OUTPUT

Frequency
160 MHz

Level
+13 dBm ±2 dB into 50 ohms

STABILITY

Aging
1×10^{-6} first year
after 30 days operating, typical
5×10^{-7} second year, typical
3×10^{-7} per year thereafter, typical

Phase Noise L(f), Static

100 Hz	-125 dBc/Hz
1 kHz	-153 dBc/Hz
10 kHz	-167 dBc/Hz
100 kHz	-168 dBc/Hz

Temperature Stability
$\pm 5 \times 10^{-7}$, 0° to +50°C (Ref +25°C)

Harmonics
≤ -25 dBc

Sub-Harmonics
≤ -50 dBc

Non-Harmonic Spurious
≤ -80 dBc, excluding power supply line related spurs

MECHANICAL

Dimensions
2" x 2" x 1.3"

Connectors
SMA(f) and solder pins on one side

Packaging
Nickel-plated machined aluminum housing (CVP-1A)

Mounting
Threaded inserts, # 2-56, 4 places
Tapped holes on sides, 16 places (provisions for shock mounts)

POWER REQUIREMENTS

Warm-Up Power
≤ 7 Watts for 5 minutes at +25°C

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
80 MHz SC-cut w/ x2 stage

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

ENVIRONMENTAL

Operating Temperature
0° to +50°C

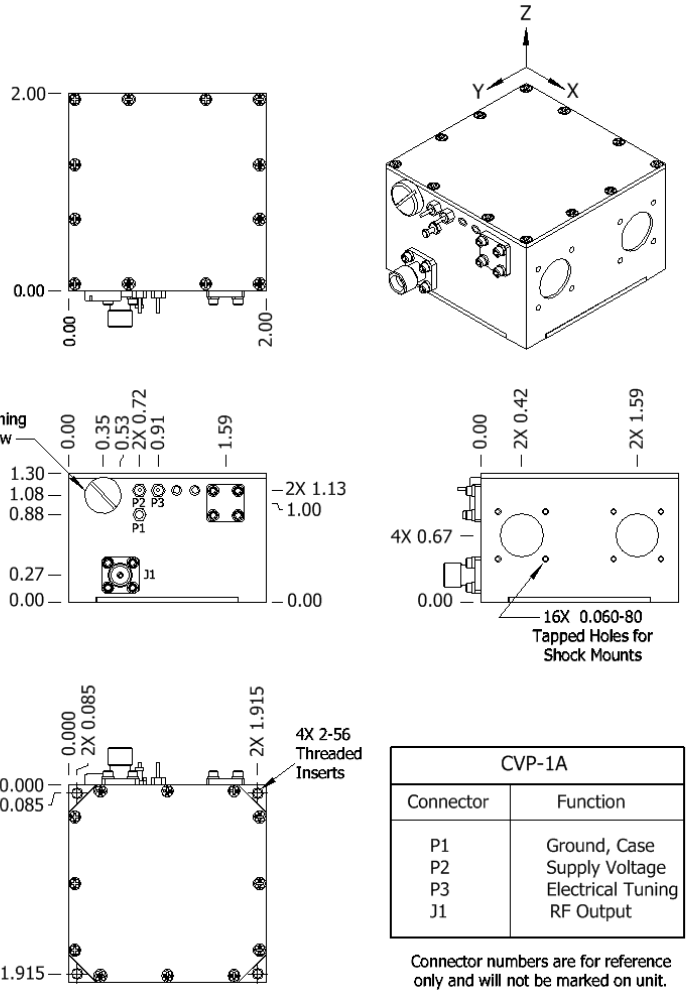
Storage Temperature
-40° to +85°C

OTHER

Label
Use conventional label with the following information:
501-26954 (Current Rev.)
160 MHz Citrine Plus
+15 VDC
Serial # - Date Code

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-25-13	Initial Release	PAC	
A	01-07-14	Phase Noise	PAC	



CVP-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

Title:
Premium 160 MHz Citrine Plus Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-26954	**A**	**01-07-14**		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	