OUTPUT A

Frequency

100 MHz

Level

+13 dBm ±2 dB into 50 ohms

OUTPUT B

Frequency

2.5 GHz

Level

+13 dBm ±2 dB into 50 ohms

STABILITY

Aging

1×10^{-6} first year

after 30 days operating, typical

5×10^{-7} second year, typical

3×10^{-7} per year thereafter, typical

Phase Noise L(f), dBc/Hz, typical

	100 MHz	2.5 GHz
100 Hz	-130	-100
1 kHz	-158	-127
10 kHz	-175	-144
100 kHz	-176	-145

Temperature Stability

$\pm 5 \times 10^{-7}$, 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

RF Outputs: SMA(f)

Power, ET: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined aluminum housing – J2-03

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 11 Watts for 5 minutes

Total Power

≤ 7.5 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning

$\pm 4 \times 10^{-6}$

Electrical Tuning

$\pm 5 \times 10^{-7}$, ±5 VDC

Negative Slope

CRYSTAL

Type

100 MHz SC-cut (x25)

OTHER

Label

Use conventional label with the following information:

501-27806 (Current Rev.)

100M/2.5GHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

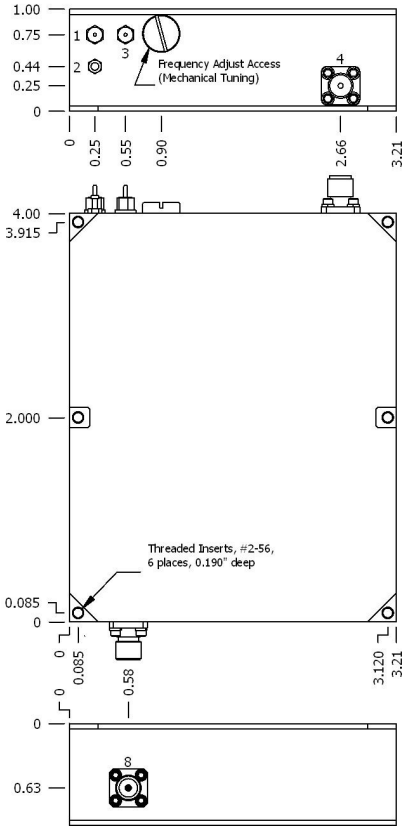
Test Data

- Output Level
- Phase Noise
- Temperature Stability
- Harmonics, Subs, Spurious
- Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	01-29-14	Initial Release	PAC	
A	01-30-14	Outline	Liz	

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 & 2.5 GHz Multiplied Crystal Oscillator (MXO-FR)

P/N:	Rev:	Date:	Drawn:	Ref:
501-27806	**A**	**01-30-14**		

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec:	0.XXX Dec:	FSCM:	Page 1 of 1
	±0.030”	±0.010”	62821	