

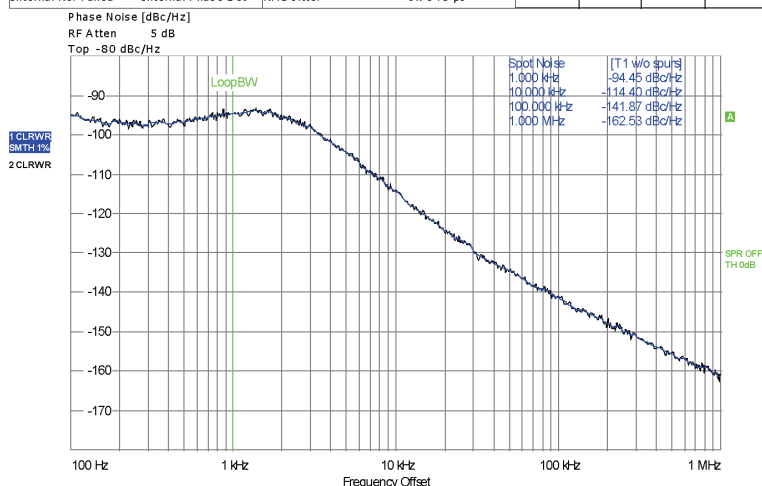
FEATURES

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

APPLICATIONS

- ◆ Commercial Wireless Applications

R&S FSUP Signal Source Analyzer				LOCKED			
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +20 dB			
Signal Frequency:	300.000006 MHz	Int PHN (100.0 .. 1.0 M)	-59.9 dBc				
Signal Level:	0.92 dBm	Residual PM	81.517 m°				
Cross Corr. Mode	Harmonic 1	Residual FM	12.494 Hz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.7548 ps				



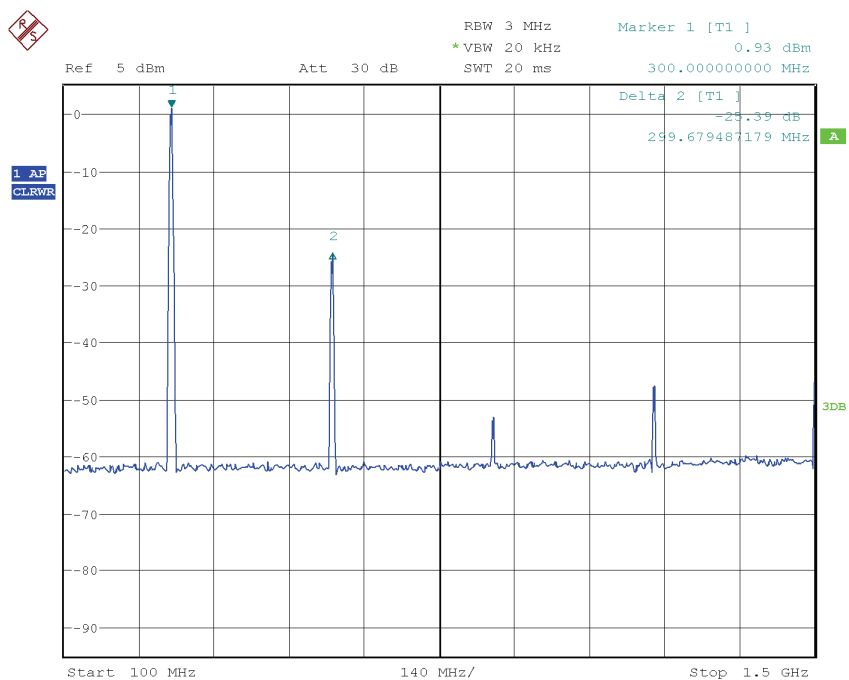
Parameter	Min	Typ	Max	Units
Frequency Range -	290		310	MHz
Step Size		200		KHz
Startup Lock Time		2.9		ms
Charge Pump Output Current		5.0		mA
Output Power -	-2.0		2.0	dBm
Phase Noise:				
1 kHz		-93	-90	dBc/Hz
10 kHz		-113	-110	dBc/Hz
100 kHz		-140	-137	dBc/Hz
Spurious Product - 200KHz		-80	-70	dBc
Reference Feedthrough -		-80	-70	dBc
Harmonic Suppression -2nd		-20		dBc
Output Impedance -		50		Ω
Operating Temperature Range	-40		+85	°C
Package Type	PLL-25A(19.05X19.05X3.5mm)			

POWER SUPPLY REQUIREMENTS

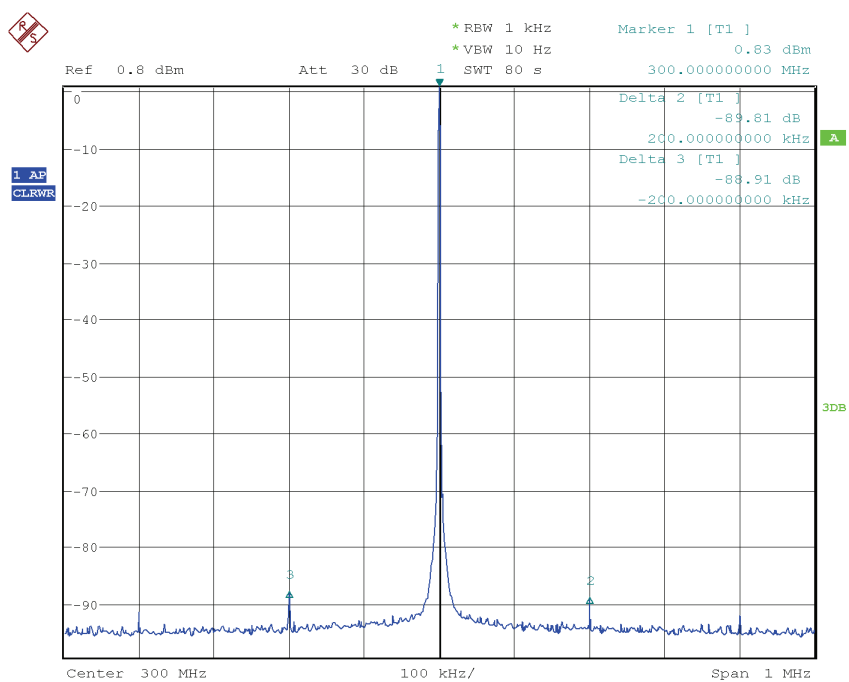
Supply Voltage	4.75	5	5.25	Vdc
Supply Current		19	21	mA

NOTES

Reference Input Frequency	5	13	104	MHz
Reference Input Voltage	0.4		3.0	Vp-p
Frequency Synthesizer IC	ADF4113			



Date: 15.DEC.2009 10:11:56



Date: 15.DEC.2009 10:15:29

REVISIONS

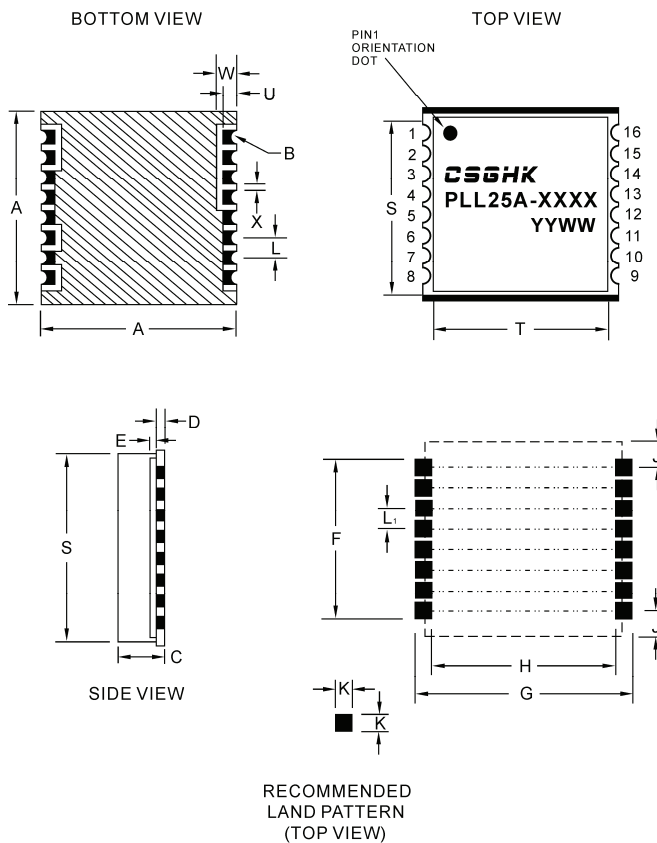
NOTE: UNLESS OTHERWISE SPECIFIED:

1. THE METAL CASE IS GROUND
2. ALL HALF VIA CONTACTS ARE PLATED THRU FORM 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	PIN	APPLICATION
1	OSC IN	9	VCC (VCO)
2	ENABLE	11	RF OUT
3	DATA	15	VCC (CHIP)
4	CLOCK	16	LOCK DETECT

ALL OTHER PINS ARE GROUND



SYMBOL	DIMENSION	
	MILLIMETERS	INCHES
A	19.05±0.25	0.75±0.010
B	R=0.50	R=0.020
C	3.50	0.138
D	0.99MAX	0.039MAX
E	0.60	0.023
F	15.75	0.620
G	20.57	0.810
H	17.53	0.690
J	2.41	0.095
K	1.50	0.059
L	2.00±0.05	0.080±0.002
L ₁	2.00	0.080
S	18.03	0.710
T	18.19	0.716
U	1.28	0.050
W	1.78	0.070
X	0.51	0.020

	APPROVALS	DATA	 PLL-25A PACKAGE MECHANICAL PCB OUTLINE
DRAWN BY			
CHECKED BY			
PROCESS ENG			
QUALITY			
APPROVAL			