

INPUT

Frequency

10 MHz

Level

+7 dBm \pm 6 dB into 50 ohms

OUTPUT

Frequency

5.120 GHz

Level

+16 dBm \pm 2 dB into 50 ohms

STABILITY

Aging (free-running)

1 x 10⁻⁶ first year

after 30 days operating, typical

5 x 10⁻⁷ second year, typical

3 x 10⁻⁷ per year thereafter, typical

Output Phase Noise L(f)

(Free-Running)

100 Hz -98 dBc/Hz

1 KHz -123 dBc/Hz

10 KHz -145 dBc/Hz

100 KHz -146 dBc/Hz

Temperature Stability

\pm 5 x 10⁻⁷ free-running from 0 to +50°C
(Ref. +25°C)

Harmonics

\leq -25 dBc

Sub-Harmonics

\leq -60 dBc

PLL Divider Products

\leq -60 dBc

Spurious

\leq -80 dBc, excluding power
supply line related spurs

MECHANICAL

Dimensions

6.36 x 4 x 1"

Connectors

RF Outputs: SMA(f)

Power, ET: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined
aluminum housing – G3P

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

\leq 20 Watts for 5 minutes

Total Power

\leq 16 Watts at +25°C

Supply Voltage

+15 VDC \pm 5%

ADJUSTMENT

Loop BW

Target Bandwidth: < 30 Hz

Type 2 Loop

PHASE LOCK STATUS

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

Electrical tuning monitor pin supplied

CRYSTAL

Type

128 MHz SC-cut (x40)

Label

Use conventional label with the
following information:

501-29211 (Current Rev.)

5.12G GMXO-PLD

+15 VDC

Serial # - Date Code

(Mark connectors with function)

Test Data

Output Level

Phase Noise (free-running)

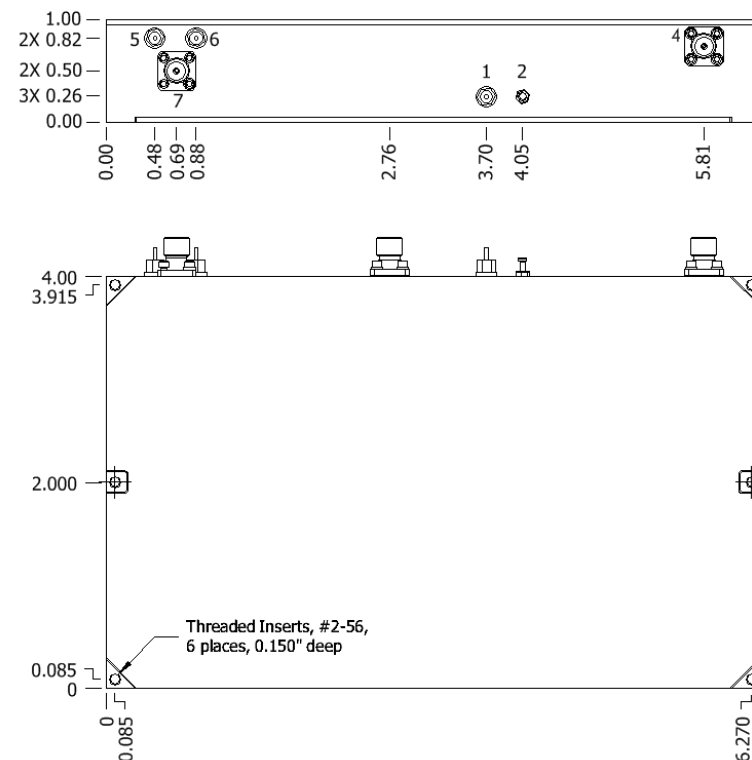
Temperature Stability (free-running)

Harmonics, Subs, Products, Spurious

Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	07-07-15	Initial Release	PAC	

G3P MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output
5	Phase Lock Voltage
6	Phase Lock Alarm
7	External Reference Input



Wenzel Associates, Inc.

Austin, Texas

Title:

**5.120 GHz Golden Multiplied Crystal Oscillator
(GMXO-PLD)**

P/N:

501-29211

Rev:

-

Date:

07-07-15

Drawn:

Ref:

28403a

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

\pm 0.030"

0.XXX Dec:

\pm 0.010"

FSCM:

62821

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