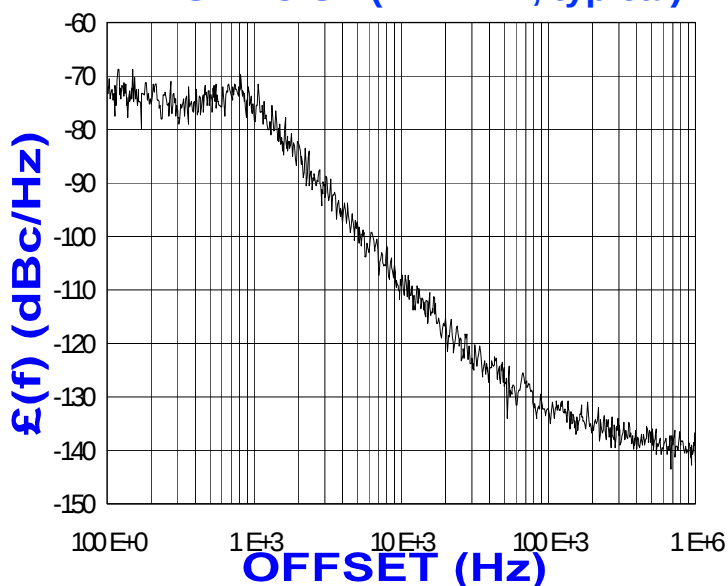




### PHASE NOISE (1 Hz BW, typical)



#### FEATURES

- Frequency Range: 3180 - 3210 MHz
- Step Size: 125 KHz
- PLL-24H - Style Package

#### APPLICATIONS

- Digital Radio Equipment
- Fixed Wireless Access
- Satellite Communication Systems

#### PERFORMANCE SPECIFICATIONS

|                                             | VALUE       | UNITS        |
|---------------------------------------------|-------------|--------------|
| Frequency Range                             | 3180 - 3210 | MHz          |
| Phase Noise @ 10 kHz offset (1 Hz BW, typ.) | -107        | dBc/Hz       |
| Harmonic Suppression (2nd, typ.)            | -12         | dBc          |
| Sideband Spurs (typ.)                       | -70         | dBc          |
| Power Output                                | 0±3         | dBm          |
| Load Impedance                              | 50          | $\Omega$     |
| Step Size                                   | 125         | KHz          |
| Charge Pump Output Current                  | 5000        | $\mu$ A      |
| Switching Speed (typ., adjacent channel)    | 3           | mSec         |
| Startup Lock Time (typ.)                    | 3           | mSec         |
| Operating Temperature Range                 | -40 to 85   | $^{\circ}$ C |
| Package Style                               | PLL-24H     |              |

#### POWER SUPPLY REQUIREMENTS

|                            |    |     |
|----------------------------|----|-----|
| Supply Voltage (Vcc, nom.) | 5  | Vdc |
| Supply Current (Icc, typ.) | 35 | mA  |

All specifications are typical unless otherwise noted and subject to change without notice.

#### APPLICATION NOTES

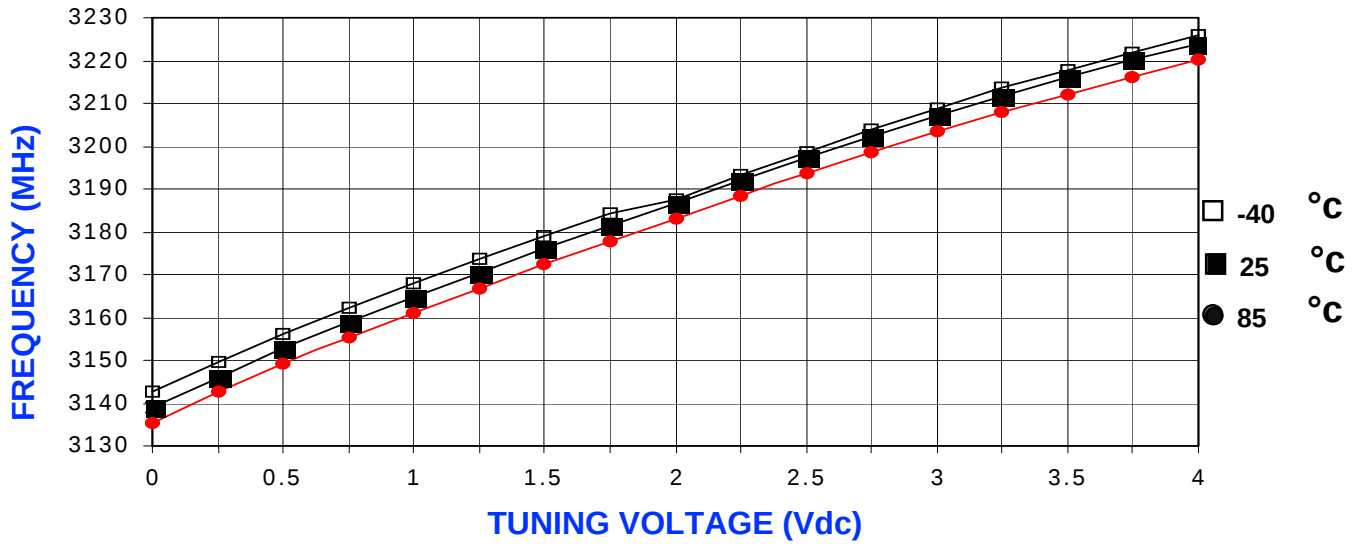
- AN-107 : How to Solder Z-COMM VCOs / PLLs
- AN-200 : Mounting and Grounding of Z-COMM PLLs
- AN-201 : PLL Fundamentals      AN-202 : PLL Functional Description

#### NOTES:

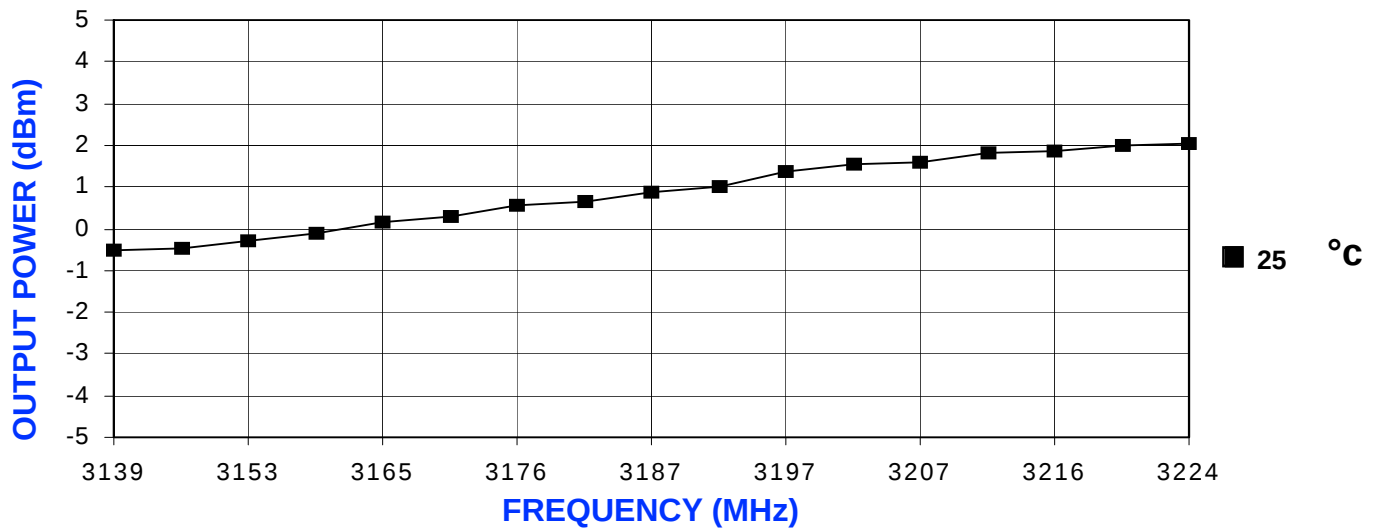
Reference Oscillator Signal:  $5 \text{ MHz} < f_{\text{osc}} < 100 \text{ MHz}$   
 Frequency Synthesizer: Analog Devices - ADF4106

Prescaler: 32

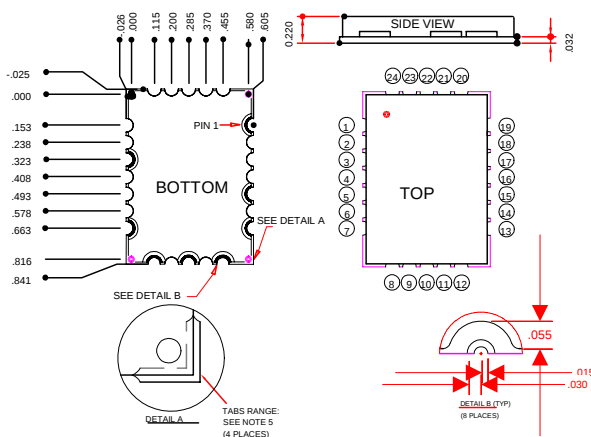
### VCO TUNING CURVE, typ.



### VCO POWER CURVE, typ.



### PHYSICAL DIMENSIONS



1. The inside radius of all 24 half holes at the perimeter of the board are plated to provide a surface for the attachment of the PLL Module to the PCB. 16 pads are for grounding, 8 pads are for signal interface.
2. The surface of the shield is tin-plated and may be soldered to. The shield's base metal is cold-rolled steel.
3. The ground plane on the bottom side is ground and attaches to a ground track on the top side of the board as well as to the shield.
4. Unless otherwise noted all dimensions are in inches.
5. Unless otherwise noted all tolerances are as follows:  
.xxx = ± .010.

P1 RF OUTPUT  
P2.4 GROUND  
P5 REFERENCE OSCILLATOR INPUT  
P6 GROUND  
P7 CLOCK  
P8 DATA  
P9 GROUND  
P10 LOAD ENABLE  
P11 GROUND  
P12 LOCK DETECT  
P13 VCC  
P14 GROUND  
P15 GROUND  
P16 GROUND  
P17 NO CONNECTION  
P18-24 GROUND