

INPUT

Frequency

10 MHz

Level

+7 dBm ± 6 dB into 50 ohms

OUTPUT

Frequency

180 MHz

Level

+16 dBm ± 2 dB into 50 ohms

STABILITY

Aging

1×10^{-6} first year

after 30 days operating, typical

5×10^{-7} second year, typical

3×10^{-7} per year thereafter, typical

Output Phase Noise L(f) (Free-Running)

10 Hz -93 dBc/Hz

100 Hz -123 dBc/Hz

1 KHz -153 dBc/Hz

10 KHz -173 dBc/Hz

100 KHz -176 dBc/Hz

Temperature Stability

$\pm 5 \times 10^{-7}$, 0° to +50°C (Ref +25°C)

Harmonics

≤ -25 dBc

Sub-Harmonics

≤ -60 dBc

Spurious

≤ -80 dBc, excluding power
supply line related spurs

MECHANICAL

Dimensions

4.45 x 4 x 1"

Connectors

SMA(f) and solder pins

Packaging

Nickel-plated machined
aluminum housing – G1P

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 14.5 Watts for 5 minutes

Total Power

≤ 11.5 Watts at +25°C

Supply Voltage

+15 VDC $\pm 5\%$

ADJUSTMENT

Loop BW

Target Bandwidth: < 10 Hz

Type 2 Loop

CRYSTAL

Type

90 MHz SC-cut (x2)

Label

Use conventional label with the
following information:

501-27768 (Current Rev.)

180 MHz GMXO-PLD

+15 VDC

Serial # - Date Code

(Mark connectors with function)

Test Data

Output Level

Phase Noise

Temperature Stability

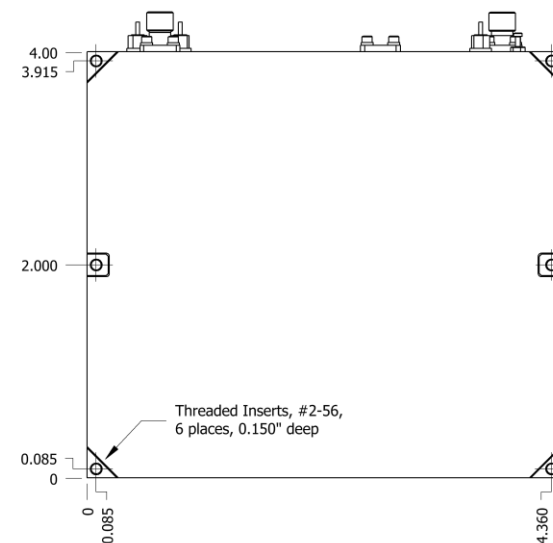
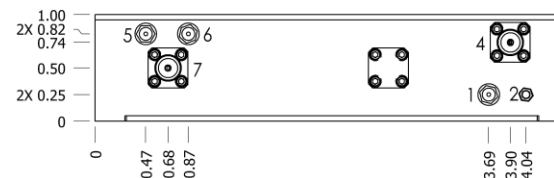
Harmonics, Subs, Spurious

Power – Warm-up and Total

Tuning – MT

REV	DATE	REVISION RECORD	DWN	AUTH
-	01-23-14	Initial Release	PAC	

G1P 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



Wenzel Associates, Inc.

Austin, Texas

Title:

**180 MHz Golden Multiplied Crystal Oscillator
(GMXO-PLD)**

P/N:

501-27768

Rev:

-

Date:

01-23-14

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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