

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	10 MHz	+13 ±2 dBm
B	840 MHz	+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	840 MHz
10 Hz	-140	-100
100 Hz	-160	-118
300 Hz	-165	-121
1 kHz	-172	-135
10 kHz	-174	-155
100 kHz	-175	-157

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

- 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

- ≤ 18 Watts for 5 minutes

Total Power

- ≤ 12 Watts at +25°C

Supply Voltage

- +15 VDC ±5%

ADJUSTMENT

Mechanical Tuning (Internal 10 MHz)

- ±1 x 10⁻⁶

Loop BW (Internal 120 MHz PLL)

- Target Bandwidth: ~300 Hz
- Type 2 Loop

CRYSTAL

Type

- 10 MHz SC-cut
- 120 MHz SC-cut (x7)

ENVIRONMENT

Operating Temperature

- 0 to +50°C

Storage Temperature

- 50 to +85°C

OTHER

Label

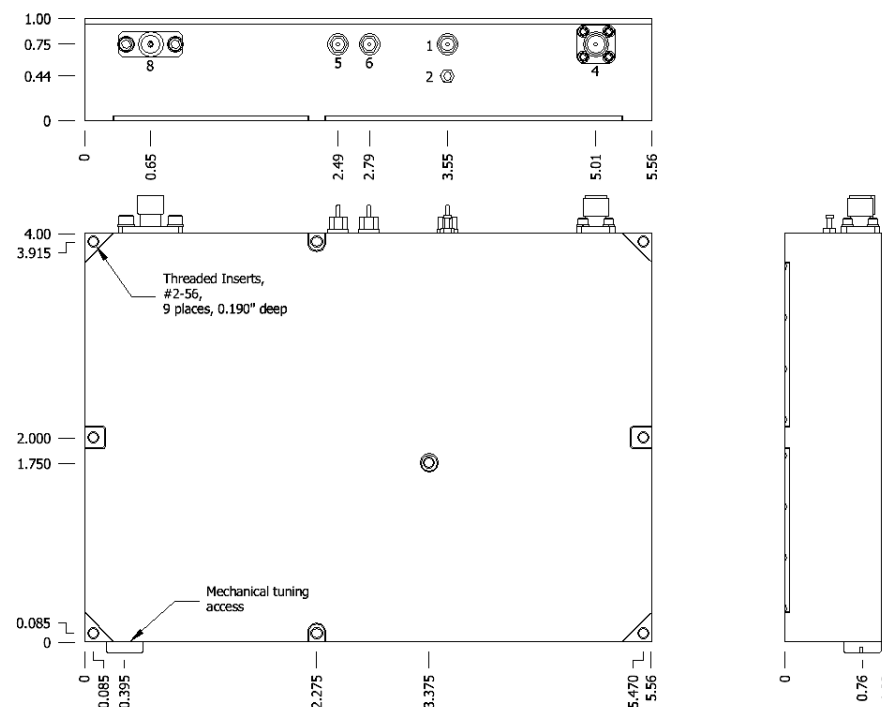
- Use conventional label with the following information:
 - 501-25784 (Current Rev.)
 - 10M/840M MXO-PLMX
 - +15 VDC
 - Serial # - Date Code
 - (Mark connectors with function)

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:

10 & 840 MHz Multiplied Crystal Oscillator (MXO-PLMX)

P/N:

501-25784

Rev:

-

Date:

07-02-13

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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