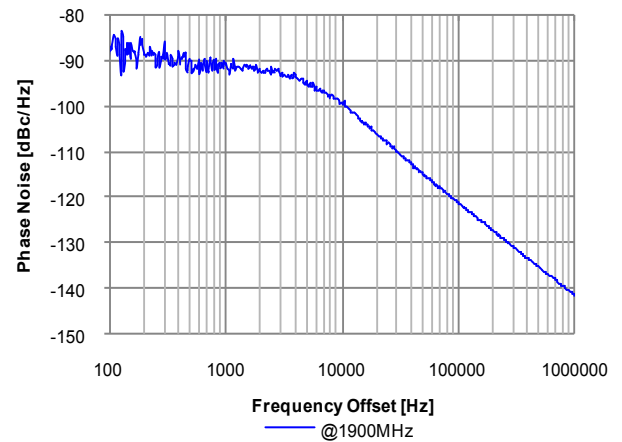


Features

- 3 wire serial Fractional PLL
- Sub-Compact Size 0.6"x0.6"x0.15"
- Low phase noise (typ. -88@1kHz)
- Programming : ADF4153(ADI)

Applications

- SATCOM radio link
- Receiver
- Test Equipment
- Radar
- Point-to-Point radio
- MMDS
- WiMAX

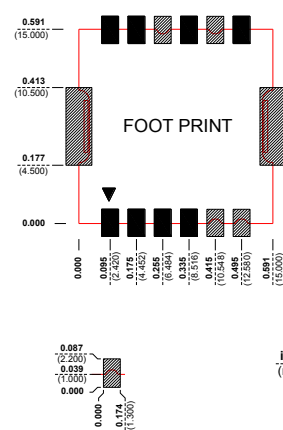
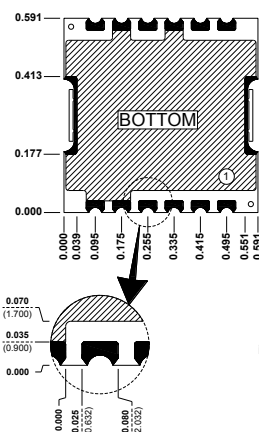
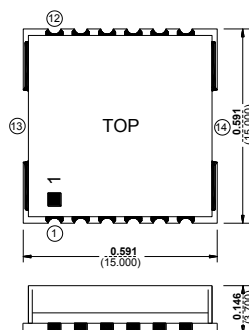


Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	1890		1910
Step Size	kHz		200	
Settling Time	msec		10	30
Output Power	dBm	+1.0	+3.0	+5.0
Output Impedance	Ω		50	
Phase Noise	@1kHz offset	dBc/Hz	-88	-83
	@10kHz offset	dBc/Hz	-96	-91
	@100kHz offset	dBc/Hz	-122	-117
	@1MHz offset	dBc/Hz	-141	-136
2nd Harmonic Suppression	dBc		-37	-20
Sideband Spurious Suppression	dBc			-75
Reference	Input Frequency	MHz	10	250
	Input Level	dBm	-5	+5
VCO Power Supply (Vcc)	Voltage	Vdc	3.3	
	Current	mA	25	35
PLL Power Supply (Vcp)	Voltage	Vdc	3.3	
	Current	mA	10	15
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

Dimensions



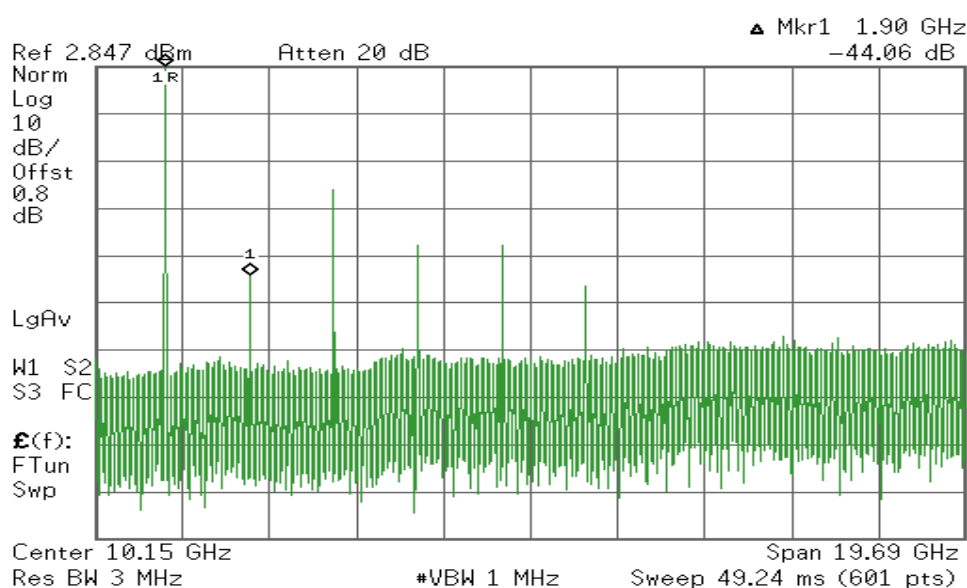
PIN CONNECTIONS	
1	CLK
2	DATA
3	LE
4	Ref. In
5-6	GND
7	Vcc(VCO)
8	GND
9	RF Out
10	GND
11	Lock Detect
12	Vcp(PLL)
13-14	GND

PACKAGE DRAWING : PS12-L

■ Programming Setting - ADF4153(ADI)

No.	Parameter	Description	No.	Parameter	Description
1	Fast Lock	FAST LOCK ENABLED	7	PD Polarity	POSITIVE
2	Load Control	NORMAL(DISABLED)	8	Power-Down	NORMAL(DISABLED)
3	Muxout	DIGITAL LOCK DETECT	9	CP Three-state	DISABLED(OFF)
4	Prescaler	8/9	10	Counter Reset	DISABLED
5	Reference Doubler	ENABLED	11	Noise & Spur Setting	LOWEST NOISE MODE
6	CP Current Setting	1.25mA	12	Phase detector Freq.	20MHz

■ Harmonic Suppression



■ Sideband Spurious Suppression

