INPUT
Frequency
10 MHz
Level
+7 dBm ±6 dB into 50 ohms
OUTPUT
Frequency
1.024 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, typical
3 x 10 <sup>-7</sup> per year thereafter, typical
Phase Noise L(f), typical, (free-running)
100 Hz -97 dBc/Hz
1 KHz -127 dBc/Hz
10 KHz -152 dBc/Hz
100 KHz -153 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 Reference Products
-60 dBc <b>Spurious</b>
-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
4.4 x 4 x 1"

## **Connectors**

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Terminals

**GND: Ground Turret** 

# **Packaging**

Nickel-plated machined aluminum housing – J2P

## Mounting

Threaded inserts on base, 6 places, #2-56

## **POWER REQUIREMENTS**

Warm-Up Power

≤ 11.5 Watts for 5 minutes

#### **Total Power**

≤ 8.5 Watts at +25°C

# **Supply Voltage**

+15 VDC ±5%

## **ADJUSTMENT**

## Loop BW

Target Bandwidth: 10 Hz

Type 2 Loop

### **CRYSTAL**

## **Type**

128 MHz SC-cut (x8)

# OTHER

## Label

Use conventional label with the

following information:

501-30512 (Current Rev.)

1.024 GHz MXO-PLM

+15 VDC

Serial # - Date Code

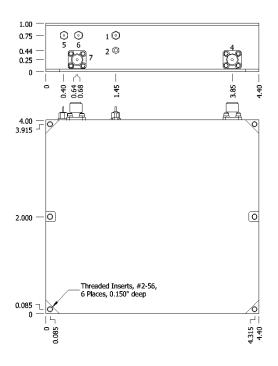
(Mark connectors with function)

### **Test Data**

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-29-16	Initial Release	CB	

J2P 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 1.024 GHz Multiplied Crystal Oscillator (MXO-PLD) Rev: Date: Drawn: Ref: 501-30512 011-29-16 0.XXX Dec: Tolerances: 0.XX Dec: FSCM: (except as noted) Page 1 of 1 62821 $\pm 0.030$ " ±0.010" Dimensions are in inches