

OUTPUTS

| Output | Frequency | Level (into 50Ω) |
|--------|-----------|------------------|
| A | 10 MHz | +13 ±2 dBm |
| B | 3 GHz | +13 ±2 dBm |

STABILITY

Aging

- 1 x 10⁻⁷ first year
- after 30 days operating, typical
- 5 x 10⁻⁸ second year, typical
- 2 x 10⁻⁸ per year thereafter, typical

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

| | 10 MHz | 3 GHz |
|---------|--------|-------|
| 10 Hz | -140 | -88 |
| 100 Hz | -160 | -106 |
| 300 Hz | -165 | -111 |
| 1 kHz | -172 | -124 |
| 10 kHz | -174 | -141 |
| 100 kHz | -175 | -143 |

Temperature Stability

±5 x 10⁻⁹, 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

≤ 21.5 Watts for 5 minutes

Total Power

≤ 14.5 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning (Internal 10 MHz)

±1 x 10⁻⁶

Loop BW (Internal 100 MHz PLL)

Target Bandwidth: ~250 Hz

Type 2 Loop

CRYSTAL

Type

100 MHz SC-cut (x30)

OTHER

Label

Use conventional label with the
following information:

501-25790 (Current Rev.)

10M/3G MXO-PLMX

+15 VDC

Serial # - Date Code

(Mark connectors with function)

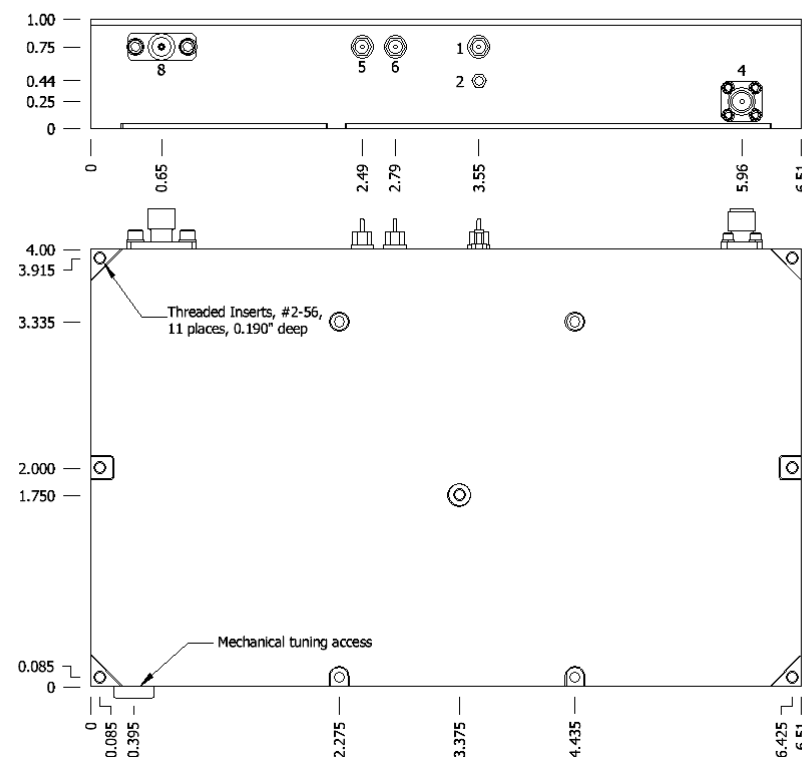
Test Data

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

| REV | DATE | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| - | 07-23-13 | Initial Release | PAC | |
| | | | | |
| | | | | |
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| | | | | |

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 MHz & 3 GHz
Multiplied Crystal Oscillator (MXO-PLMX)**

P/N:

501-25790

Rev:

-

Date:

07-23-13

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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