

## OUTPUT

### Frequency

1.5 GHz

### Level

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

## STABILITY

### Aging

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)

100 Hz -105 dBc/Hz  
1 KHz -132 dBc/Hz  
10 KHz -149 dBc/Hz  
100 KHz -150 dBc/Hz

### Temperature Stability

$\pm$ 5 x 10<sup>-7</sup>, 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

3.21 x 4 x 1"

### Connectors

SMA(f) and solder pins

### Packaging

Nickel-plated machined  
aluminum housing (J2)

### Mounting

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

## POWER REQUIREMENTS

### Warm-Up Power

$\leq$  11.5 Watts for 5 minutes

### Total Power

$\leq$  8 Watts at +25°C

### Supply Voltage

+15 VDC  $\pm$ 5%

## CRYSTAL

### Type

100 MHz SC-cut (x15)

## OTHER

### Label

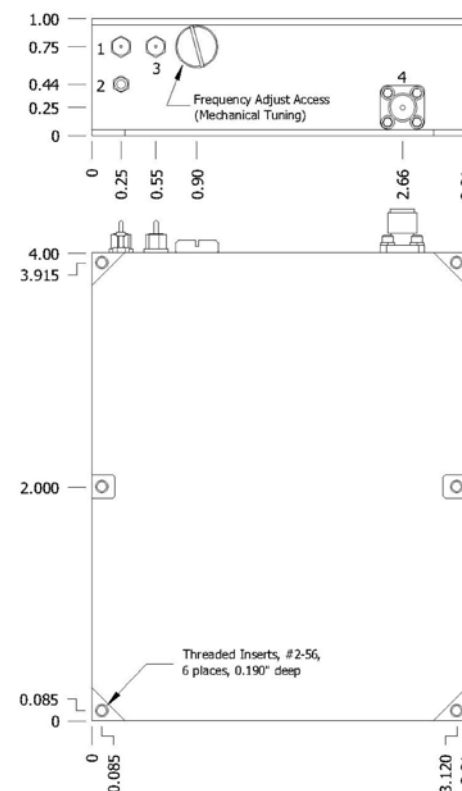
Use conventional label with the  
following information:  
501-29549 (Current Rev.)  
1.5 GHz MXO-FR  
+15 VDC  
Serial # - Date Code  
(Mark connectors with function)

### 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
-	11-11-15	Initial Release	CB	

J2 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output



## Wenzel Associates, Inc.

Austin, Texas

Title:

1.5 GHz Multiplied Crystal Oscillator (MXO-FR)

P/N:

501-29549

Rev:

-

Date:

11-11-15

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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