

## OUTPUT

### Frequency

700 MHz

### 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 -112 dBc/Hz  
1 KHz -140 dBc/Hz  
10 KHz -156 dBc/Hz  
100 KHz -157 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

2.25 x 4 x 1"

### Connectors

SMA(f) and solder pins

### Packaging

Nickel-plated machined  
aluminum housing – J1

### Mounting

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

## POWER REQUIREMENTS

### Warm-Up Power

$\leq 8.5$  Watts for 5 minutes

### Total Power

$\leq 5$  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 (x7)

## OTHER

### Label

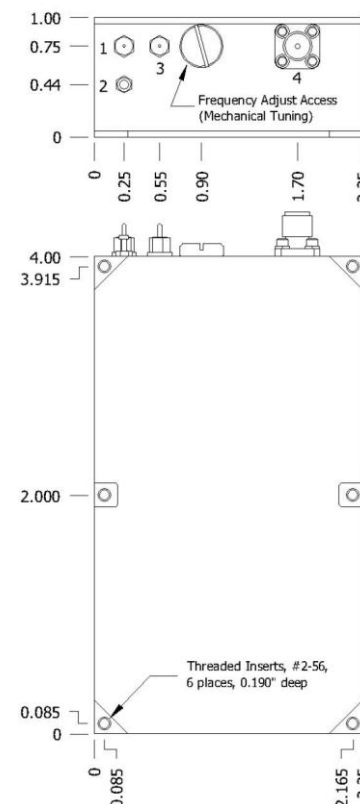
Use conventional label with the  
following information:  
501-25393 (Current Rev.)  
700 MHz MXO-FR  
+15 VDC  
Serial # - Date Code  
(Mark connectors with function)

### 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 |
|-----|----------|-----------------|-----|------|
| -   | 01-25-12 | Initial Release | PAC |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |

| J1 MXO Connections |                   |
|--------------------|-------------------|
| Connector          | Function          |
| 1                  | Supply Voltage    |
| 2                  | Ground, Case      |
| 3                  | Electrical Tuning |
| 4                  | RF Output         |



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**700 MHz Multiplied Crystal Oscillator (MXO-FR)**

P/N:

**501-25393**

Rev:

**-**

Date:

**01-25-12**

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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