

## INPUT

### Frequency

10 MHz

### Level

+7 dBm  $\pm$ 6 dB into 50 ohms

## OUTPUT A

RF Output	Frequency	Output Level (into 50 ohms)
A	80 MHz	+13 dBm $\pm$ 2 dB
B	320 MHz	+13 dBm $\pm$ 2 dB
C	640 MHz	+13 dBm $\pm$ 2 dB

## 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), dBc/Hz, typical, (free-running)

	80 MHz	320 MHz	640 MHz
10 Hz	-102	-89	-82
100 Hz	-132	-119	-112
1 kHz	-158	-144	-137
10 kHz	-175	-161	-154
100 kHz	-176	-162	-155

### Temperature Stability

$\pm$ 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

Voltage monitor pin supplied

## MECHANICAL

### Dimensions

4.4 x 4 x 1"

### Connectors

RF Input/Outputs: SMA(f)

Power, Monitoring: Feed Thru

### Terminals

GND: Ground Turret

### Packaging

Nickel-plated machined

aluminum housing – J2P-023

### Mounting

Threaded inserts on base,

#2-56, 6 places

## POWER REQUIREMENTS

### Warm-Up Power

$\leq$  12 Watts for 5 minutes

### Total Power

$\leq$  9 Watts at +25°C

### Supply Voltage

+15 VDC  $\pm$ 5%

## ADJUSTMENT

### Loop BW

Target Bandwidth:  $\leq$  10 Hz

Type 2 Loop

## CRYSTAL

### Type

80 MHz SC-cut (x8)

## OTHER

### Label

Use conventional label with the  
following information:

501-30919 (Current Rev.)

80/320/640MHz MXO-PLD

+15 VDC

Serial # - Date Code

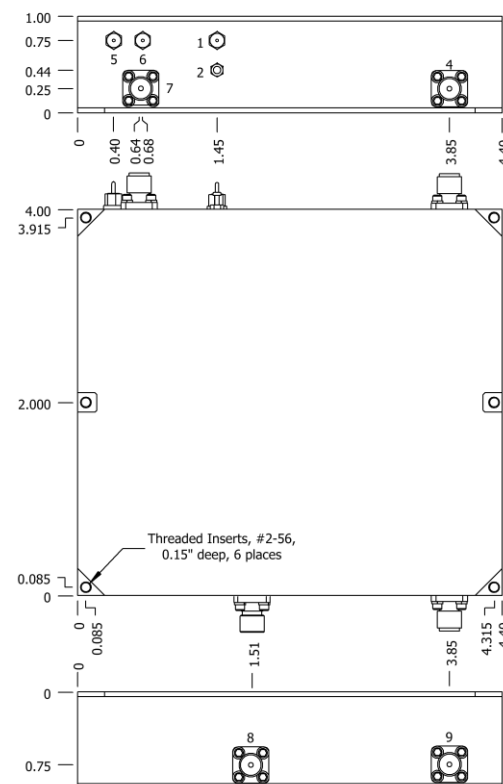
(Mark connectors with function)

### 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
-	05-23-17	Initial Release	PAC	

J2P-023 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output C
5	Phase Lock Voltage
6	Phase Lock Alarm
7	External Reference Input
8	RF Output A
9	RF Output B



**Wenzel Associates, Inc.**

Austin, Texas

Title:  
**80M/320M/640M Multiplied Crystal Oscillator (MXO-PLD)**

P/N: <b>501-30919</b>	Rev: <b>-</b>	Date: <b>05-23-17</b>	Drawn:	Ref:
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b><math>\pm</math>0.030"</b>	0.XXX Dec: <b><math>\pm</math>0.010"</b>	FSCM: <b>62821</b>	Page 1 of 1
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