

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	10 MHz	+13 ±2 dBm
B	7 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	7 GHz
10 Hz	-140	-78
100 Hz	-160	-96
300 Hz	-165	-100
1 kHz	-172	-113
10 kHz	-174	-129
100 kHz	-175	-131

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

7.46 x 4 x 1"

Connectors

RF Outputs: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined
aluminum housing – J3PMX

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 24 Watts for 5 minutes

Total Power

≤ 17 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning (Internal 10 MHz)

±1 x 10⁻⁶

Loop BW (Internal 70 MHz PLL)

Target Bandwidth: ~250 Hz

Type 2 Loop

CRYSTAL

Type

70 MHz SC-cut (x100)

OTHER

Label

Use conventional label with the
following information:

501-25795 (Current Rev.)

10M/7G MXO-PLMX

+15 VDC

Serial # - Date Code

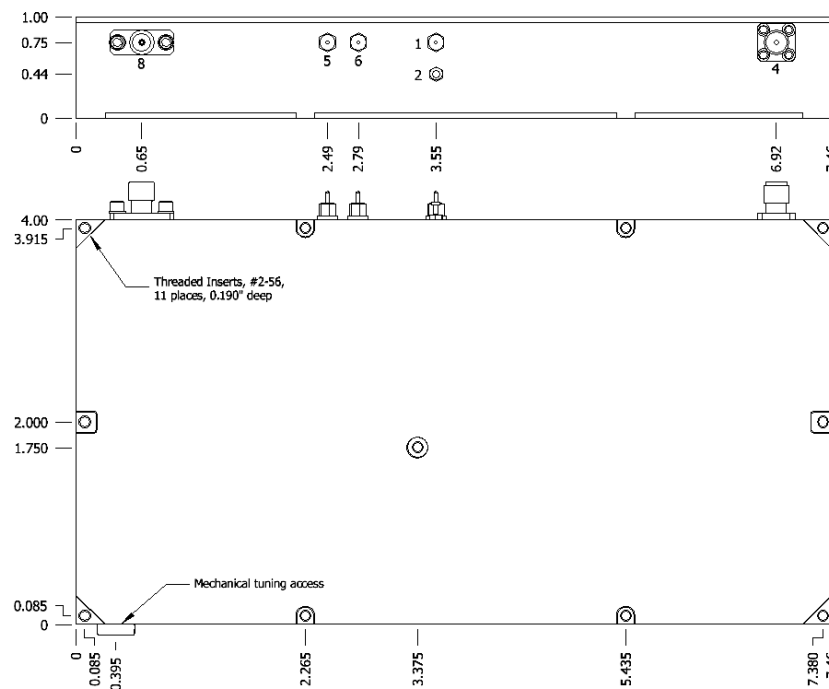
(Mark connectors with function)

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	

J3PMX 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 & 7 GHz
Multiplied Crystal Oscillator (MXO-PLMX)**

P/N:

501-25795

Rev:

-

Date:

07-23-13

Drawn:

62821

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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