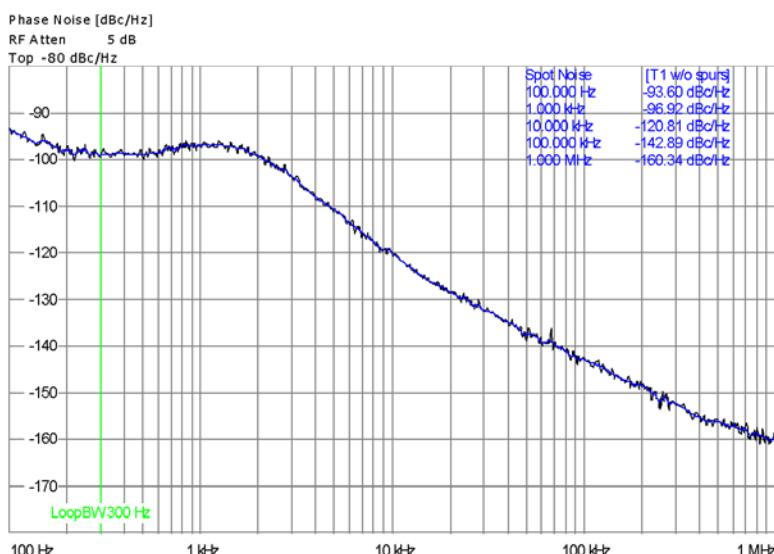




FEATURES

- ◆ Low Phase Noise
- ◆ Fast Settling Time
- ◆ Small Size, Surface Mount
- ◆ Integrated VCO, PLL IC, Loop Filter

APPLICATIONS

- ◆ Commercial Wireless Applications

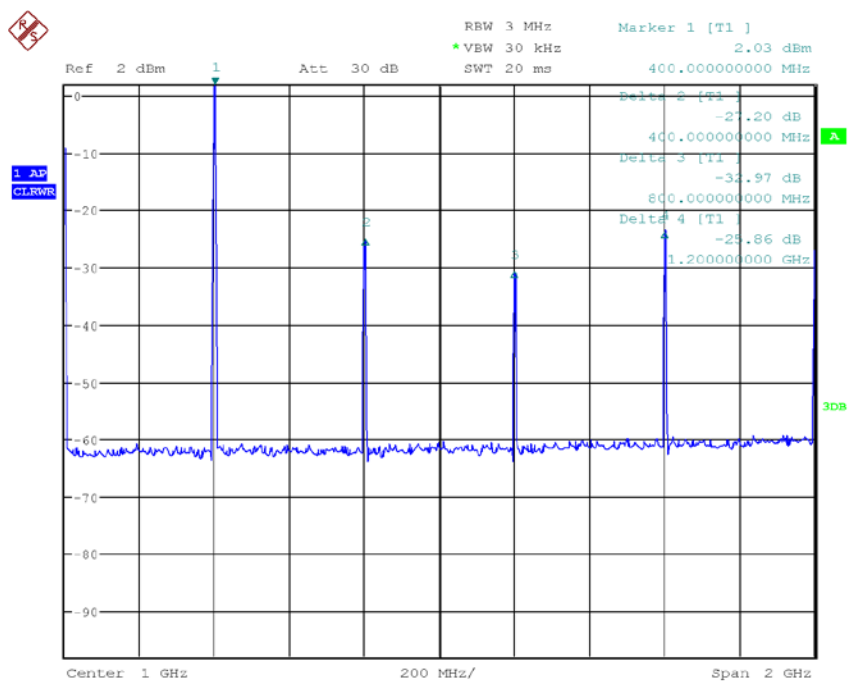
Parameter	Min	Typ	Max	Units
Frequency Range -		400		MHz
Step Size		1000		KHz
Startup Lock Time		5.8		ms
Charge Pump Output Current		5.0		mA
Output Power -	0.0		4.0	dBm
Phase Noise:				
1 kHz		-95	-92	dBc/Hz
10 kHz		-120	-117	dBc/Hz
100 kHz		-142	-139	dBc/Hz
Spurious Product - 1000KHz		-80	-70	dBc
Reference Feedthrough -		-80	-70	dBc
Harmonic Suppression -2nd		-25		dBc
Output Impedance -		50		Ω
Operating Temperature Range	-40		+85	$^{\circ}\text{C}$
Package Type	PLL-20(20.3X14.8X3.5mm)			

POWER SUPPLY REQUIREMENTS

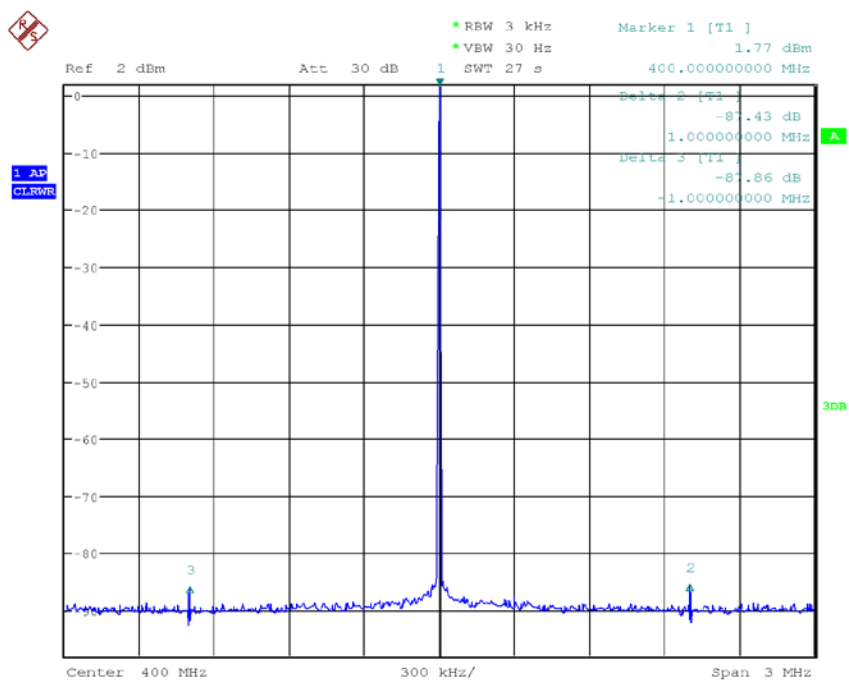
Supply Voltage	4.75	5	5.25	Vdc
Supply Current		70	73	mA

NOTES

Reference Input Frequency	5	13	104	MHz
Reference Input Voltage	0.4		3.0	Vp-p
Phase Noise @ 1 kHz offset		-145		dBc/Hz
PLL IC	ADF4113			



Date: 16.MAY.2014 15:06:23



Date: 16.MAY.2014 15:09:50

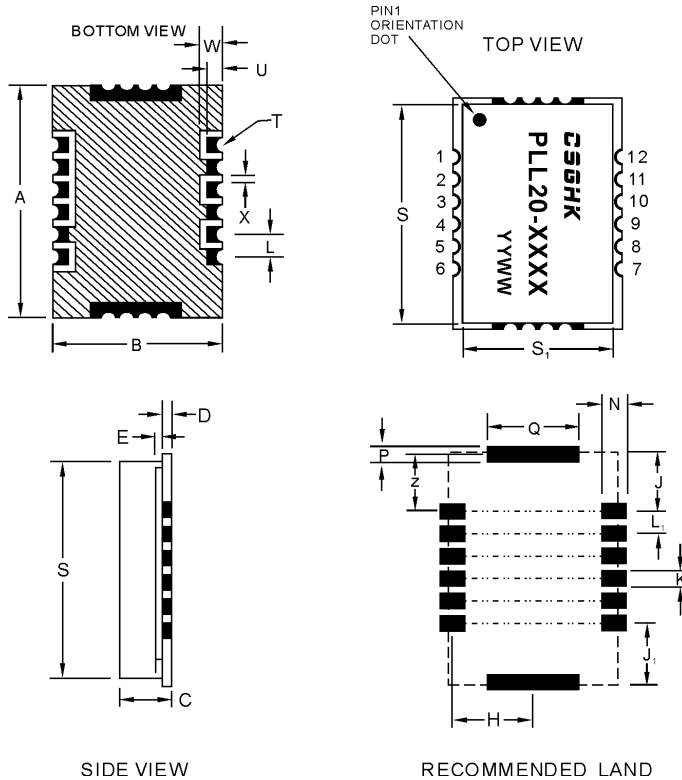
REVISIONS

NOTE. UNLESS OTHERWISE SPECIFIED:

1. THE METAL CASE IS GROUND
2. ALL HALF VIA CONTACTS ARE PLATED THRU FROM THE PAD ON THE TOP SIDE TO THE PAD ON THE BOTTOM SIDE OF THE BOARD.
3. HATCHED AREAS GROUND AND ARE COVERED WITH LPI SOLDER MASK OVER BARE COPPER. ALL CONTACT AREAS ARE PLATED. SIGNAL VIAS MAY BE LOCATED WITHIN GROUND PLANE.
4. SUBSTRATE MATERIAL: FR-4
5. XXXX REPRESENTS THE MODEL NUMBER.
6. YYWW IS THE DATA CODE.

PIN OUT FOR PLL	
PIN	APPLICATION
1	VCC (CHIP)
3	OSC IN
5	VCC (VCO)
7	RF OUT
9	LOCK DETECT
10	CLOCK
11	DATA
12	ENABLE

ALL OTHER PINS ARE GROUND



SYMBOL	DIMENSION	
	MILLIMETERS	INCHES
A	20.3±0.25	0.800±0.010
B	14.8±0.25	0.582±0.010
C	3.50	0.138
D	0.99MAX	0.039MAX
E	0.51	0.020
H	6.91	0.272
J	5.16	0.203
J ₁	5.13	0.202
K	1.50	0.059
L	2.00±0.05	0.080±0.002
L ₁	2.00	0.080
N	1.98	0.078±0.003
P	1.52	0.060±0.003
Q	7.40	0.291±0.003
S	19.56	0.770
S ₁	14.02	0.552
T	R=0.50	R=0.020
U	1.47	0.058
W	1.78	0.070
X	0.51	0.020
Z	4.90	0.193

	APPROVALS	DATA	 PLL-20 PACKAGE MECHANICAL PCB OUTLINE
DRAWN BY			
CHECKED BY			
PROCESS ENG			
QUALITY			