

## OUTPUTS

Output	Frequency	Level (into 50Ω)
A	5 MHz	+13 ±2 dBm
B	250 MHz	+13 ±2 dBm

## STABILITY

### Aging

- 1 x 10<sup>-7</sup> first year
- after 30 days operating, typical
- 5 x 10<sup>-8</sup> second year, typical
- 2 x 10<sup>-8</sup> per year thereafter, typical

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

	5 MHz	250 MHz
10 Hz	-140	-111
100 Hz	-160	-129
300 Hz	-165	-132
1 kHz	-172	-146
10 kHz	-174	-166
100 kHz	-175	-168

### Temperature Stability

- ±5 x 10<sup>-9</sup>, 0 to +50°C (Ref. +25°C)

### Harmonics

- ≤ -25 dBc

### Sub-Harmonics

- ≤ -60 dBc

### PLL Reference Products

- ≤ -60 dBc

### Spurious

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

### Phase Lock Alarm

- TTL
- Locked: +3.5 VDC to +5.2 VDC (Hi)
- Out-of-Lock: +0.8 VDC max (Lo)

### Phase Lock Voltage Monitor

- Voltage monitor pin supplied

## MECHANICAL

### Dimensions

- 5.56 x 4 x 1"

### Connectors

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

## Packaging

- Nickel-plated machined aluminum housing – J1PMX

## Mounting

- Threaded inserts on base, #2-56, 9 places

## POWER REQUIREMENTS

### Warm-Up Power

- ≤ 16.5 Watts for 5 minutes

### Total Power

- ≤ 9.5 Watts at +25°C

### Supply Voltage

- +15 VDC ±5%

## ADJUSTMENT

### Mechanical Tuning (Internal 5 MHz)

- ±1 x 10<sup>-6</sup>

### Loop BW (Internal 125 MHz PLL)

- Target Bandwidth: ~250 Hz
- Type 2 Loop

## CRYSTAL

### Type

- 5 MHz SC-cut
- 125 MHz SC-cut (x2)

## ENVIRONMENT

### Operating Temperature

- 0 to +50°C

### Storage Temperature

- 50 to +85°C

## OTHER

### Label

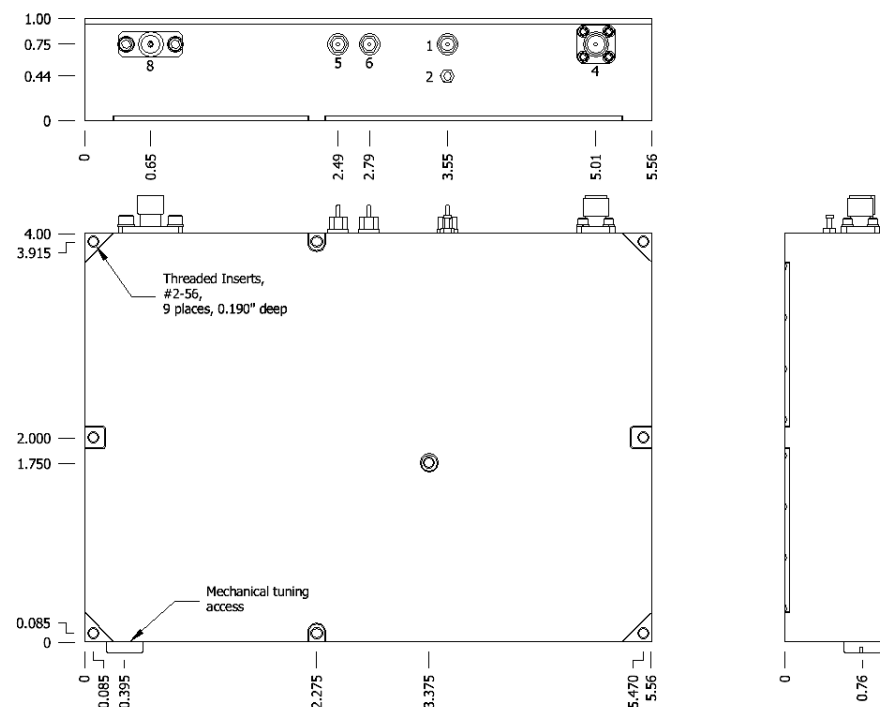
- Use conventional label with the following information:
  - 501-26966 (Current Rev.)
  - 5M/250M MXO-PLMX
  - +15 VDC
  - Serial # - Date Code
  - (Mark connectors with function)

### Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	07-02-13	Initial Release	PAC	

J1PMX MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output B
5	Phase Lock Voltage
6	Phase Lock Alarm
8	RF Output A



**Wenzel Associates, Inc.**  
Austin, Texas

Title:  
**5 & 250 MHz Multiplied Crystal Oscillator (MXO-PLMX)**

P/N: <b>501-26966</b>	Rev: <b>-</b>	Date: <b>07-02-13</b>	Drawn:	Ref:
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Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>	Page 1 of 1
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