

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	500 MHz	+13 ±2 dBm
B	1 GHz	+13 ±2 dBm

STABILITY

Aging

- 1 x 10⁻⁶ first year
- after 30 days operating, typical
- 5 x 10⁻⁷ second year, typical
- 3 x 10⁻⁷ per year thereafter, typical

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

	500 MHz	1 GHz
10 Hz	-85	-77
100 Hz	-115	-109
1 kHz	-143	-136
10 kHz	-159	-153
100 kHz	-160	-154

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

RF Outputs: SMA(f)
Power, ET: Feed Thru Terminals
GND: Ground Turret

Packaging

Nickel-plated machined
aluminum housing – J2-13

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

±4 x 10⁻⁶

Electrical Tuning

±5 x 10⁻⁷, ±5 VDC

Negative Slope

CRYSTAL

Type

100 MHz SC-cut (x10)

OTHER

Label

Use conventional label with the
following information:

501-30505 (Current Rev.)

500M/1G MXO-FR

+15 VDC

Serial # - Date Code

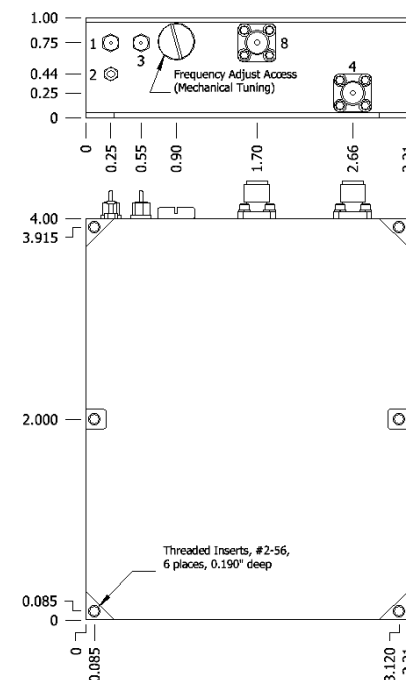
(Mark connectors with function)

Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-28-16	Initial Release	BH	CB

J2-13 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:

**500 MHz and 1 GHz
Multiplied Crystal Oscillator (MXO-FR)**

P/N: 501-30505	Rev.: -	Date: 11-28-16	Drawn:	Ref: 501-25471
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1