

OUTPUT**Frequency**

1 GHz

Level

+13 dBm ±2 dB into 50 ohms

STABILITY**Aging**1 x 10⁻⁶ first year

after 30 days operating, typical

5 x 10⁻⁷ second year, typical3 x 10⁻⁷ per year thereafter, typical**Phase Noise L(f), typical**

100 Hz -109 dBc/Hz

1 KHz -136 dBc/Hz

10 KHz -153 dBc/Hz

100 KHz -154 dBc/Hz

1 MHz -160 dBc/Hz

10 MHz -165 dBc/Hz

Temperature Stability±5 x 10⁻⁷, 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**

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**

≤ 13 Watts for 5 minutes

Total Power

≤ 10 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT**Mechanical Tuning**±4 x 10⁻⁶**Electrical Tuning**±5 x 10⁻⁷, ±5 VDC

Negative slope

CRYSTAL**Type**

100 MHz SC-cut (x10)

OTHER**Design**

Includes a SAW filter for improving the phase noise beyond the ~300 kHz offset.

Label

Use conventional label with the following information:

501-25721 (Current Rev.)

1 GHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

Test Data

Output Level

Phase Noise

Temperature Stability

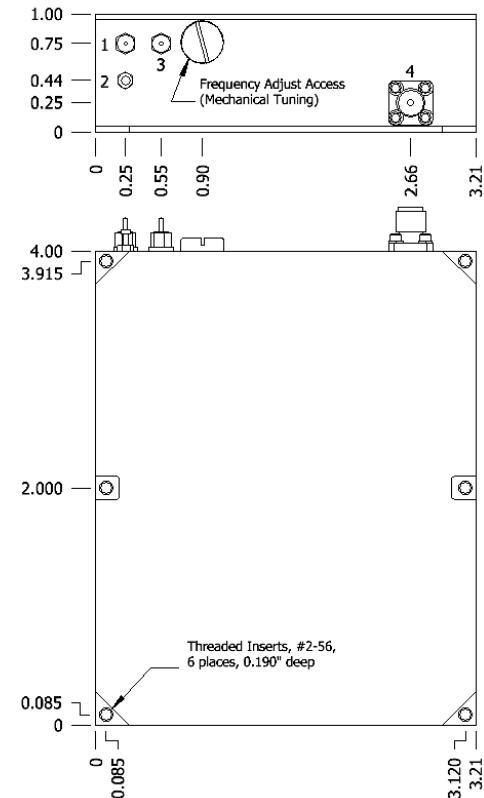
Harmonics, Subs, Spurious

Power – Warm-up and Total

Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-04-12	Initial Release	PAC	

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

**Wenzel Associates, Inc.**

Austin, Texas

Title:

1 GHz Multiplied Crystal Oscillator (MXO-FR)

P/N:

501-25721

Rev:

-

Date:

06-04-12

Drawn:

Ref:

23202a

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

±0.010"

FSCM:

62821

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