

**OUTPUT A**

**Frequency**  
100 MHz

**Level**  
+13 dBm ±2 dB into 50 ohms

**OUTPUT B**

**Frequency**  
10 GHz

**Level**  
+13 dBm ±2 dB into 50 ohms

**STABILITY**

**Aging**  
 $1 \times 10^{-6}$  first year  
 after 30 days operating, typical  
 $5 \times 10^{-7}$  second year, typical  
 $3 \times 10^{-7}$  per year thereafter, typical

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

	<b>100 MHz</b>	<b>10 GHz</b>
100 Hz	-130	-87
1 kHz	-158	-113
10 kHz	-175	-131
100 kHz	-176	-132

**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**

4.16 x 4 x 1"

**Connectors**

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

**Packaging**

Nickel-plated machined aluminum housing – J3-05

**Mounting**

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

**POWER REQUIREMENTS**

**Warm-Up Power**  
≤ 16 Watts for 5 minutes

**Total Power**  
≤ 13 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 (x100)

**OTHER****Label**

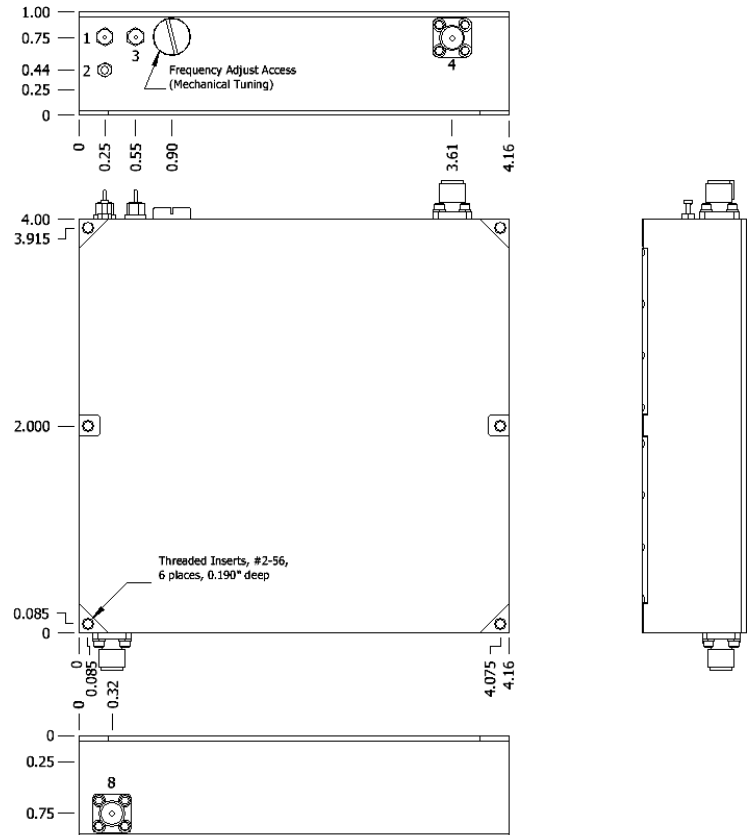
Use conventional label with the following information:  
 501-25473 (Current Rev.)  
 100M/10GHz MXO-FR  
 +15 VDC  
 Serial # - Date Code  
 (Mark connectors with function)

**Test Data**

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-13-12	Initial Release	PAC	

J3-05 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 & 10 GHz Multiplied Crystal Oscillator (MXO-FR)**

P/N: **501-25473**    Rev: **-**    Date: **06-13-12**    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