

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	100 MHz	+16 ±2 dBm
B	500 MHz	+13 ±2 dBm
C	1 GHz	+16 ±2 dBm

STABILITY

Aging

- 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

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

	100 MHz	500 MHz	1 GHz
10 Hz	-105	-85	-78
100 Hz	-136	-120	-113
1 kHz	-162	-146	-139
10 kHz	-183	-167	-160
100 kHz	-188	-170	-163

Temperature Stability

- ±5 x 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

- 4.21 x 4 x 1"

Connectors

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

Packaging

- Nickel-plated machined aluminum housing – G2-013

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

- ≤ 14 Watts for 5 minutes

Total Power

- ≤ 10.5 Watts at +25°C

Supply Voltage

- +15 VDC ±5%

ADJUSTMENT

Mechanical Tuning

- ±4 x 10⁻⁶

Electrical Tuning

- ±5 x 10⁻⁷, ±5 VDC
- Negative Slope

CRYSTAL

Type

- 100 MHz SC-cut (x5, x2)

OTHER

Label

- Use conventional label with the following information:
501-27234 (Current Rev.)
100M/500M/1G GMXO-FR
+15 VDC
Serial # - Date Code
(Mark connectors with function)

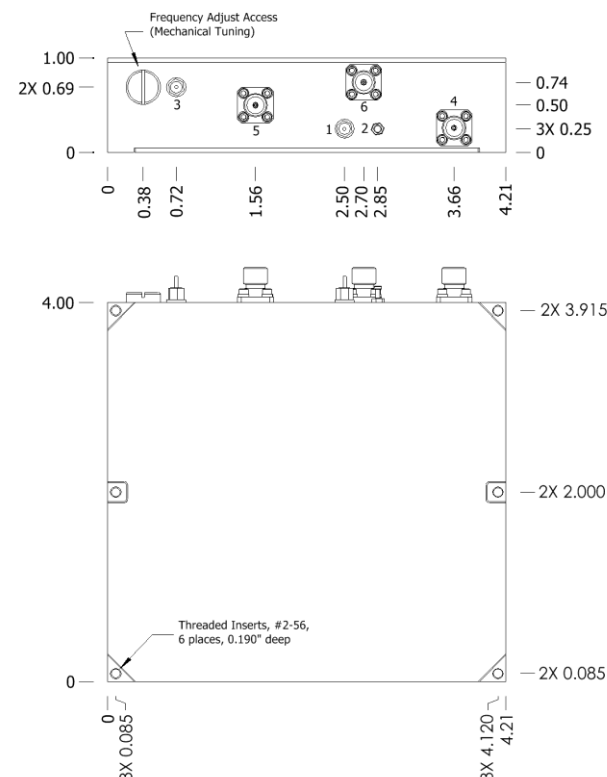
Test Data

- Output Level
- Phase Noise
- Temperature Stability
- Harmonics, Subs, Spurious
- Power – Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	10-10-13	Initial Release	PAC	

G2-013 Connections

Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output C
5	RF Output A
6	RF Output B



Wenzel Associates, Inc.

Austin, Texas

Title:

**100 MHz, 500 MHz & 1 GHz Golden
Multiplied Crystal Oscillator (GMXO-FR)**

P/N:

501-27234

Rev:

-

Date:

10-10-13

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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