OUTPUT

Frequency
10 MHz

Level
+13 dBm ±2 dB into 50 ohms

STABILITY

Aging
5×10^{-10} per day
after 30 days operating, typical

Phase Noise L(f), Static

10 Hz	-130 dBc/Hz
100 Hz	-155 dBc/Hz
1 kHz	-165 dBc/Hz
10 kHz	-165 dBc/Hz

Phase Noise L(f), Dynamic, typical

10 Hz	-92 dBc/Hz
50 Hz	-99 dBc/Hz
100 Hz	-119 dBc/Hz
300 Hz	-142 dBc/Hz
1 kHz	-162 dBc/Hz
2 kHz	-163 dBc/Hz

Temperature Stability
$\pm 5 \times 10^{-8}$, 0° to +50°C (Ref +25°C)

Harmonics
≤ -30 dBc

Spurious
≤ -90 dBc, excluding power
supply line related spurs

MECHANICAL

Dimensions
3.05" x 3.25" x 1.25"

Connectors
SMA(f) and solder pins on side

Packaging
Nickel-plated machined
aluminum case (CHI-1)

POWER REQUIREMENTS

Warm-Up Power
≤ 6.5 Watts for 5 minutes

Total Power
≤ 4 Watts at +25°C

Supply Voltage
+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning
$\pm 1 \times 10^{-6}$

Electrical Tuning
$\pm 2 \times 10^{-7}$ min, ±5 VDC
Negative slope

CRYSTAL

Type
10 MHz SC-cut (low-g)

Acceleration Sensitivity
$\leq 3 \times 10^{-10}$/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)
~50 Hz, goal

OTHER

Label
Use conventional label with the
following information:
501-24973 (Current Rev.)
10 MHz Citrine
+15 VDC
Serial # - Date Code

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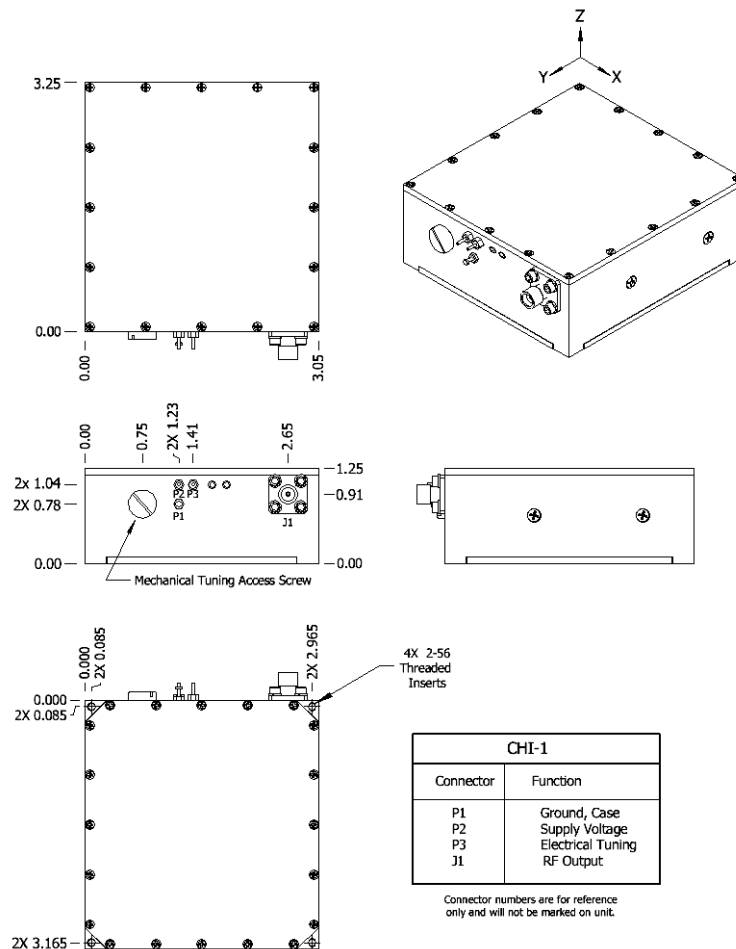Output Level
Phase Noise, Static and Dynamic
Temperature Stability
Harmonics, Spurious
Power – Warm-up and Total
Tuning – MT and ET

CHI-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.

WA Wenzel Associates, Inc.
Austin, Texas

Title:
**Standard 10 MHz-SC Citrine
Vibration Isolated Crystal Oscillator**

P/N: **501-24973**	Rev: **A**	Date: **04-18-17**	Drawn:	Ref: STR

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