

**INPUT****Frequency**

10 MHz

**Level**

+7 dBm ±6 dB into 50 ohms

**OUTPUT****Frequency**

1.2 GHz

**Level**

+13 dBm ±2 dB into 50 ohms

**STABILITY****Aging (free-running)**1 x 10<sup>-6</sup> first year

after 30 days operating, typical

5 x 10<sup>-7</sup> second year, typical3 x 10<sup>-7</sup> per year thereafter, typical**Phase Noise L(f), (free-running)**

100 Hz -106 dBc/Hz

1 KHz -133 dBc/Hz

10 KHz -150 dBc/Hz

100 KHz -154 dBc/Hz

**Temperature Stability**±5 x 10<sup>-7</sup> free-running from 0 to +50°C  
(Ref. +25°C)**Harmonics**

-25 dBc

**Sub-Harmonics**

-60 dBc

**PLL Divider Products**

-60 dBc

**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**

Electrical tuning monitor pin supplied

**MECHANICAL****Dimensions**

3.45 x 4.00 x 1"

**Connectors**

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

**Packaging**Nickel-plated machined  
aluminum housing – J1P**Mounting**Threaded inserts on base,  
#2-56, 6 places**POWER REQUIREMENTS****Warm-Up Power**

≤ 11 Watts for 5 minutes

**Total Power**

≤ 7.5 Watts at +25°C

**Supply Voltage**

+15 VDC ±5%

**ADJUSTMENT****Loop BW**Target Bandwidth: ≤ 10 Hz  
Type 2 Loop**CRYSTAL****Type**

120 MHz SC-cut (x10)

**OTHER****Label**Use conventional label with the  
following information:

501-25906 (Current Rev.)

1.2 GHz MXO-PLD

+15 VDC

Serial # - Date Code

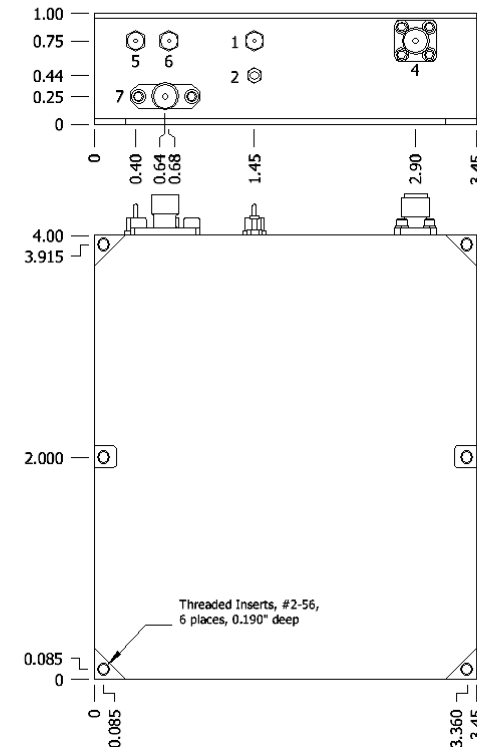
(Mark connectors with function)

**Test Data**

- Output Level
- Phase Noise – free-running
- Temperature Stability – free-running
- Harmonics, Subs, Products, Spurious
- Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-11-13	Initial Release	Liz	

J1P MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output
5	Phase Lock Voltage
6	Phase Lock Alarm
7	External Reference Input

**Wenzel Associates, Inc.**

Austin, Texas

Title:

**1.2 GHz Multiplied Crystal Oscillator (MXO-PLD)**

P/N:

**501-26906**

Rev:

-

Date:

**06-11-13**

Drawn:

Ref:

501-21081c

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

±0.010"

FSCM:

62821

Page 1 of 1