INPUT

Frequency

10 MHz

Level

+7 dBm ±6 dB into 50 ohms

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	100 MHz	+16 ±2 dBm
B	300 MHz	+16 ±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	300 MHz
10 Hz	-105	-93
100 Hz	-136	-124
1 kHz	-162	-150
10 kHz	-183	-170
100 kHz	-188	-172

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

4.45 x 4 x 1”

Connectors

RF Outputs: SMA(f)
Power, ET: Feed Thru Terminals
GND: Ground Turret

Packaging

Nickel-plated machined
aluminum housing – G1P-01

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 15 Watts for 5 minutes

Total Power

≤ 11.5 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Target Bandwidth: ≤ 50 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

100 MHz SC-cut (x3)

OTHER

Label

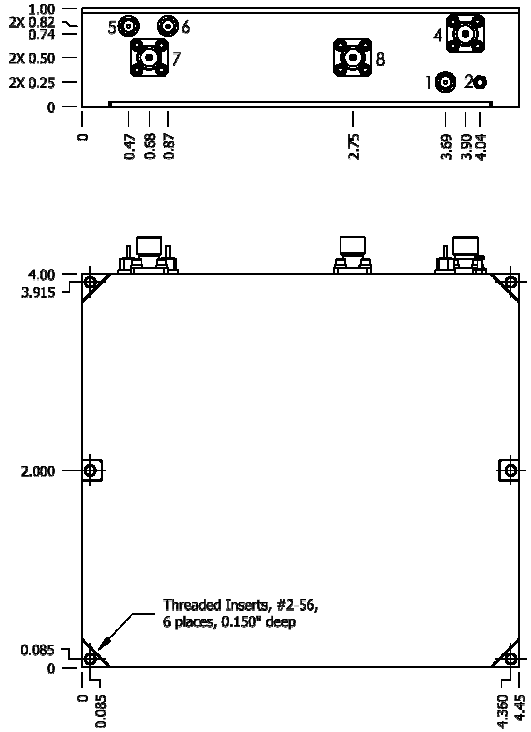
Use conventional label with the
following information:
501-28341 (Current Rev.)
100M/300M GMXO-PLD
+15 VDC
Serial # - Date Code
(Mark connectors with function)

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
-	08-12-14	Initial Release	Liz	

G1P-01 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:

100 MHz & 300 MHz Golden Multiplied Crystal Oscillator (GMXO-PLD)

P/N:	Rev:	Date:	Drawn:	Ref:
501-28341	-	08-12-14		27216a

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec:	0.XXX Dec:	FSCM:	Page 1 of 1
	±0.030”	±0.010”	62821	