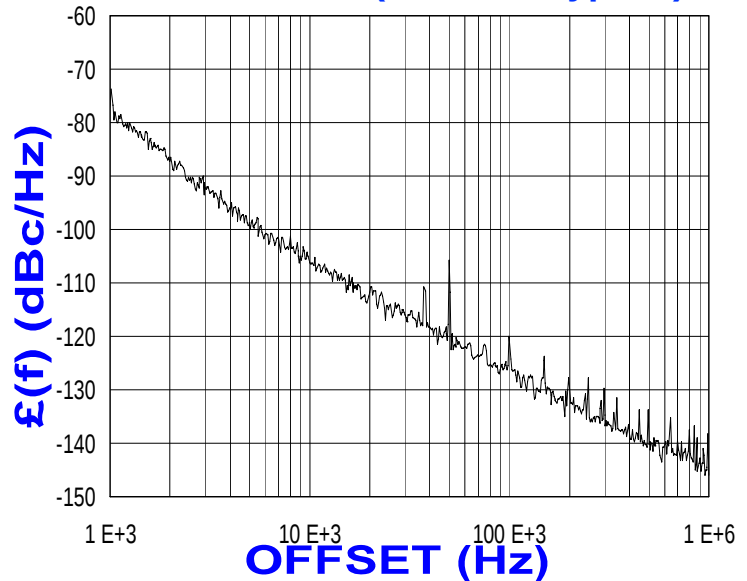




### PHASE NOISE (1 Hz BW, typical)



#### FEATURES

- Frequency Range: 1840 - 1910 MHz
- Step Size: 50 KHz
- PLL-24 - Style Package

#### APPLICATIONS

- Telecommunications
- Satellite
- Telemetry

#### PERFORMANCE SPECIFICATIONS

|                                             | VALUE       | UNITS        |
|---------------------------------------------|-------------|--------------|
| Frequency Range                             | 1840 - 1910 | MHz          |
| Phase Noise @ 10 kHz offset (1 Hz BW, typ.) | -106        | dBc/Hz       |
| Harmonic Suppression (2nd, typ.)            | -15         | dBc          |
| Sideband Spurs (typ.)                       | -65         | dBc          |
| Power Output                                | 3±2         | dBm          |
| Load Impedance                              | 50          | $\Omega$     |
| Step Size                                   | 50          | kHz          |
| Charge Pump Output Current                  | 3.13        | $\mu$ A      |
| Switching Speed (typ., adjacent channel)    | 5.5         | mSec         |
| Startup Lock Time (typ.)                    | 5.5         | mSec         |
| Operating Temperature Range                 | -40 to 85   | $^{\circ}$ C |
| Package Style                               | PLL-24      |              |

#### POWER SUPPLY REQUIREMENTS

|                            |    |     |
|----------------------------|----|-----|
| Supply Voltage (Vcc, nom.) | 5  | Vdc |
| Supply Current (Icc, typ.) | 40 | mA  |

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

#### APPLICATION NOTES

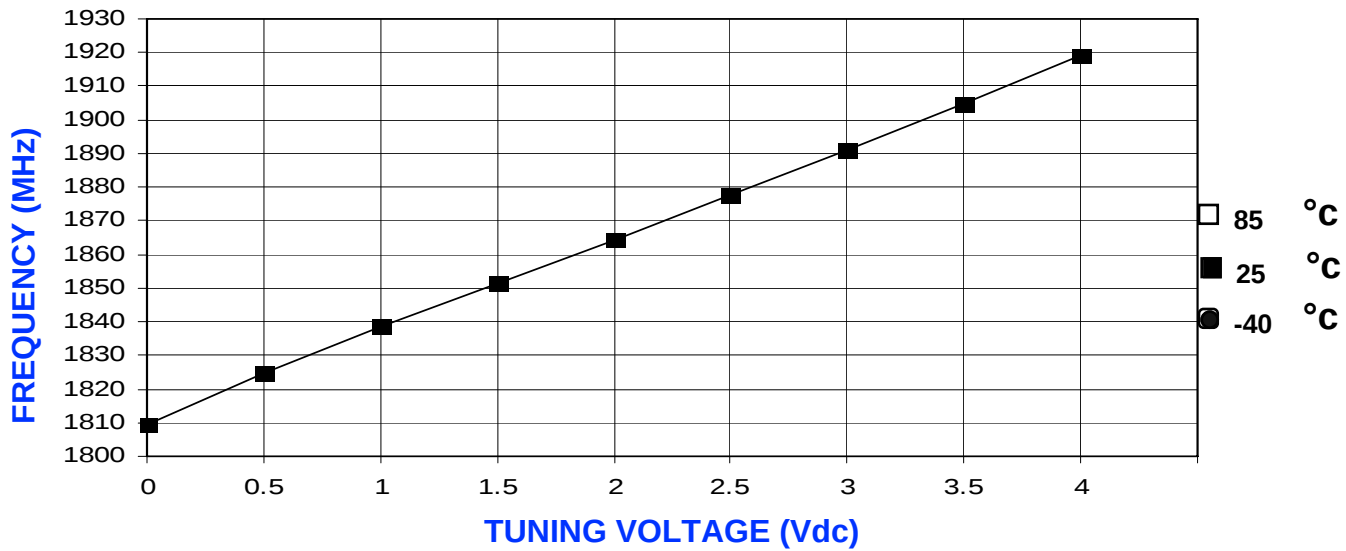
- AN-107 : How to Solder Z-COMM VCOs / PLLs
- AN-202 : PLL Functional Description

#### NOTES:

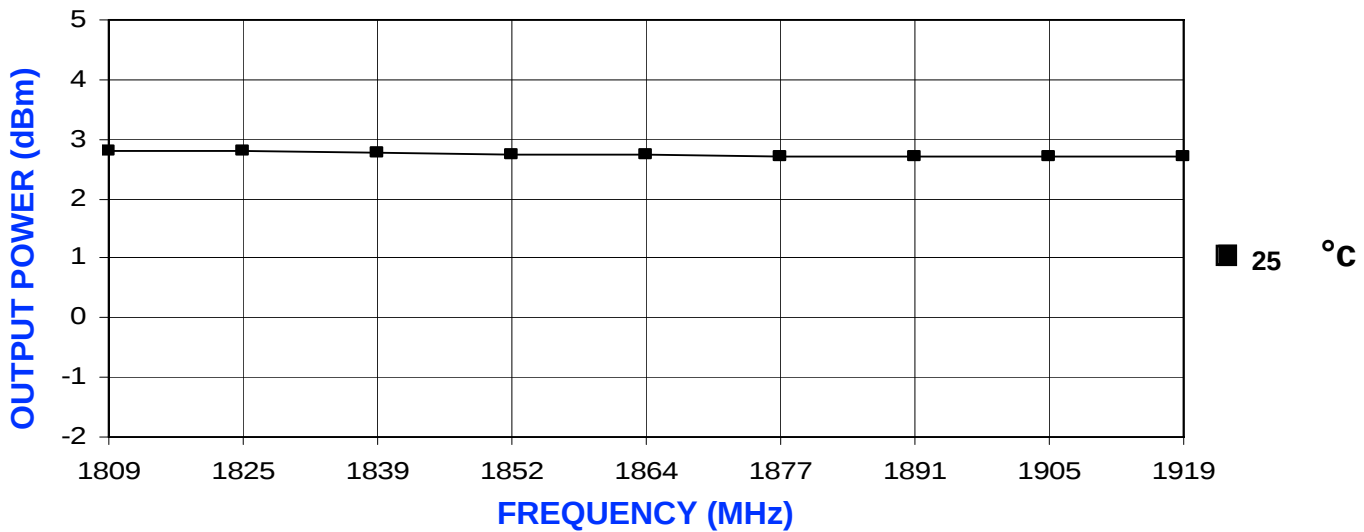
Reference Oscillator Signal:  $5 \text{ MHz} < f_{\text{osc}} < 100 \text{ MHz}$   
Frequency Synthesizer: National Semiconductor - ADF4106

## PHASE LOCKED LOOP

VCO TUNING CURVE, typ.



VCO POWER CURVE, typ.



PHYSICAL DIMENSIONS

