

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 ±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**

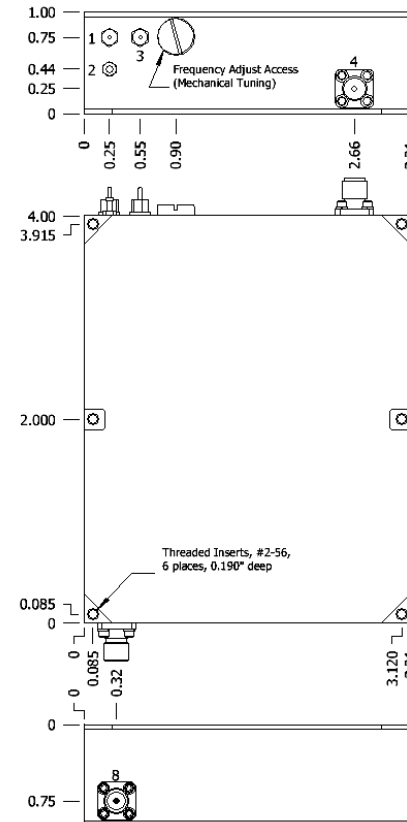
Use conventional label with the following information:
 501-25470 (Current Rev.)
 100M/1GHz MXO-FR
 +15 VDC
 Serial # - Date Code
 (Mark connectors with function)

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** Page 1 of 1