

## OUTPUT A (J2)

### Frequency

100 MHz

### Level

+13 dBm  $\pm 2$  dB into 50 ohms

### Phase Noise L(f), Static

100 Hz -130 dBc/Hz

1 kHz -158 dBc/Hz

10 kHz -175 dBc/Hz

100 kHz -176 dBc/Hz

## OUTPUT B (J1)

### Frequency

500 MHz

### Level

+13 dBm  $\pm 2$  dB into 50 ohms

### Phase Noise L(f), Static

100 Hz -114 dBc/Hz

1 kHz -142 dBc/Hz

10 kHz -158 dBc/Hz

100 kHz -159 dBc/Hz

## STABILITY

### Aging

$1 \times 10^{-6}$  first year

after 30 days operating, typical

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

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

### Temperature Stability

$\pm 5 \times 10^{-7}$ , 0° to +50°C (Ref +25°C)

## Harmonics

$\leq -25$  dBc

## Sub-Harmonics

$\leq -60$  dBc

## Spurious

$\leq -80$  dBc, excluding power  
supply line related spurs

## MECHANICAL

### Dimensions

2.25 x 4 x 1"

### Connectors

SMA(f) and solder pins

### Packaging

Nickel-plated machined  
aluminum housing – J1-01

### Mounting

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

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 9$  Watts for 5 minutes

### Total Power

$\leq 6$  Watts at +25°C

### Supply Voltage

+15 VDC  $\pm 5\%$

## ADJUSTMENT

### Mechanical Tuning

$\pm 4 \times 10^{-6}$

### Electrical Tuning

$\pm 5 \times 10^{-7}$ ,  $\pm 5$  VDC

Negative slope

## CRYSTAL

### Type

100 MHz SC-cut (x5)

## OTHER

### Label

Use conventional label with the  
following information:

501-25469 (Current Rev.)

100/500 MHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

### Test Data

Output Level

Phase Noise – Static

Temperature Stability

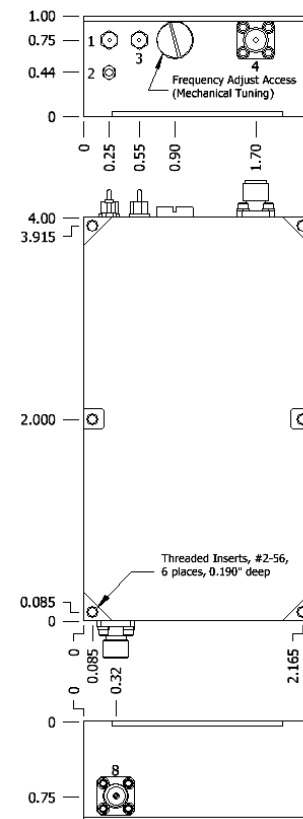
Harmonics, Subs, Spurious

Power - Warm-up and Total

Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-10-11	Initial Release	PAC	

J1-01 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output B
8	RF Output A



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**100/500 MHz Multiplied Crystal Oscillator (MXO-FR)**

P/N:

**501-25469**

Rev:

**-**

Date:

**11-10-11**

Drawn:

Ref:

23456

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

**$\pm 0.030$ "**

0.XXX Dec:

**$\pm 0.010$ "**

FSCM:

**62821**

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