

**OUTPUT**

**Frequency**

100 MHz

**Level**

+13 dBm ±2 dB into 50 ohms

**STABILITY**

**Aging**

1 x 10<sup>-6</sup> 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

**Temperature Stability**

±2 x 10<sup>-7</sup>, 0° to +50°C (Ref +25°C)

**Harmonics**

≤ -30 dBc

**Spurious**

≤ -90 dBc, excluding power  
supply line related spurs

**MECHANICAL**

**Dimensions**

2 x 2 x 0.7"

**Connectors**

SMA(f) and solder pins on side

**Packaging**

Nickel-plated machined  
aluminum case (CV-1A)

**POWER REQUIREMENTS**

**Warm-Up Power**

≤ 6 Watts for 5 minutes

**Total Power**

≤ 3 Watts at +25°C

**Supply Voltage**

+12 VDC ±5%

**ADJUSTMENT**

**Mechanical Tuning**

±4 x 10<sup>-6</sup>

**Electrical Tuning**

±2 x 10<sup>-7</sup>, ±5 VDC  
Negative slope

**CRYSTAL**

**Type**

100 MHz SC-Cut (low-g)

**Acceleration Sensitivity**

≤ 3 x 10<sup>-10</sup> /g per axis, typical

**ENVIRONMENTAL**

**Operating Temperature**

0° to +50°C

**Storage Temperature**

-40° to +85°C

**OTHER**

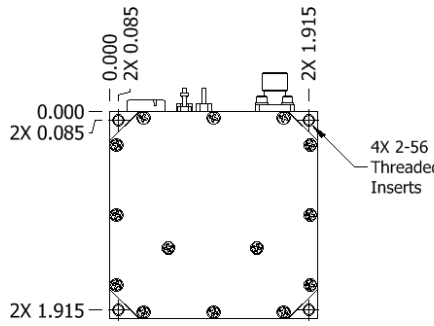
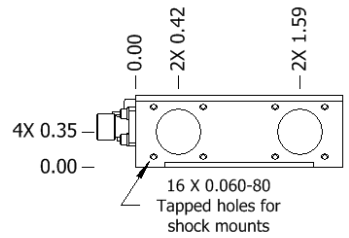
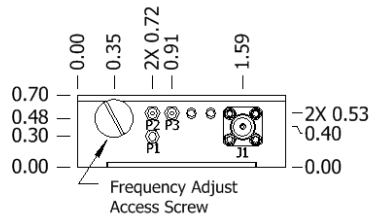
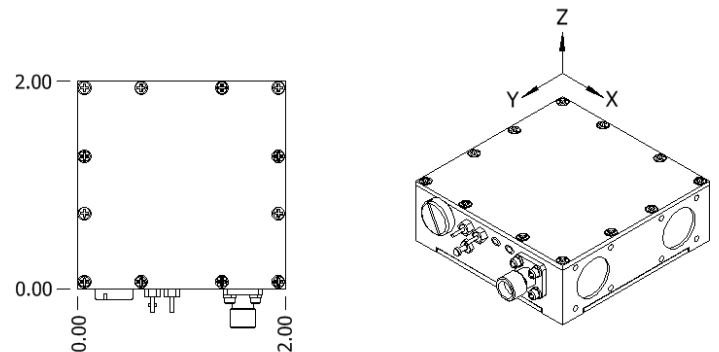
**Label**

Use conventional label with the  
following information:  
501-24069 (Current Rev.)  
100 MHz Citrine  
+12 VDC  
Serial # - Date Code

**Test Data**

Output Level  
Phase Noise, Static  
Temperature Stability  
Harmonics, Spurious  
Power – Warm-up and Total  
Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	08-03-11	Initial Release	PAC	
A	12-03-12	Updated Drawing	PAC	



CV-1A	
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

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Title: **Premium 100 MHz-SC Citrine Crystal Oscillator**

P/N: <b>501-24069</b>	Rev: <b>A</b>	Date: <b>12-03-12</b>	Drawn:	Ref: ULN
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>	Page <b>1</b> of <b>1</b>
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