| REV | DATE | REVISION RECORD | DWN | AUTH |
|---|---|---|---|---|
| - | 09-05-12 | Initial Release | PAC | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**INPUT**

**Frequency**

10 MHz, ±5 x $10^{-7}$

**Level**

+7 dBm ±5 dB into 50 ohms

**OUTPUT**

**Frequency**

50 MHz

**Level**

+13 dBm ±2 dB into 50 ohms

**STABILITY**

**Aging**

1 x $10^{-6}$ first year

after 30 days operating, typical

5 x $10^{-7}$ second year, typical

3 x $10^{-7}$ per year thereafter, typical

**Phase Noise L(f), static, free-running**

| | |
|---|---|
| 100 Hz | -135 dBc/Hz |
| 1 kHz | -158 dBc/Hz |
| 10 kHz | -175 dBc/Hz |
| 100 kHz | -176 dBc/Hz |

**Temperature Stability**

±2 x $10^{-7}$ free-running from 0 to +50°C, (Ref. +25°C)

**Harmonics**

-30 dBc

**Sub-Harmonics**

-80 dBc

**PLL Divider Products**

-80 dBc

**Non-Harmonic Spurious**

-80 dBc, excluding power supply line related spurs

**Phase Lock Alarm**

TTL

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

**Phase Lock Voltage Monitor**

Voltage monitor pin supplied

**MECHANICAL**

**Dimensions**

2 x 2 x 1.3”

**Connectors**

SMA(f) and solder pins on side

**Packaging**

Nickel-plated machined aluminum case - CVPLO

**POWER REQUIREMENTS**

**Warm-Up Power**

≤ 8 Watts for 5 minutes

**Total Power**

≤ 5 Watts at +25°C

**Supply Voltage**

+15 VDC ±5%

**ADJUSTMENT**

**Loop BW**

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

**CRYSTAL**

**Type**

50 MHz SC-cut (low-g)

**Acceleration Sensitivity**

≤ 5 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:

501-26246 (Current Rev.)

50 MHz PL Citrine

+15 VDC

Serial # - Date Code

**Test Data**

Output Level

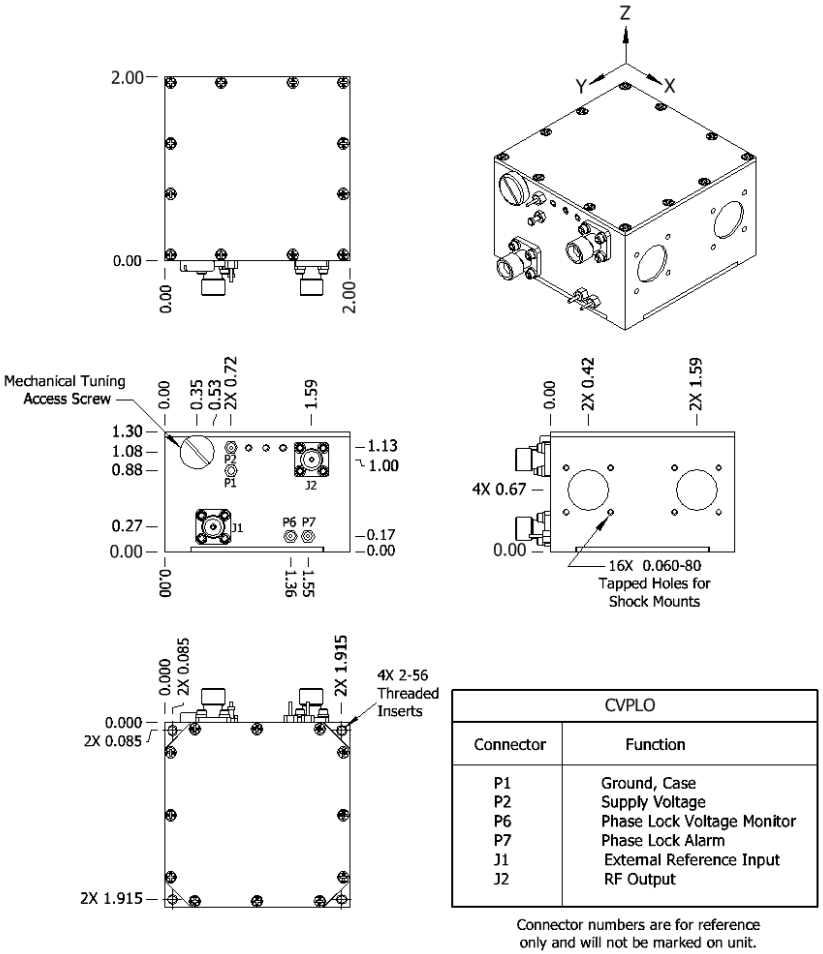
Phase Noise, Static, Free-Running

Temperature Stability, Free-Running

Harmonics, Subs, Products, Spurious

Power – Warm-up and Total

Acceleration Sensitivity




| CVPLO | |
|---|---|
| Connector | Function |
| P1 | Ground, Case |
| P2 | Supply Voltage |
| P6 | Phase Lock Voltage Monitor |
| P7 | Phase Lock Alarm |
| J1 | External Reference Input |
| J2 | RF Output |

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

**Wenzel Associates, Inc.**

**Austin, Texas**

Title:

# Premium 50 MHz-SC Phase Lock Citrine Crystal Oscillator

| P/N: | Rev: | Date: | Drawn: | Ref: |
|---|---|---|---|---|
| **501-26246** | **-** | **09-05-12** | | 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 | |