

## OUTPUTS

| Output | Frequency | Level (into 50Ω) |
|--------|-----------|------------------|
| A      | 10 MHz    | +13 ±2 dBm       |
| B      | 800 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
- 3 x 10<sup>-8</sup> per year thereafter, typical

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

|         | 10 MHz | 800 MHz |
|---------|--------|---------|
| 10 Hz   | -140   | -101    |
| 100 Hz  | -160   | -120    |
| 300 Hz  | -165   | -123    |
| 1 kHz   | -172   | -135    |
| 10 kHz  | -174   | -152    |
| 100 kHz | -175   | -154    |

### 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

- 6.51 x 4 x 1"

### Connectors

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

## Packaging

- Nickel-plated machined aluminum housing – J2PMX

## Mounting

- Threaded inserts on base, #2-56, 11 places

## POWER REQUIREMENTS

### Warm-Up Power

- ≤ 19 Watts for 5 minutes

### Total Power

- ≤ 12 Watts at +25°C

### Supply Voltage

- +15 VDC ±5%

## ADJUSTMENT

### Mechanical Tuning (Internal 10 MHz)

- ±1 x 10<sup>-6</sup>

### Loop BW (Internal 80 MHz PLL)

- Target Bandwidth: ~300 Hz
- Type 2 Loop

## CRYSTAL

### Type

- 10 MHz SC-cut
- 80 MHz SC-cut (x10)

## ENVIRONMENT

### Operating Temperature

- 0 to +50°C

### Storage Temperature

- 50 to +85°C

## OTHER

### Label

- Use conventional label with the following information:
  - 501-25783 (Current Rev.)
  - 10M/800M MXO-PLMX
  - +15 VDC
  - Serial # - Date Code
- (Mark connectors with function)

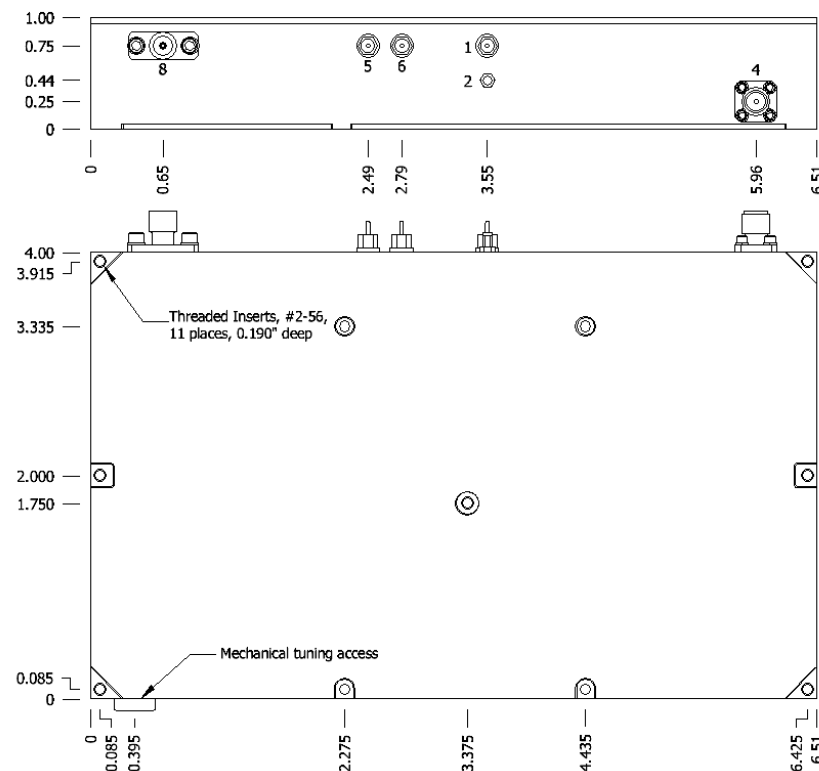
## Test Data

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

| REV | DATE     | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| -   | 07-26-13 | Initial Release | PAC |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |

J2PMX 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:

**10 & 800 MHz Multiplied Crystal Oscillator (MXO-PLMX)**

P/N:

**501-25783**

Rev:

-

Date:

**07-26-13**

Drawn:

Ref:

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:  
**±0.030"**

0.XXX Dec:  
**±0.010"**

FSCM:  
**62821**

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