

OUTPUT A

Frequency

100 MHz

Level

+13 dBm ± 2 dB into 50 ohms

OUTPUT B

Frequency

1 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	1 GHz
100 Hz	-130	-109
1 kHz	-158	-136
10 kHz	-175	-153
100 kHz	-176	-154

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

≤ 9.5 Watts for 5 minutes

Total Power

≤ 6.5 Watts at +25°C

Supply Voltage

+15 VDC $\pm 5\%$

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 (x10)

OTHER

Label

Use conventional label with the
following information:

501-25470 (Current Rev.)

100M/1GHz MXO-FR

+15 VDC

Serial # - Date Code

(Mark connectors with function)

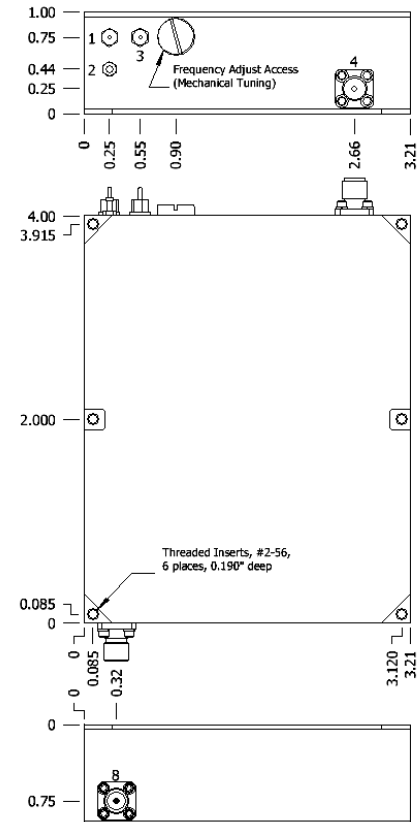
Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	05-17-12	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 & 1 GHz Multiplied Crystal Oscillator (MXO-FR)

P/N:

501-25470

Rev:

-

Date:

05-17-12

Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:
 ± 0.030 "

0.XXX Dec:
 ± 0.010 "

FSCM:
62821

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