

**OUTPUT****Frequency**

9 GHz

**Level**

+13 dBm ±2 dB 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, typical3 x 10<sup>-7</sup> per year thereafter, typical**Phase Noise L(f), typical**

100 Hz -82 dBc/Hz

1 KHz -110 dBc/Hz

10 KHz -130 dBc/Hz

100 KHz -131 dBc/Hz

**Temperature Stability**±5 x 10<sup>-7</sup>, 0° to +50°C (Ref +25°C)**Harmonics**

≤ -25 dBc

**Sub-Harmonics**

≤ -60 dBc

**Spurious**

≤ -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**

≤ 15 Watts for 5 minutes

**Total Power**

≤ 12.0 Watts at +25°C

**Supply Voltage**

+15 VDC ±5%

**ADJUSTMENT****Mechanical Tuning**±4 x 10<sup>-6</sup>**Electrical Tuning**±5 x 10<sup>-7</sup>, ±5 VDC

Negative slope

**CRYSTAL****Type**

90 MHz SC-cut (x100)

**OTHER****Label**

Use conventional label with the following information:

501-25410 (Current Rev.)

9 GHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

**Test Data**

Output Level

Phase Noise

Temperature Stability

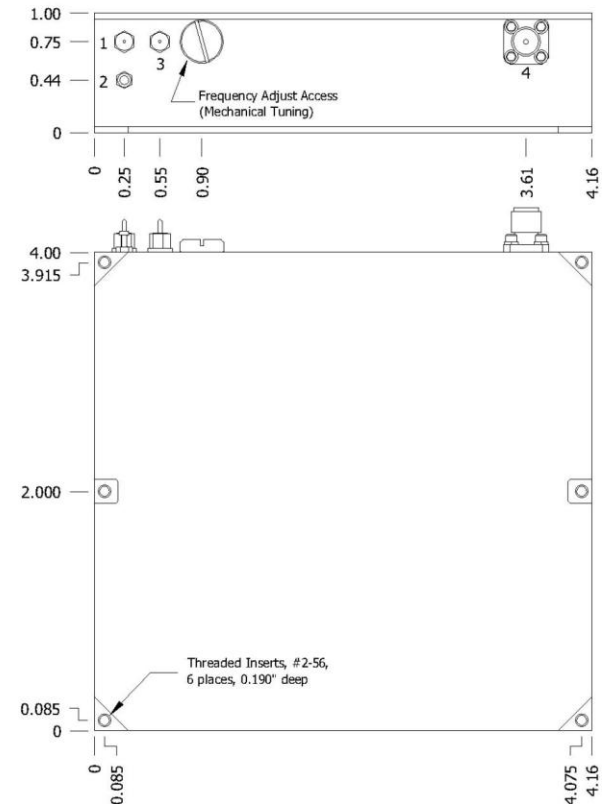
Harmonics, Subs, Spurious

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:

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

P/N:

**501-25410**

Rev:

**-**

Date:

**01-26-12**

Drawn:

Ref:

Tolerances:  
(except as noted)  
Dimensions are in inches0.XX Dec:  
**±0.030"**0.XXX Dec:  
**±0.010"**FSCM:  
**62821**

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