OUTPUT

Frequency
500 MHz

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), typical

100 Hz	-115 dBc/Hz
1 KHz	-143 dBc/Hz
10 KHz	-159 dBc/Hz
100 KHz	-160 dBc/Hz

Temperature Stability
$\pm 5 \times 10^{-7}$, 0° to +50°C (Ref +25°C)

Harmonics
≤ -25 dBc

Sub-Harmonics
≤ -70 dBc

Spurious
≤ -80 dBc, excluding power
supply line related spurs

MECHANICAL

Dimensions
2.25 x 4 x 1”

Connectors
SMA(f) and solder pins

Packaging
Nickel-plated machined
aluminum housing – J1

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

POWER REQUIREMENTS

Warm-Up Power
≤ 8.5 Watts for 5 minutes

Total Power
≤ 5 Watts at +25°C

Supply Voltage
+12 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 (x5)

OTHER

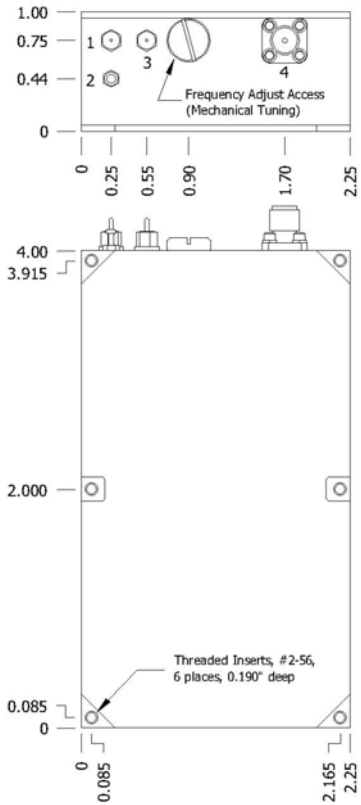
Label
Use conventional label with the
following information:
501-31297 (Current Rev.)
500 MHz MXO-FR
+12 VDC
Serial # - Date Code
(Mark connectors with function)

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
-	11-06-17	Initial Release	BH	BB

J1 MXO Connections

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



Wenzel Associates, Inc.
Austin, Texas

Title:
500 MHz Multiplied Crystal Oscillator (MXO-FR)

P/N:	Rev:	Date:	Drawn:	Ref:
501-31297	**-**	**11-16-17**		24145

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