

OUTPUT

Frequency

100 MHz

Level

+13 dBm ±2 dB into 50 ohms

STABILITY

Aging

1 x 10⁻⁶ per year
after 30 days operating, typical

Phase Noise L(f), Static

100 Hz -130 dBc/Hz
1 kHz -150 dBc/Hz
10 kHz -168 dBc/Hz
100 kHz -170 dBc/Hz

Temperature Stability

±5 x 10⁻⁷, 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

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning

±4 x 10⁻⁶

Electrical Tuning

±2 x 10⁻⁷, ±5 VDC
Negative slope

CRYSTAL

Type

100 MHz SC-Cut (low-g)

Acceleration Sensitivity

≤ 3 x 10⁻¹⁰ /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:

501-24977 (Current Rev.)

100 MHz Citrine

+15 VDC

Serial # - Date Code

Test Data

Output Level

Phase Noise, Static

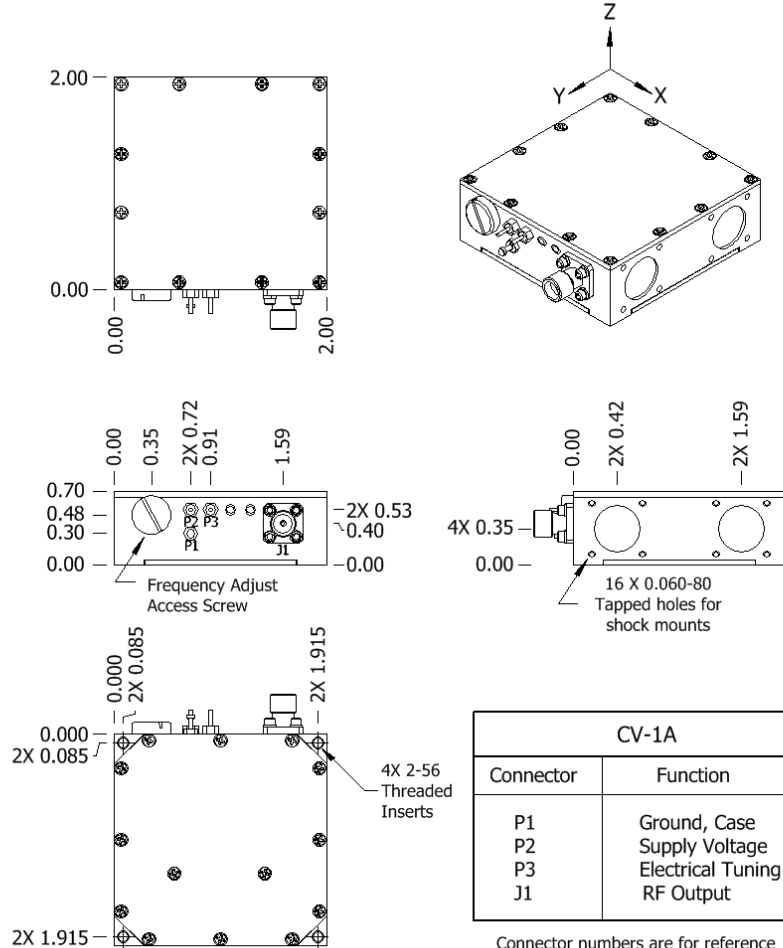
Temperature Stability

Harmonics, Spurious

Power – Warm-up and Total

Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	09-20-11	Initial Release	PAC	
A	10-16-12	Phase Noise	PAC	JR



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.

WA Wenzel Associates, Inc.
Austin, Texas

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

P/N: 501-24977	Rev: A	Date: 10-16-12	Drawn:	Ref: SPR
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1
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