

## OUTPUT

### Frequency

100 MHz

### Level

+13 dBm  $\pm 2$  dB into 50 ohms

## STABILITY

### Aging

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

after 30 days operating, typical

### Phase Noise L(f), Static

100 Hz -130 dBc/Hz

1 kHz -158 dBc/Hz

10 kHz -176 dBc/Hz

100 kHz -176 dBc/Hz

### Phase Noise L(f), Dynamic, typical

10 Hz -72 dBc/Hz

50 Hz -73 dBc/Hz

100 Hz -100 dBc/Hz

300 Hz -130 dBc/Hz

1 kHz -153 dBc/Hz

2 kHz -160 dBc/Hz

### Temperature Stability

$\pm 2 \times 10^{-7}$ , 0° to +50°C (Ref +25°C)

### Harmonics

$\leq -30$  dBc

### Spurious

$\leq -90$  dBc, excluding power  
supply line related spurs

## MECHANICAL

### Dimensions

2.8" x 3.0" x 1.15"

### Connectors

SMA(f) and solder pins on side

### Packaging

Nickel-plated machined  
aluminum case – (CVI-1)

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 6$  Watts for 5 minutes

### Total Power

$\leq 3$  Watts at +25°C

### Supply Voltage

+15 VDC  $\pm 5\%$

## ADJUSTMENT

### Mechanical Tuning

$\pm 4 \times 10^{-6}$

### Electrical Tuning

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

Negative slope

## 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

### Vibration Level

10 Hz to 2 kHz 0.01 g<sup>2</sup>/Hz

### Resonance

(Internal Mount Natural Frequency)

~50 Hz, typical

## OTHER

### Label

Use conventional label with the  
following information:

501-24942 (Current Rev.)

100 MHz Citrine

+15 VDC

Serial # - Date Code

### Test Data

Output Level

Phase Noise, Static and Dynamic

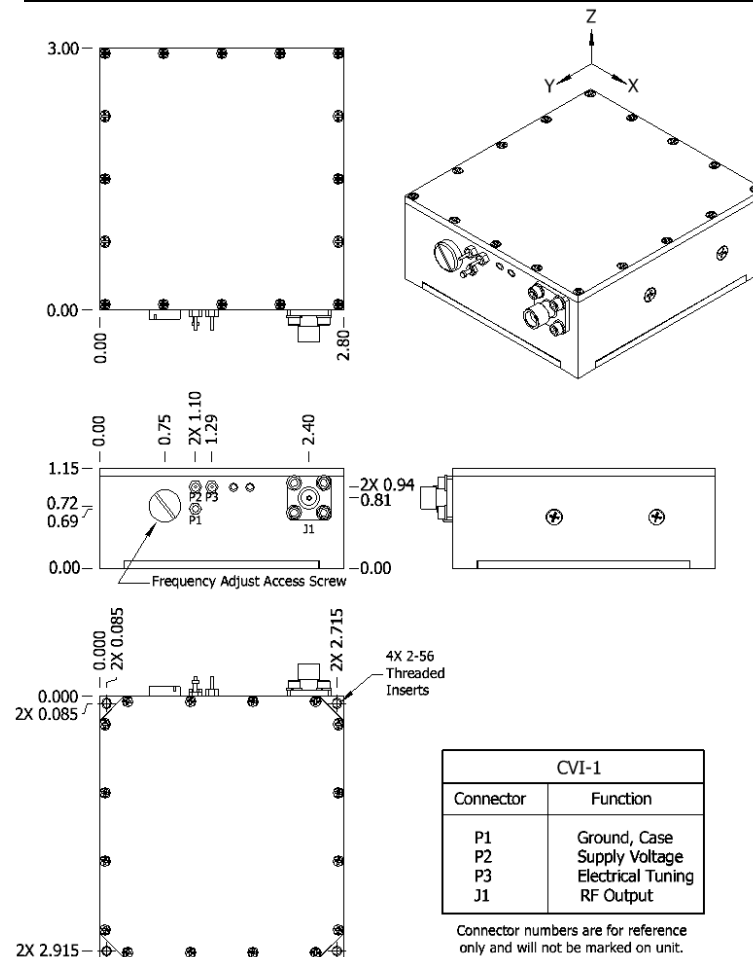
Temperature Stability

Harmonics, Spurious

Power – Warm-up and Total

Tuning – MT and ET

EV	DATE	REVISION RECORD	DWN	AUTH
-	09-08-11	Initial Release	PAC	
A	02-06-12	Resonant Frequency; Dynamic Phase Noise	PAC	JR
B	05-14-12	Dynamic Phase Noise	PAC	JR



**Wenzel Associates, Inc.**

Austin, Texas

Title:

## Premium 100 MHz-SC Citrine Vibration Isolated Crystal Oscillator

P/N: <b>501-24942</b>	Rev: <b>B</b>	Date: <b>05-14-12</b>	Drawn:	Ref: ULN
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b><math>\pm 0.030</math>"</b>	0.XXX Dec: <b><math>\pm 0.010</math>"</b>	FSCM: <b>62821</b>	Page 1 of 1