

**INPUT****Frequency**

10 MHz

**Level**+7 dBm  $\pm 6$  dB into 50 ohms**OUTPUTS**

Output	Frequency	Level (into 50 $\Omega$ )
A	128 MHz	+16 $\pm 2$ dBm
B	1.28 GHz	+13 $\pm 2$ dBm

**STABILITY****Aging (free-running)**1 x 10<sup>-6</sup> first year

after 30 days operating, typical

5 x 10<sup>-7</sup> second year, typical3 x 10<sup>-7</sup> per year thereafter, typical**Phase Noise L(f), dBc/Hz, typical, (free-running)**

	128 MHz	1.28 GHz
10 Hz	-100	-78
100 Hz	-130	-108
1 kHz	-157	-135
10 kHz	-179	-157
100 kHz	-188	-158
1 MHz	-188	-160

**Temperature Stability** $\pm 5 \times 10^{-7}$  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

**MECHANICAL****Dimensions**

5.4 x 4 x 1"

**Connectors**

RF Outputs: SMA(f)

Power, ET: Feed Thru Terminals

GND: Ground Turret

**Packaging**Nickel-plated machined  
aluminum housing – G2P-03**Mounting**Threaded inserts on base,  
#2-56, 6 places**POWER REQUIREMENTS****Warm-Up Power** $\leq 17$  Watts for 5 minutes**Total Power** $\leq 13$  Watts at +25°C**Supply Voltage**+15 VDC  $\pm 5\%$ **ADJUSTMENT**Target Bandwidth:  $\leq 10$  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 (x10)

**OTHER****Label**Use conventional label with the  
following information:

501-30294 (Current Rev.)

128M/1.28G GMXO-PLD

+15 VDC

Serial # - Date Code

(Mark connectors with function)

**Test Data**

Output Level

Phase Noise (free-running)

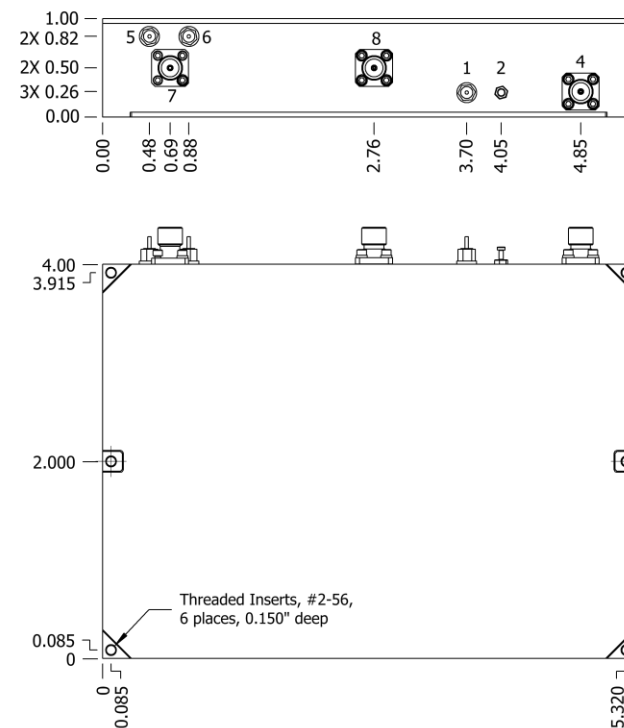
Temperature Stability (free-running)

Harmonics, Subs, Products, Spurious

Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	08-24-16	Initial Release	PAC	MG

G2P-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:

## 128 MHz & 1.28 GHz Golden Multiplied Crystal Oscillator (GMXO-PLD)

P/N: <b>501-30294</b>	Rev: <b>-</b>	Date: <b>08-25-16</b>	Drawn:	Ref:
Tolerances: (except as noted) Dimensions are in inches		0.XX Dec: <b><math>\pm 0.030</math>"</b>	0.XXX Dec: <b><math>\pm 0.010</math>"</b>	FSCM: <b>62821</b>

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