OUTPUT

Frequency
120 MHz

Level
+18 dBm ±2 dB into 50 ohms

STABILITY

Aging
1×10^{-6} per year
after 30 days operating, typical

Phase Noise L(f), Static

100 Hz	-130 dBc/Hz
1 kHz	-156 dBc/Hz
10 kHz	-180 dBc/Hz
100 kHz	-188 dBc/Hz

Phase Noise L(f), Dynamic, typical

10 Hz	-66 dBc/Hz
30 Hz	-71 dBc/Hz
100 Hz	-100 dBc/Hz
300 Hz	-121 dBc/Hz
1 kHz	-142 dBc/Hz
2 kHz	-154 dBc/Hz

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

Harmonics
≤ -30 dBc

Spurious
≤ -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

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

POWER REQUIREMENTS

Warm-Up Power
≤ 10 Watts for 5 minutes

Total Power
≤ 4 Watts at +25°C

Supply Voltage
+15 VDC ±5%

ADJUSTMENT

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

Electrical Tuning
$\pm 5 \times 10^{-7}$ min, ±5 VDC
Negative slope

CRYSTAL

Type
120 MHz SC-cut (low-g)

Acceleration Sensitivity
$\leq 5 \times 10^{-10}$ /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^2/Hz

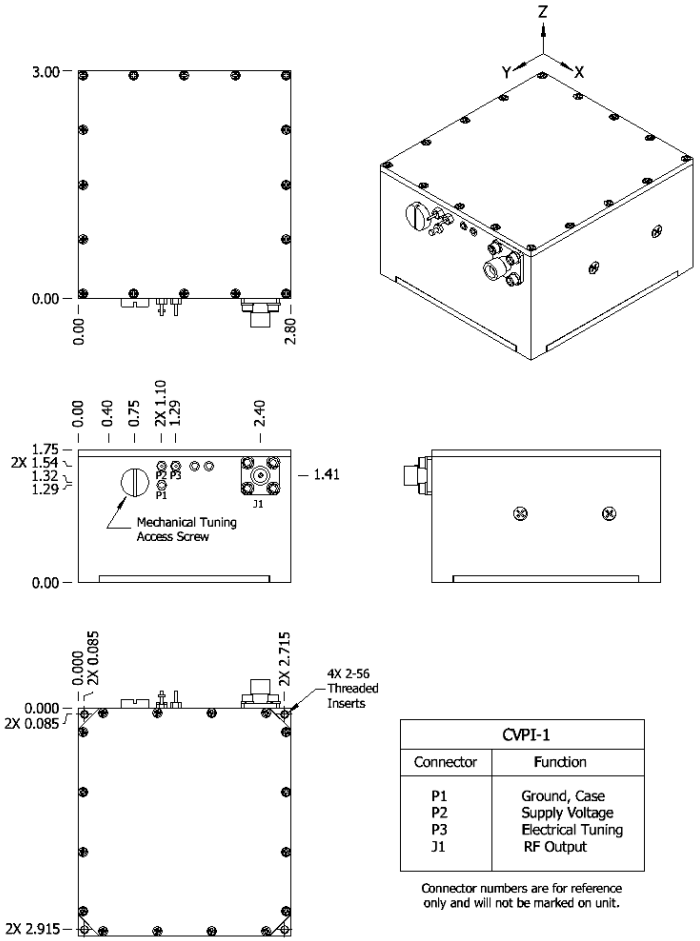
Resonance
(Internal Mount Natural Frequency)
~30 Hz, typical

OTHER

Label
Use conventional label with the following information:
501-30122 (Current Rev.)
120 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
-	06-14-16	Initial Release	CB	



CVPI-1	
Connector	Function
P1	Ground, Case
P2	Supply Voltage
P3	Electrical Tuning
J1	RF Output

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

Wenzel Associates, Inc.
Austin, Texas

Title:
120 MHz-SC Golden Citrine Vibration Isolated Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-30122	**-**	**06-14-16**		ULN

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec:	0.XXX Dec:	FSCM:	Page 1 of 1
	±0.030"	±0.010"	62821	