

INPUT

Frequency

10 MHz

Level

+7 dBm \pm 6 dB into 50 ohms

OUTPUTS

Output	Frequency	Level (into 50 Ω)
--------	-----------	---------------------------

A	100 MHz	+16 \pm 2 dBm
---	---------	-----------------

B	400 MHz	+13 \pm 2 dBm
---	---------	-----------------

C	800 MHz	+13 \pm 2 dBm
---	---------	-----------------

D	1.6 GHz	+16 \pm 2 dBm
---	---------	-----------------

STABILITY

Aging

(free-running)

1×10^{-6} first year

after 30 days operating, typical

5×10^{-7} second year, typical

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

Phase Noise L(f), dBc/Hz, typical

(free-running)

	100 MHz	400 MHz	800 MHz	1.6 GHz
10 Hz	-105	-89	-82	-75
100 Hz	-136	-119	-112	-105
1 kHz	-162	-147	-140	-133
10 kHz	-180	-165	-158	-151
100 kHz	-186	-168	-161	-154

Temperature Stability

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

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

6.36 x 4 x 1"

Connectors

RF Input/Outputs: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined
aluminum housing – G3P-0235

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 20 Watts for 5 minutes

Total Power

≤ 17 Watts at +25°C

Supply Voltage

+15 VDC \pm 5%

ADJUSTMENT

Loop BW

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

CRYSTAL

Type

100 MHz SC-cut (x16)

OTHER

Label

Use conventional label with the
following information:

500-27338(Current Rev.)

100/400/800/1.6G GMXO-PLD

+15 VDC

Serial # - Date Code

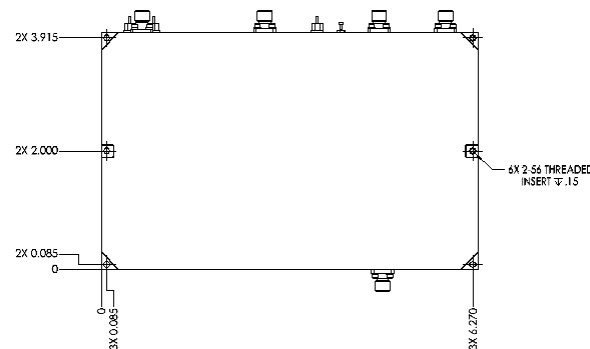
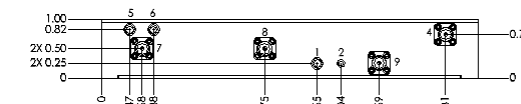
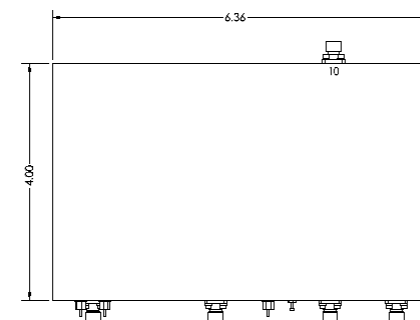
(Mark connectors with function)

Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-07-13	Initial Release	LR/PAC	

G3P-0235 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output D
5	Phase Lock Voltage
6	Phase Lock Alarm
8	External Reference Input
9	RF Output A
10	RF Output B
	RF Output C



Wenzel Associates, Inc.
Austin, Texas

Title:

**100/400/800 MHz and 1.6 GHz Golden
Multiplied Crystal Oscillator (GMXO-PLD)**

P/N:

500-27338

Rev:

-

Date:

11-07-13

Drawn:

Ref:

26985

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

± 0.010 "

FSCM:

62821

Page 1 of 1