

INPUT

Frequency

10 MHz, $\pm 5 \times 10^{-7}$

Level

+7 dBm ± 5 dB into 50 ohms

OUTPUT

Frequency

100 MHz

Level

+18 dBm ± 2 dB into 50 ohms

STABILITY

Aging

1×10^{-6} first year

after 30 days operating, typical

5×10^{-7} second year, typical

3×10^{-7} per year thereafter, typical

Phase Noise L(f), static, free-running

100 Hz -138 dBc/Hz

1 kHz -163 dBc/Hz

10 kHz -183 dBc/Hz

100 kHz -188 dBc/Hz

Temperature Stability

$\pm 5 \times 10^{-7}$ free-running from 0 to +50°C,
(Ref. +25°C)

Harmonics

-30 dBc

Sub-Harmonics

-80 dBc

PLL Divider Products

-80 dBc

Non-Harmonic Spurious

-80 dBc, excluding power
supply line related spurs

Phase Lock Alarm

TTL

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

Phase Lock Voltage Monitor

Voltage monitor pin supplied

MECHANICAL

Dimensions

2 x 2 x 1.3"

Connectors

SMA(f) and solder pins on side

Packaging

Nickel-plated machined
aluminum case - CVPLO

POWER REQUIREMENTS

Warm-Up Power

≤ 10 Watts for 5 minutes

Total Power

≤ 6 Watts at +25°C

Supply Voltage

+15 VDC $\pm 5\%$

ADJUSTMENT

Loop BW

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

CRYSTAL

Type

100 MHz SC-cut (low-g)

Acceleration Sensitivity

$\leq 3 \times 10^{-10}$ /g per axis, typical

ENVIRONMENTAL

Operating Temperature

0° to +50°C

Storage Temperature

-40° to +85°C

OTHER

Label

Use conventional label with the
following information:

501-28274 (Current Rev.)

100 MHz G-Citrine PLO

+15 VDC

Serial # - Date Code

Test Data

Output Level

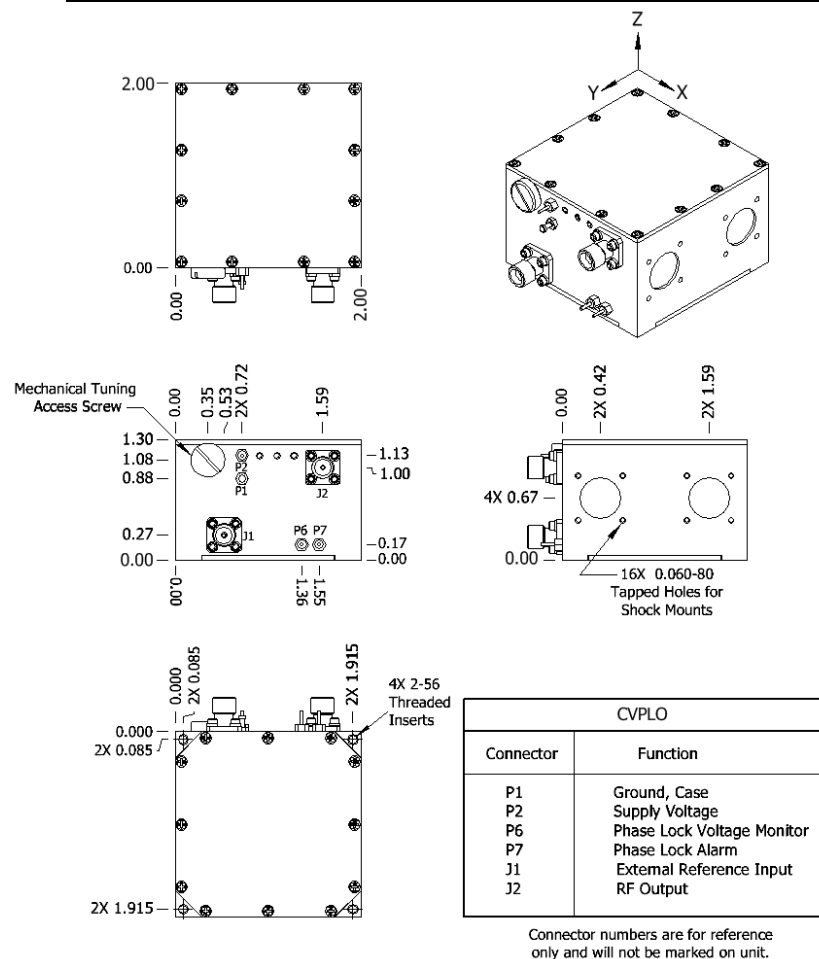
Phase Noise, Static, Free-Running

Temperature Stability, Free-Running

Harmonics, Subs, Products, Spurious

Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	07-22-14	Initial Release	PAC	



Connector numbers are for reference
only and will not be marked on unit.

Wenzel Associates, Inc.

Austin, Texas

Title:

100 MHz-SC Golden Citrine Phase Lock Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-28274	-	07-22-14		ULN
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ± 0.030 "	0.XXX Dec: ± 0.010 "	FSCM: 62821	Page 1 of 1