

OUTPUTS

Output	Frequency	Level (into 50Ω)
A	100 MHz	+16 ±2 dBm
B	500 MHz	+18 ±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
10 Hz	-105	-85
100 Hz	-136	-120
1 kHz	-162	-146
10 kHz	-183	-167
100 kHz	-188	-170

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

3.25 x 4 x 1"

Connectors

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

Packaging

Nickel-plated machined aluminum housing – G1-01

Mounting

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

POWER REQUIREMENTS

Warm-Up Power
≤ 13 Watts for 5 minutes

Total Power
≤ 8 Watts at +25°C

Supply Voltage
+15 VDC ±5%

ADJUSTMENT
Mechanical Tuning
±4 x 10⁻⁶

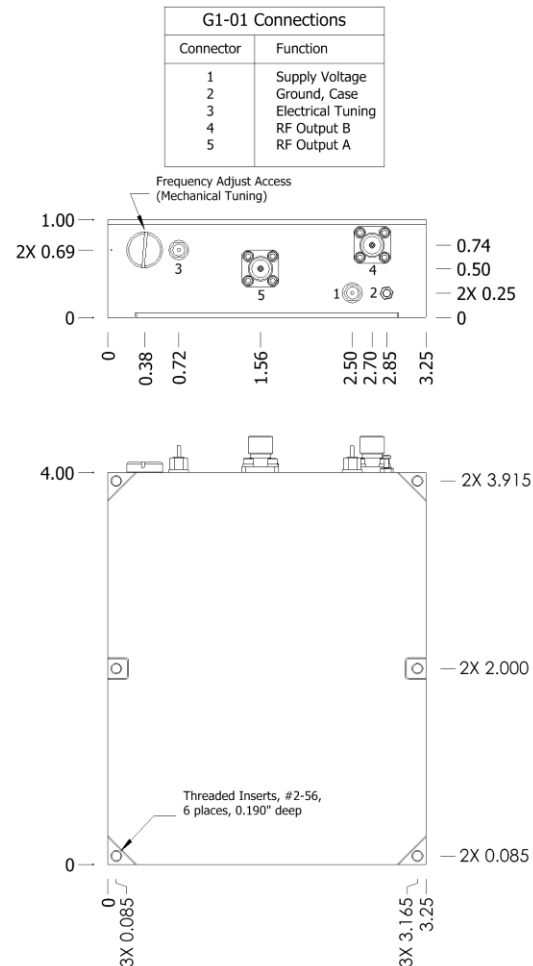
Electrical Tuning
±5 x 10⁻⁷, ±5 VDC
Negative Slope

CRYSTAL
Type
100 MHz SC-cut (x5)

OTHER
Label
Use conventional label with the following information:
501-26872 (Current Rev.)
100M/500M 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
-	05-30-13	Initial Release	PAC	
A	6-26-13	Noise	Liz	
B	10-15-13	Warm-up to 13 Watts; Total to 8 Watts	PAC	MG



Wenzel Associates, Inc.
Austin, Texas

Title: **100 MHz & 500 MHz Golden Multiplied Crystal Oscillator (GMXO-FR)**

P/N: 501-26872	Rev: B	Date: 10-15-13	Drawn:	Ref:
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1