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	-140 dBc/Hz
100 Hz	-160 dBc/Hz
1 kHz	-172 dBc/Hz
10 kHz	-174 dBc/Hz

Temperature Stability
$\pm 2 \times 10^{-8}$, 0° to +50°C (Ref +25°C)

Harmonics
≤ -30 dBc

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

MECHANICAL

Dimensions
2.25 x 2.25 x 0.8”

Connectors
SMA(f) and solder pins on side

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

POWER REQUIREMENTS

Warm-Up Power
≤ 7.5 Watts for 5 minutes

Total Power
≤ 5 Watts at +25°C

Supply Voltage
+12 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 (Special Low-G)

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

ENVIRONMENTAL

Operating Temperature
0° to +50°C

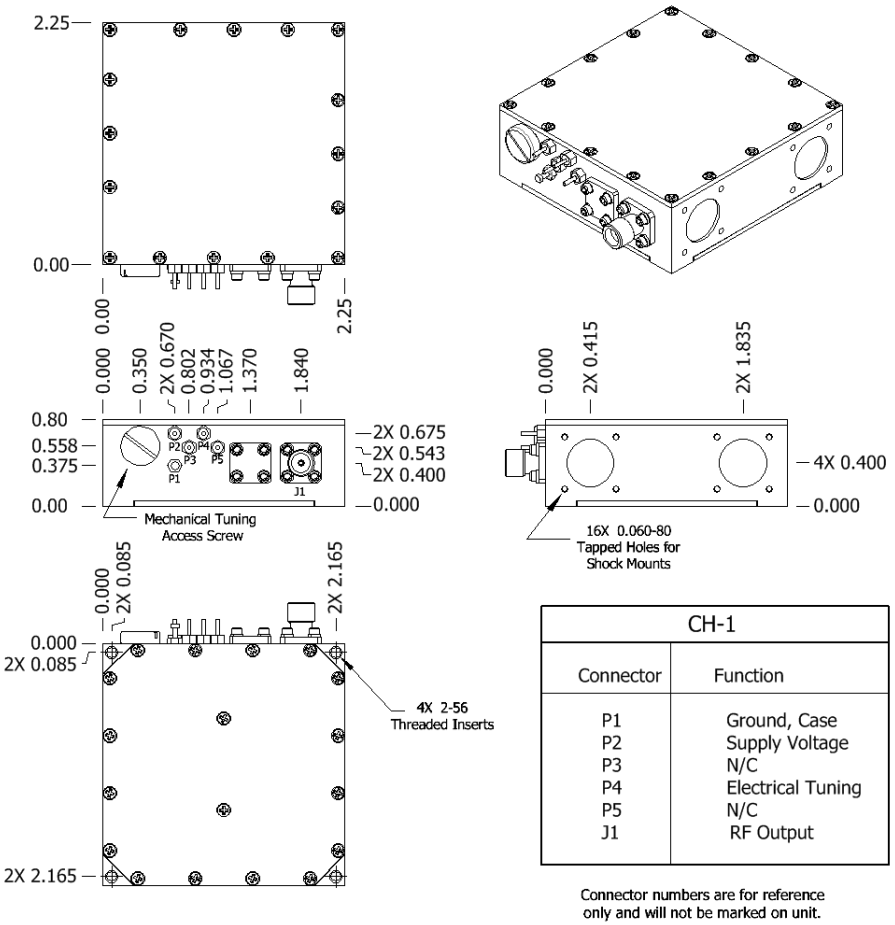
Storage Temperature
-40° to +85°C

OTHER

Label
Use conventional label with the following information:
501-23749 (Current Rev.)
10 MHz Citrine ULN
+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
-	03-09-11	Initial Release	PAC	
A	04-20-11	Output Level; Power	PAC	
B	06-01-11	Updated Drawing	PAC	
C	03-24-16	10 Hz phase noise	BH	BB
D	04-18-17	Increased Power Requirements	CB	



CH-1	
Connector	Function
P1	Ground, Case
P2	Supply Voltage
P3	N/C
P4	Electrical Tuning
P5	N/C
J1	RF Output

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

Wenzel Associates, Inc.
Austin, Texas

Title:
Premium 10 MHz-SC Citrine Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-23749	**D**	**04-18-17**		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	