

**OUTPUT A****Frequency**

100 MHz

**Level**

+13 dBm ±2 dB into 50 ohms

**Phase Noise L(f), Static**

100 Hz -130 dBc/Hz

1 kHz -158 dBc/Hz

10 kHz -173 dBc/Hz

100 kHz -175 dBc/Hz

**OUTPUT B****Frequency**

2 GHz

**Level**

+13 dBm ±2 dB into 50 ohms

**Phase Noise L(f), Static**

100 Hz -102 dBc/Hz

1 KHz -129 dBc/Hz

10 KHz -146 dBc/Hz

100 KHz -147 dBc/Hz

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

≤ -25 dBc

**Sub-Harmonics**

≤ -50 dBc

**Spurious**

≤ -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 – J2-03

**Mounting**

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

**POWER REQUIREMENTS****Warm-Up Power**

≤ 12.5 Watts for 5 minutes

**Total Power**

≤ 9 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**

100 MHz SC-cut (x20)

**OTHER****Label**

Use conventional label with the following information:

501-25472 (Current Rev.)

100M/2G MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

**Test Data**

Output Level

Phase Noise – Static

Temperature Stability

Harmonics, Subs, Spurious

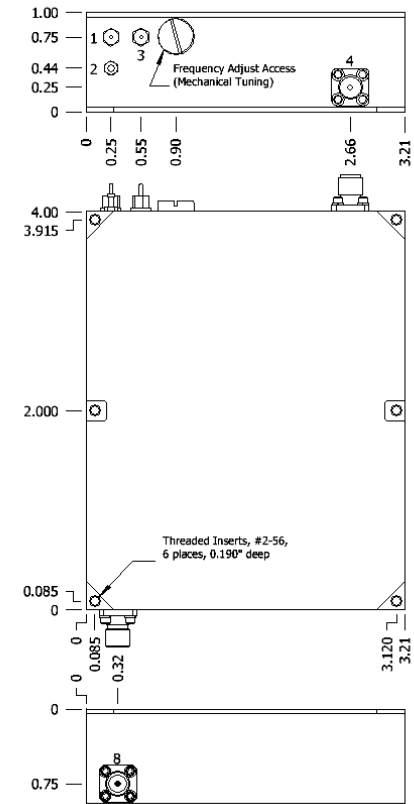
Power - Warm-up and Total

Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-15-12	Initial Release	PAC	

J2-03 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 MHz & 2 GHz  
Multiplied Crystal Oscillator (MXO-FR)**

P/N: <b>501-25472</b>	Rev: -	Date: <b>06-15-12</b>	Drawn:	Ref:
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1
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