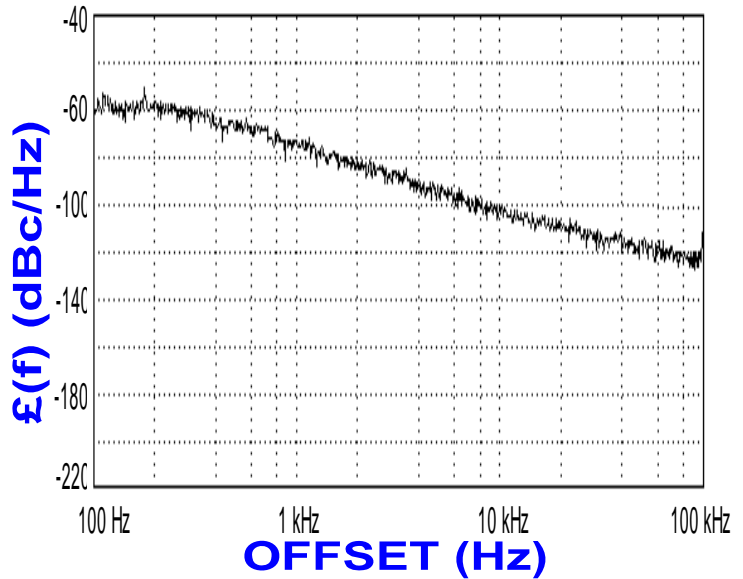


PHASE NOISE (1 Hz BW, typical)



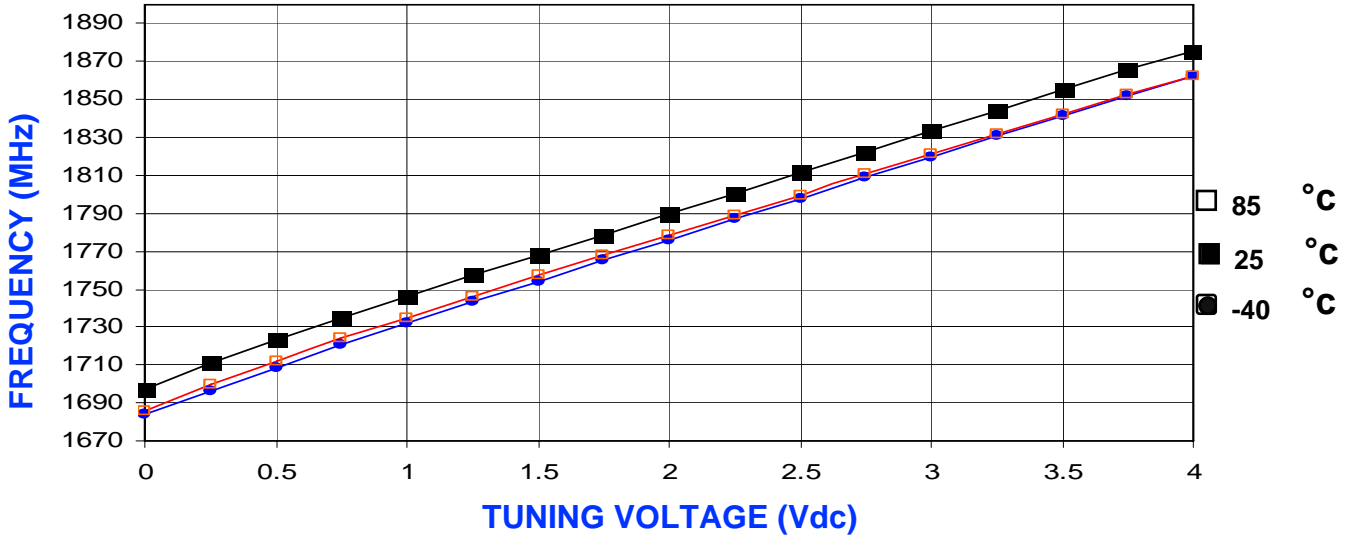
FEATURES
• Frequency Range: 1780 - 1840 MHz
• Step Size: 50 KHz
• PLL - Style Package
APPLICATIONS
• Fixed Wireless
• Satellite Communications
•

PERFORMANCE SPECIFICATIONS	VALUE	UNITS
Frequency Range	1780 - 1840	MHz
Phase Noise @ 10 kHz offset (1 Hz BW, typ.)	-101	dBc/Hz
Harmonic Suppression (2nd, typ.)	-15	dBc
Sideband Spurs (typ.)	-65	dBc
Power Output	4±2	dBm
Load Impedance	50	Ω
Step Size	50	KHz
Charge Pump Output Current	1000	μA
Switching Speed (typ., adjacent channel)	5	mSec
Startup Lock Time (typ.)	10	mSec
Operating Temperature Range	-40 to 85	°C
Package Style	PLL	
POWER SUPPLY REQUIREMENTS		
Supply Voltage (Vcc, nom.)	5	Vdc
Supply Current (Icc, typ.)	34	mA

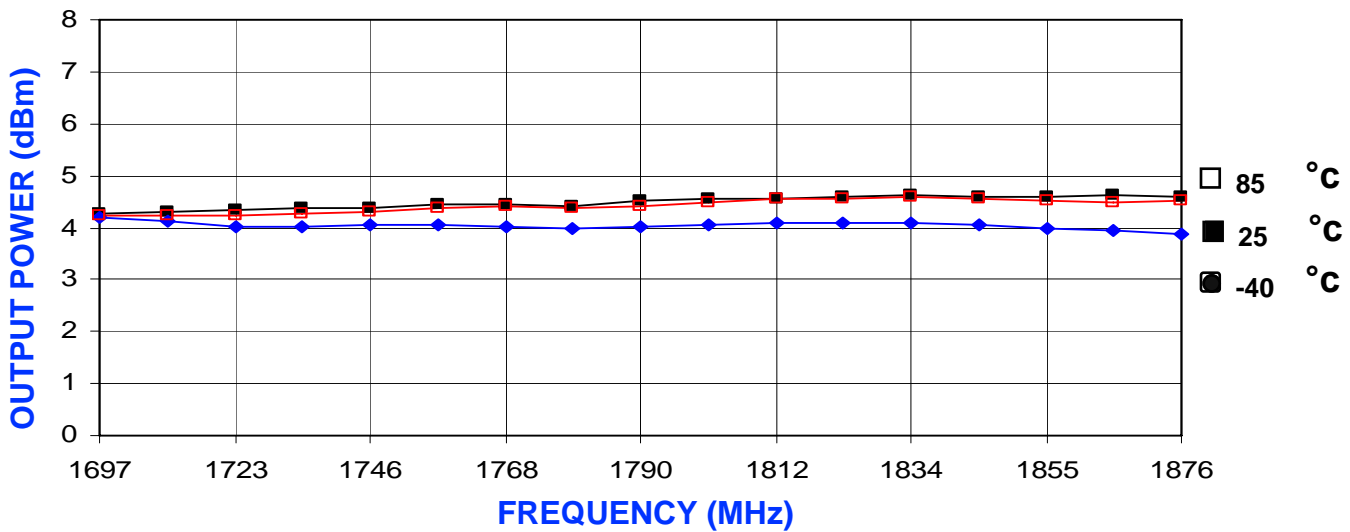
All specifications are typical unless otherwise noted and subject to change without notice.

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 MHz f_{osc} <math>< 40</math> MHz
Frequency Synthesizer: National Semiconductor - LMX2326

VCO TUNING CURVE, typ.

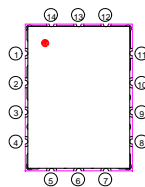
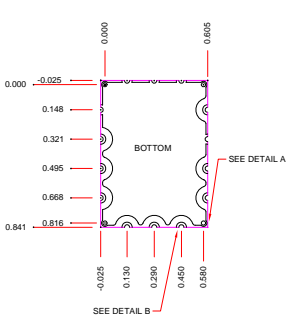


VCO POWER CURVE, typ.

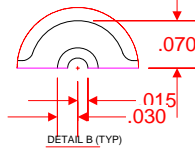
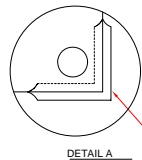


PHYSICAL DIMENSIONS

PLL
415-0078 REV. F
(DRAWING NOT TO SCALE)



- P1 RF OUTPUT
- P2 GROUND
- P3 REFERENCE OSCILLATOR INPUT
- P4 CLOCK
- P5 DATA
- P6 LOAD ENABLE
- P7 LOCK DETECT
- P8 VCC
- P9 OPTIONAL
- P10 NO CONNECTION
- P11-14 GROUND



NOTES:

1. THE INSIDE RADIUS OF ALL .14 HOLE HOLES AT THE PERIMETER OF THE BOARD ARE PLATED TO PROVIDE A SURFACE FOR THE ATTACHMENT OF THE P3 MODULE TO A PCB. IN 11 LOCATIONS, WITH PADS BEING USED FOR ELECTROMECHANICAL INTERFACE. 14 SOLDER LOCATIONS REQUIRED.
2. THE SURFACE OF THE SHIELD IS UNPLATED AND MAY BE SOLDED TO THE SHIELD'S BASE METAL OR TO THE SHIELD'S PADS.
3. THE GROUND PLANE IS GROUND AND ATTACHES TO THE BOARD AS WELL AS THE SHIELD BY PTH.
4. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES.
5. UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS FOLLOWS:
TOLERANCES
.XXX = ± .010