

## OUTPUT

### Frequency

6 GHz

### Level

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

## 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

### Phase Noise L(f), typical

100 Hz -91 dBc/Hz

1 KHz -118 dBc/Hz

10 KHz -135 dBc/Hz

100 KHz -136 dBc/Hz

## 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

4.16 x 4 x 1"

### Connectors

SMA(f) and solder pins

### Packaging

Nickel-plated machined  
aluminum housing – J3

### Mounting

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

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 15$  Watts for 5 minutes

### Total Power

$\leq 12$  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 (x60)

## OTHER

### Label

Use conventional label with the  
following information:

501-25404 (Current Rev.)

6 GHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

### Test Data

Output Level

Phase Noise

Temperature Stability

Harmonics, Subs, Spurious

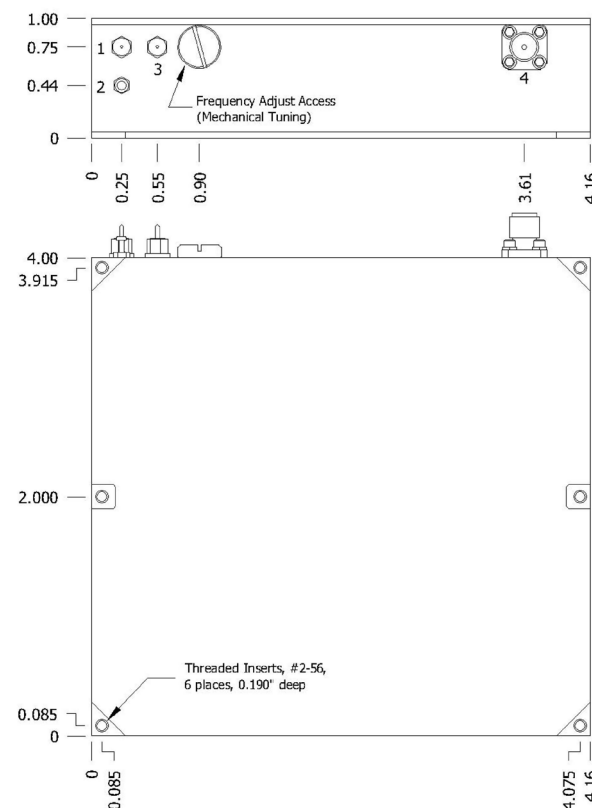
Power – Warm-up and Total

Tuning – MT and ET

| REV | DATE     | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| -   | 01-26-12 | Initial Release | PAC |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |

J3 MXO Connections

| Connector | Function          |
|-----------|-------------------|
| 1         | Supply Voltage    |
| 2         | Ground, Case      |
| 3         | Electrical Tuning |
| 4         | RF Output         |



## Wenzel Associates, Inc.

Austin, Texas

Title:

**6 GHz Multiplied Crystal Oscillator (MXO-FR)**

P/N:

**501-25404**

Rev:

**-**

Date:

**01-26-12**

Drawn:

Ref:

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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