

INPUT**Frequency**

10 MHz

Level

+7 dBm ±6 dB into 50 ohms

OUTPUT

RF Output	Frequency	Output Level (into 50 ohms)
A	100 MHz	+13 dBm ±2 dB
B	7 GHz	+13 dBm ±2 dB

STABILITY**Aging (free-running)**1 x 10⁻⁶ first year

after 30 days operating, typical

5 x 10⁻⁷ second year, typical3 x 10⁻⁷ per year thereafter, typical**Phase Noise L(f), typical, (free-running)**

	100 MHz	7 GHz
10 Hz	-100	-60
100 Hz	-130	-90
1 kHz	-158	-117
10 kHz	-175	-134
100 kHz	-176	-135

Temperature Stability±5 x 10⁻⁷ free-running from 0 to +50°C

(Ref. +25°C)

Harmonics

-25 dBc

Sub-Harmonics

-60 dBc

PLL Divider 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**

4.4 x 4 x 1"

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined aluminum housing – J2P-03

Mounting

Threaded inserts on base, #2-56, 6 places

POWER REQUIREMENTS**Warm-Up Power**

≤ 14 Watts for 5 minutes

Total Power

≤ 10.5 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT**Loop BW**Target Bandwidth: ≤ 10 Hz
Type 2 Loop**CRYSTAL****Type**

100 MHz SC-cut (x70)

OTHER**Label**

Use conventional label with the following information:

501-28637 (Current Rev.)

100M/7G MXO-PLD

+15 VDC

Serial # - Date Code

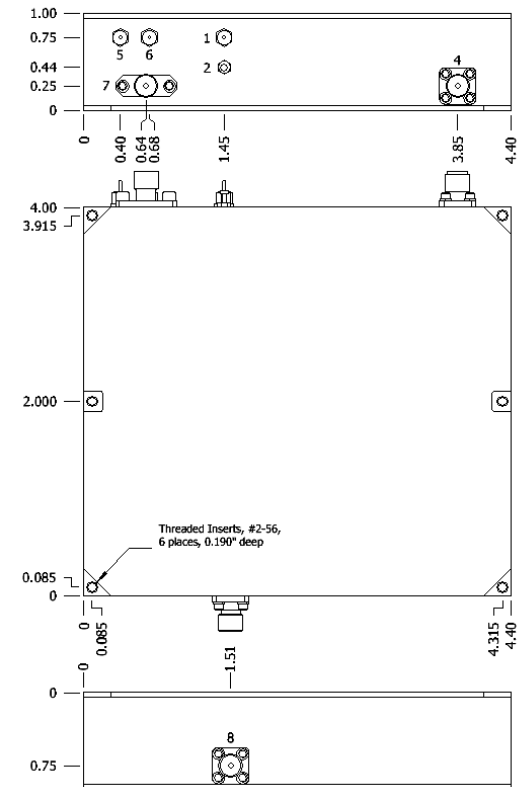
(Mark connectors with function)

Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	12-9-14	Initial Release	CB	

J2P-03 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output B
5	Phase Lock Voltage
6	Phase Lock Alarm
7	External Reference Input
8	RF Output A

**Wenzel Associates, Inc.**

Austin, Texas

Title:

100M/7G Multiplied Crystal Oscillator (MXO-PLD)

P/N:

501-28637

Rev.:

-

Date:

12-9-14

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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