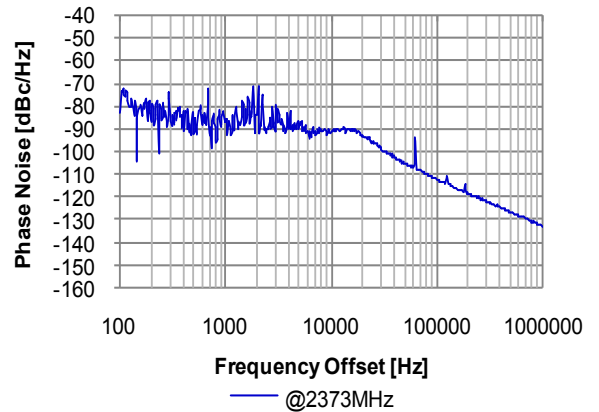


## Features

- 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

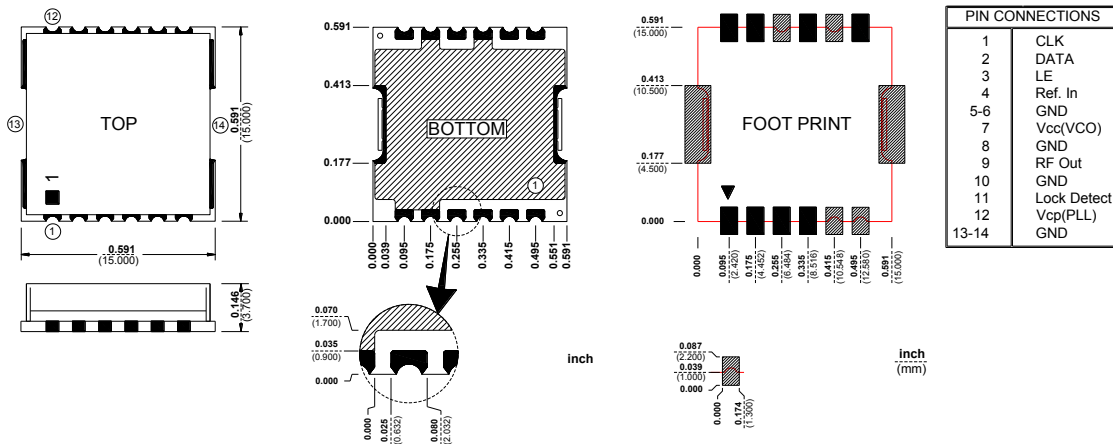


## Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	2276		2470
Step Size	kHz		125	
Settling Time	msec		10	30
Output Power	dBm	+1.0	+3.0	+5.0
Output Impedance	$\Omega$		50	
Phase Noise	@1kHz offset	dBc/Hz	-88	-83
	@10kHz offset	dBc/Hz	-91	-86
	@100kHz offset	dBc/Hz	-112	-107
	@1MHz offset	dBc/Hz	-132	-127
2nd Harmonic Suppression	dBc		-37	-20
Sideband Spurious Suppression	dBc			-65
Reference	Input Frequency	MHz	10	250
	Input Level	dBm	-5	+5
VCO Power Supply (Vcc)	Voltage	Vdc	5	
	Current	mA	33	40
PLL Power Supply (Vcp)	Voltage	Vdc	5	
	Current	mA	10	15
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

## Dimensions

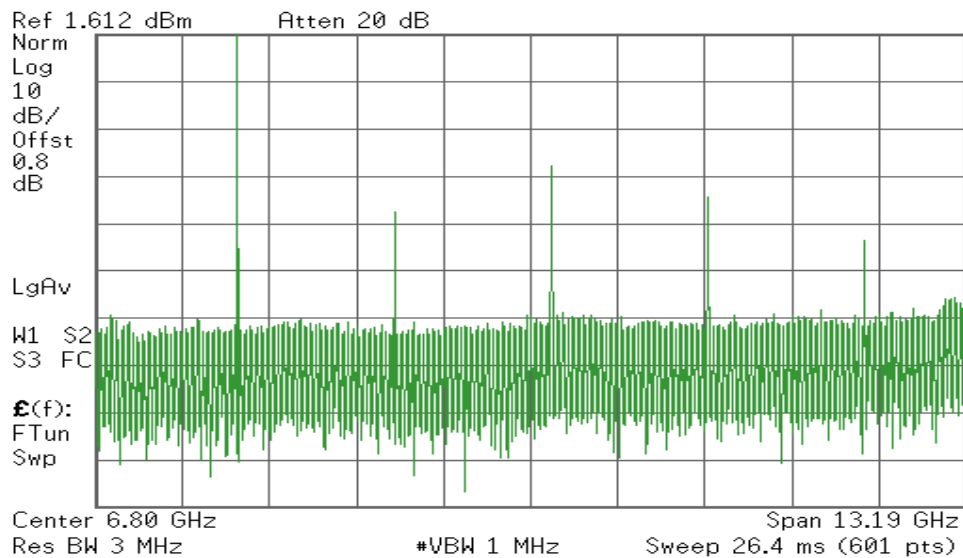


PACKAGE DRAWING : PS12-L

## ■ Programming Setting - ADF4153(ADI)

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

## ■ Harmonic Suppression



## ■ Sideband Spurious Suppression

