

## OUTPUT

### Frequency

100 MHz

### Level

+18 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 -135 dBc/Hz

1 kHz -162 dBc/Hz

10 kHz -185 dBc/Hz

100 kHz -188 dBc/Hz

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

10 Hz -68 dBc/Hz

30 Hz -72 dBc/Hz

100 Hz -102 dBc/Hz

300 Hz -122 dBc/Hz

1 kHz -143 dBc/Hz

2 kHz -155 dBc/Hz

### Temperature Stability

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

### Harmonics

$\leq -30$  dBc

### Spurious

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

## MECHANICAL

### Dimensions

2.8" x 3.0" x 1.75"

### Connectors

SMA(f) and solder pins on side

### CBkaging

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

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 10$  Watts for 5 minutes

### Total Power

$\leq 4$  Watts at  $+25^\circ\text{C}$

### 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

$\leq 5 \times 10^{-10}$  /g per axis, typical

## ENVIRONMENTAL

### Operating Temperature

$0^\circ$  to  $+50^\circ\text{C}$

### Storage Temperature

$-40^\circ$  to  $+85^\circ\text{C}$

### Vibration Level

10 Hz to 2 kHz  $0.01 \text{ g}^2/\text{Hz}$

### Resonance

(Internal Mount Natural Frequency)

$\sim 30$  Hz, typical

## OTHER

### Label

Use conventional label with the  
following information:

501-25843 (Current Rev.)

100 MHz Citrine

+15 VDC

Serial # - Date Code

### Test Data

Output Level

Phase Noise, Static and Dynamic

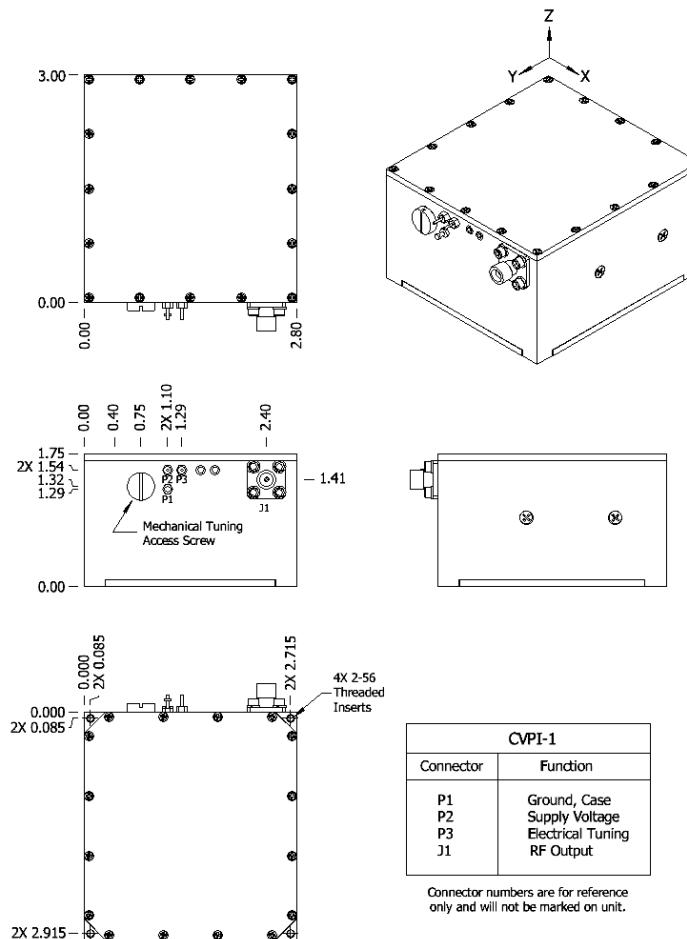
Temperature Stability

Harmonics, Spurious

Power – Warm-up and Total

Tuning – MT and ET

| EV | DATE     | REVISION RECORD              | DWN | AUTH |
|----|----------|------------------------------|-----|------|
| -  | 04-23-12 | Initial Release              | PAC |      |
| A  | 06-15-16 | Modified dynamic phase noise | CB  |      |
|    |          |                              |     |      |
|    |          |                              |     |      |
|    |          |                              |     |      |
|    |          |                              |     |      |



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**100 MHz-SC Golden Citrine  
Vibration Isolated Crystal Oscillator**

|  |  |   |                       |             |
|--|--|---|-----------------------|-------------|
| P/N:<br><b>501-25843</b>                                     | Rev:<br><b>A</b>                           | Date:<br><b>06-15-16</b>                    | Drawn:                | Ref:<br>ULN |
| Tolerances:<br>(except as noted)<br>Dimensions are in inches | 0.XX Dec:<br><b><math>\pm 0.030</math></b> | 0.XXX Dec:<br><b><math>\pm 0.010</math></b> | FSCM:<br><b>62821</b> | Page 1 of 1 |