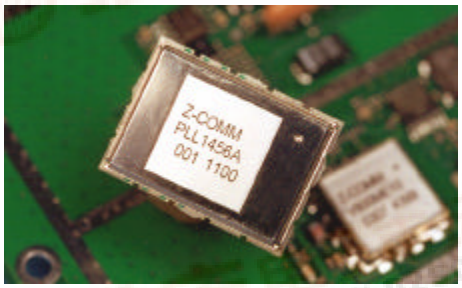
Z-Communications, Inc.
9939 Via Pasar • San Diego, CA 92126
TEL (858) 621-2700 FAX (858) 621-2722

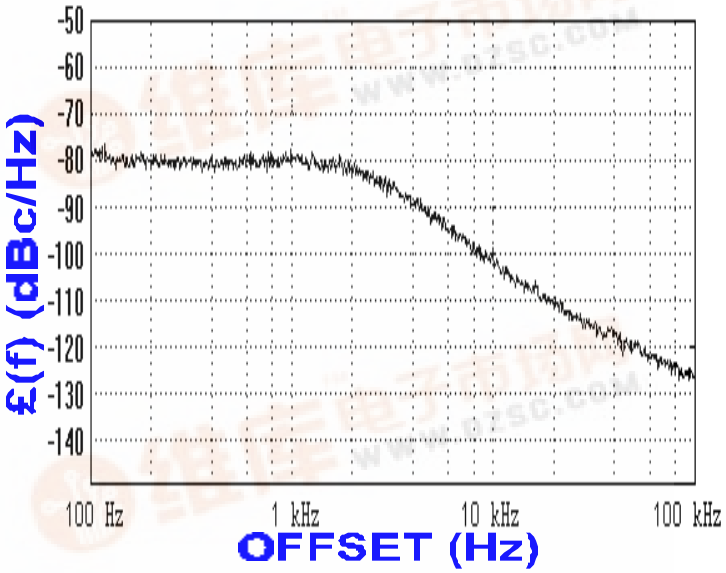
PLL1000A

PHASE LOCKED LOOP

Rev A



PHASE NOISE (1 Hz BW, typical)



FEATURES

- Frequency Range: 988 - 1028 MHz
- Step Size: 1000 KHz
- PLL - Style Package

APPLICATIONS

- Basestations
- Mobile Radios
- Satellite Communications

PERFORMANCE SPECIFICATIONS	VALUE	UNITS
Frequency Range	988 - 1028	MHz
RMS Phase Error (100 Hz - 100 KHz)	0.75	°
Harmonic Suppression (2nd, typ.)	-20	dBc
Sideband Spurs (typ.)	-70	dBc
Power Output	0±2	dBm
Load Impedance	50	Ω
Step Size	1000	KHz
Charge Pump Output Current	LOW	
Switching Speed (typ., adjacent channel)	2	mSec
Startup Lock Time (typ.)	5	mSec
Operating Temperature Range	-40 to +85	°C
Package Style	PLL	
POWER SUPPLY REQUIREMENTS		
Supply Voltage (Vcc, nom.)	5	Vdc
Supply Current (Icc, typ.)	32	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:

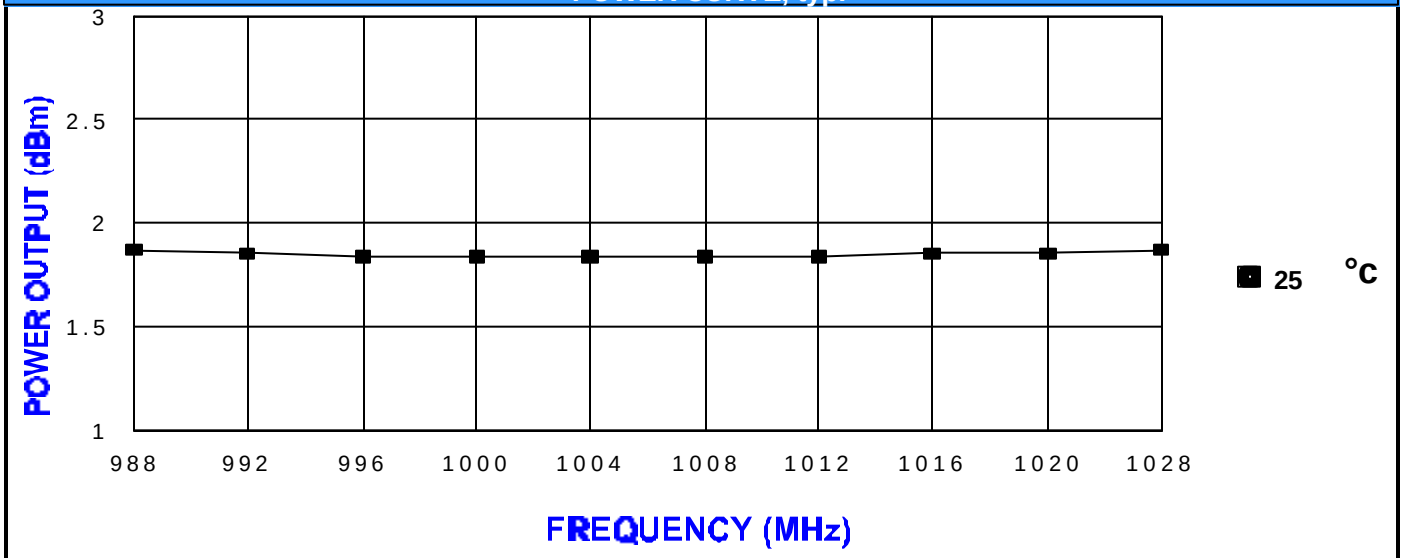
Reference Oscillator Signal: 5 MHz<f_{osc}<40 MHz

PLL OUTPUT SPECTRUM

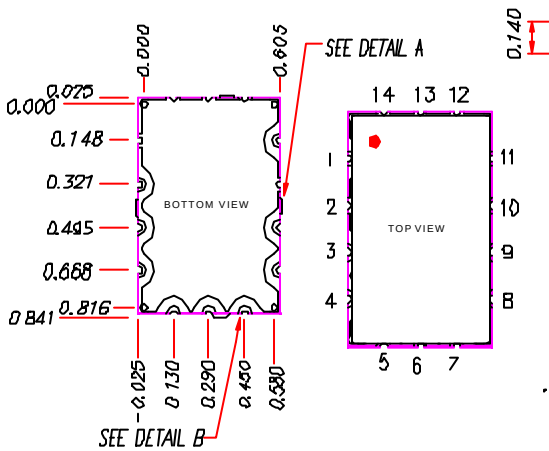
POWER

FREQUENCY OFFSET (KHz)

POWER CURVE, typ.



PHYSICAL DIMENSIONS



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

1. The inside radius of all 14 half holes at the perimeter of the board are plated to provide a surface for the attachment of the PLL Module to the motherboard. 5 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 brass
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