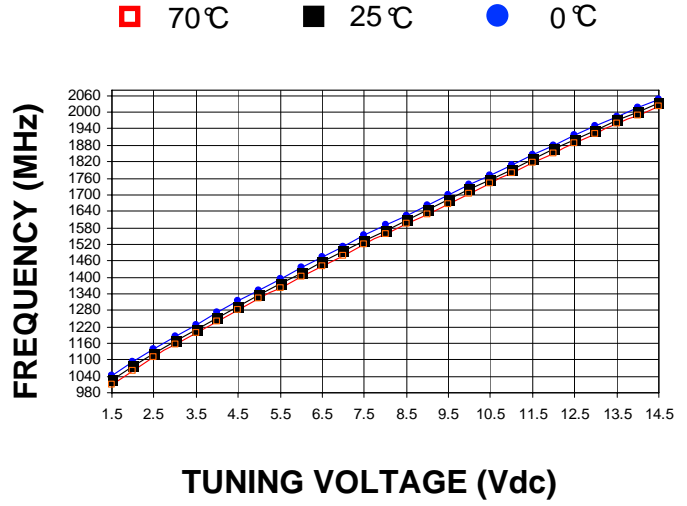
### Additional Notes

Reference Oscillator Signal:  $32\text{ MHz} < f_{\text{osc}} < 250\text{ MHz}$ . Frequency Synthesizer: Analog Devices - ADF4156.  
Smaller step sizes are possible with smaller PDF. Fractional-N PLL.

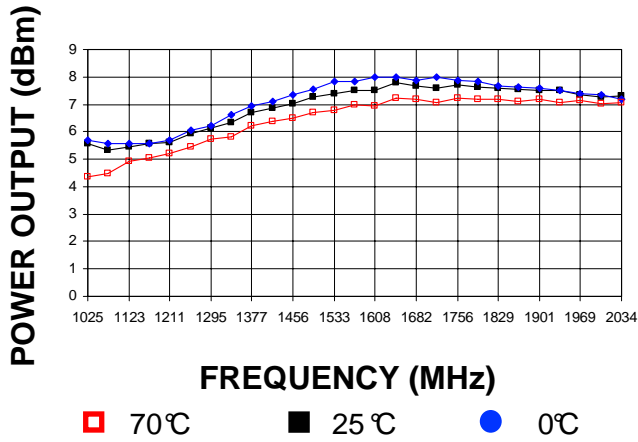
Phase Noise, typ.



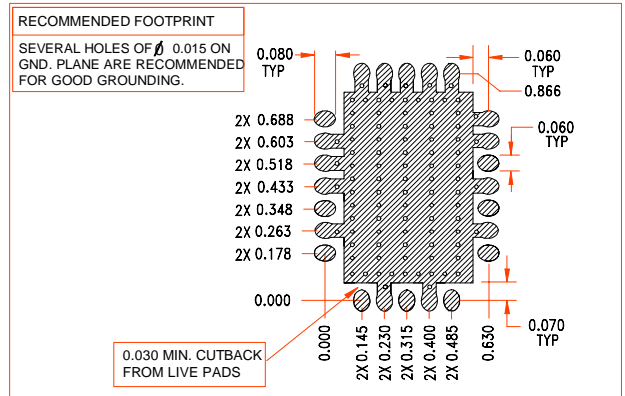
Tuning Curve, typ.



Power Curve, typ.



Footprint



Physical Dimensions

