

Features

- ◆ Low Cost
- ◆ Low Power Consumption
- ◆ Low Phase Noise
- ◆ Fast Settling Time
- ◆ Integrated VCO, PLL IC, Loop Filter

Applications

- ◆ Commercial Wireless Applications

Electrical Specifications, $T_A = +25^{\circ}\text{C}$, $V_{CC} = +3.3\text{V}$ (unless otherwise stated)

Parameter	Units	Min	Typ	Max
Frequency Range –	MHz		825	
Step Size	kHz		200	
Settling Time – To within 1 kHz	mSec		8.1	
Output Power –	dBm	0.0		3.0
Output Phase Noise:				
1 kHz	dBc/Hz		-86	-82
10 kHz	dBc/Hz		-110	-105
100 kHz	dBc/Hz		-128	-124
Power Supply –	Volts	+3.10	3.30	+3.50
Supply Current	mA		25	30
Spurious Product – 200 kHz	dBc		-85	-80
Reference Feedthrough –	dBc		-85	-80
Harmonic Suppression:				
2nd Harmonic	dBc		-12	
3rd Harmonic	dBc		-20	
Ref Osc Signal				
Frequency	MHz		10	
Amplitude	Vp-p	0.4		2
Phase Noise – 1 kHz	dBc/Hz		-145	
Input Impedance	k Ω		1000	
Output Impedance –	Ω		50	
Operating Temperature Range	$^{\circ}\text{C}$	-55		+85
PLL IC	ADF4113			

Comments

All specifications apply with a 50 ohm load impedance.