

## INPUT

### Frequency

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

### Level

+7 dBm  $\pm 5$  dB into 50 ohms

## OUTPUT

### Frequency

100 MHz

### Level

+18 dBm  $\pm 2$  dB into 50 ohms

## STABILITY

### Aging

$1 \times 10^{-6}$  first year

after 30 days operating, typical

$5 \times 10^{-7}$  second year, typical

$3 \times 10^{-7}$  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

2.8" x 3.0" x 1.75"

### Connectors

SMA(f) and solder pins on side

## Packaging

Nickel-plated machined  
aluminum case – CVPLOI

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 10$  Watts for 5 minutes

### Total Power

$\leq 6$  Watts at +25°C

### Supply Voltage

+15 VDC  $\pm 5\%$

## ADJUSTMENT

### Loop BW

Target Bandwidth:  $\leq 10$  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

## Resonance

(Internal Mount Natural Frequency)

~30 Hz, typical

## OTHER

### Label

Use conventional label with the  
following information:

501-27039 (Current Rev.)

100 MHz PL G-Citrine VI

+15 VDC

Serial # - Date Code

## Test Data

Output Level

Phase Noise, Static, Free-Running

Temperature Stability, Free-Running

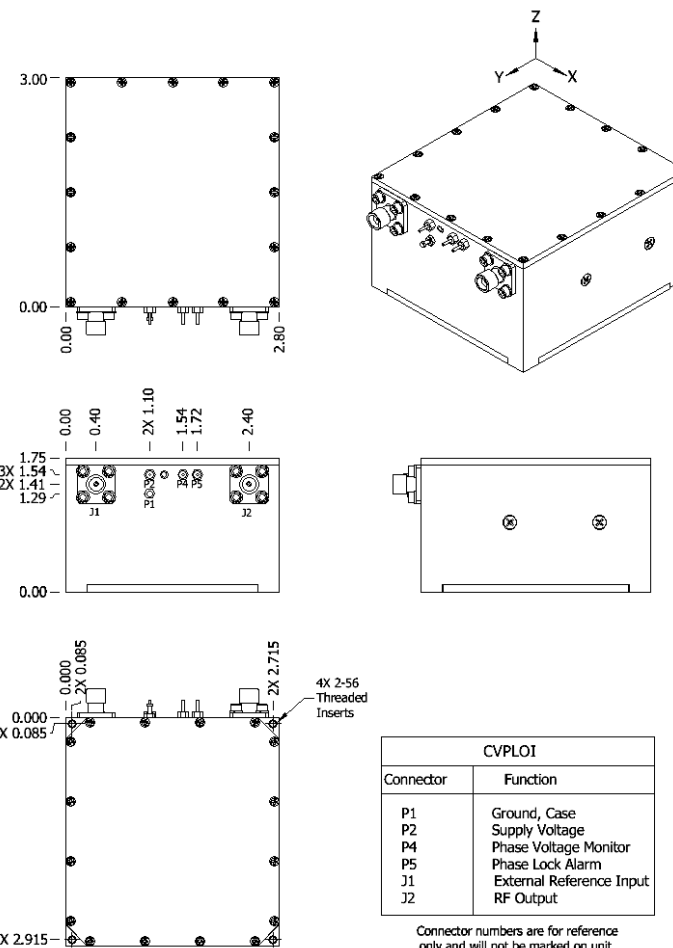
Harmonics, Subs, Products, Spurious

Power – Warm-up and Total

Acceleration Sensitivity (100 Hz)

Mount Natural Frequency Resonance

REV	DATE	REVISION RECORD	DWN	AUTH
-	08-01-13	Initial Release	PAC	



**Wenzel Associates, Inc.**

Austin, Texas

Title:

## 100 MHz-SC Phase Lock Golden Citrine Vibration Isolated Crystal Oscillator

P/N:

**501-27039**

Rev:

-

Date:

**08-01-13**

Drawn:

Ref:

ULN

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:  
 **$\pm 0.030$ "**

0.XXX Dec:  
 **$\pm 0.010$ "**

FSCM:  
**62821**

Page 1 of 1