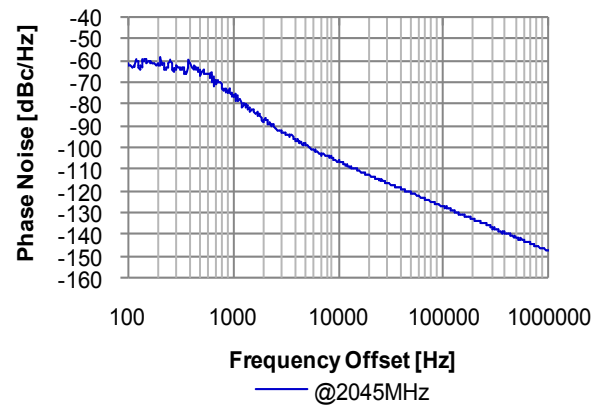


## Features

- 3 wire serial Fractional PLL
- Compact Size (0.75"x0.75"x0.23")
- Very Low phase noise (typ. -108@10kHz)
- Programming : ADF4118(ADI)

## Applications

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

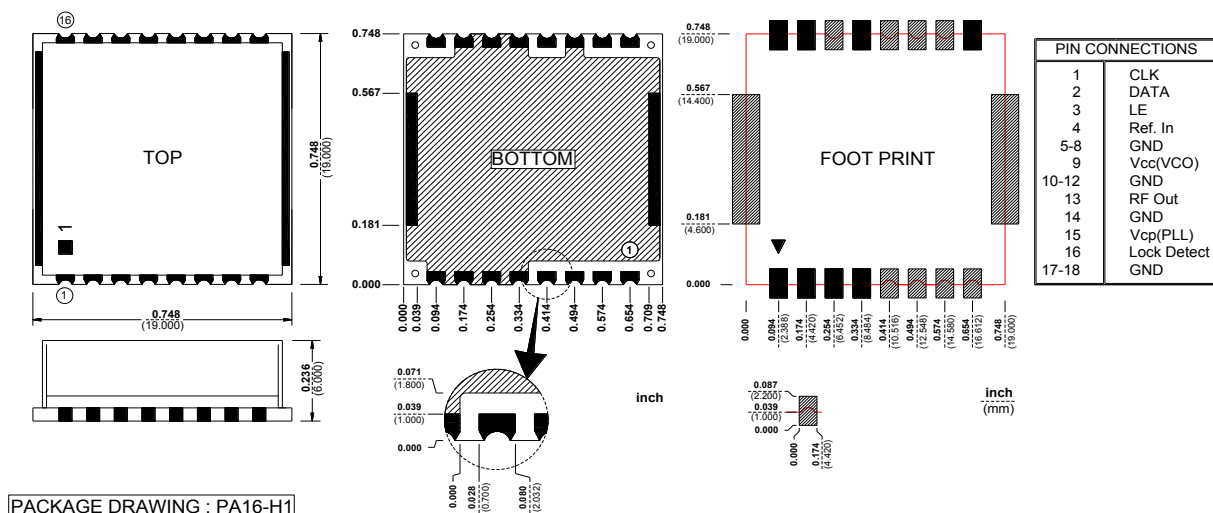


## Electrical Characteristics

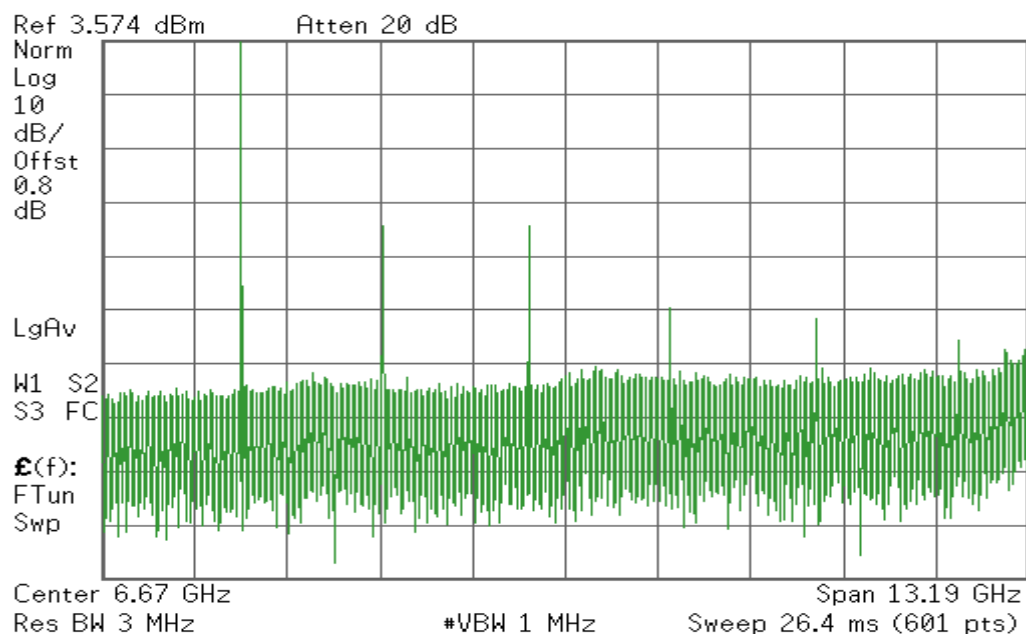


| Parameter                     | Units              | Min  | Typ  | Max  |
|-------------------------------|--------------------|------|------|------|
| Operating Frequency Range     | MHz                | -    | 2045 | -    |
| Step Size                     | kHz                |      | 40   |      |
| Settling Time                 | msec               |      | 10   | 30   |
| Output Power                  | dBm                | +1.0 | +3.0 | +5.0 |
| Output Impedance              | $\Omega$           |      | 50   |      |
| Phase Noise                   | @1kHz offset       |      | -79  | -74  |
|                               | @10kHz offset      |      | -108 | -103 |
|                               | @100kHz offset     |      | -129 | -124 |
|                               | @1MHz offset       |      | -148 | -143 |
| 2nd Harmonic Suppression      | dBc                |      | -34  | -20  |
| Sideband Spurious Suppression | dBc                |      |      | -70  |
| Reference                     | Input Frequency    | MHz  | 5    | 100  |
|                               | Input Level        | dBm  | -5   | +5   |
| VCO Power Supply (Vcc)        | Voltage            | Vdc  | 5    |      |
|                               | Current            | mA   | 29   | 40   |
| PLL Power Supply (Vcp)        | Voltage            | Vdc  | 5    |      |
|                               | Current            | mA   | 5    | 10   |
| Operating Temp. Range         | $^{\circ}\text{C}$ | -40  |      | +85  |

## Dimensions



## Harmonic Suppression



## Sideband Spurious Suppression

