

OUTPUT

Frequency

500 MHz

Level

+16 dBm ± 2 dB into 50 ohms

STABILITY

Aging

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

100 Hz -121 dBc/Hz
1 KHz -146 dBc/Hz
10 KHz -167 dBc/Hz
100 KHz -172 dBc/Hz
1 MHz -178 dBc/Hz
10 MHz -180 dBc/Hz

Temperature Stability

$\pm 5 \times 10^{-7}$, 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

SMA(f) and solder pins

Packaging

Nickel-plated machined
aluminum housing – G2

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 13 Watts for 5 minutes

Total Power

≤ 10 Watts at +25°C

Supply Voltage

+15 VDC $\pm 5\%$

ADJUSTMENT

Mechanical Tuning

$\pm 4 \times 10^{-6}$

Electrical Tuning

$\pm 5 \times 10^{-7}$, ± 5 VDC

Negative slope

CRYSTAL

Type

100 MHz SC-cut (x5 w/SAW)

Label

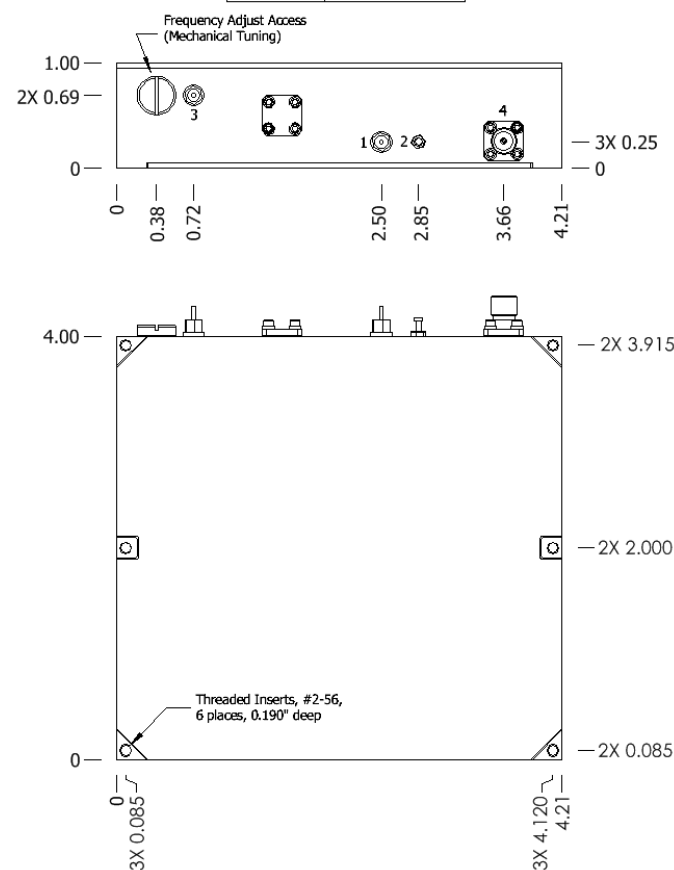
Use conventional label with the
following information:
501-27189 (Current Rev.)
500 MHz GMXO-FR
+15 VDC
Serial # - Date Code
(Mark connectors with function)

Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	09-17-13	Initial Release	Liz	
A	02-06-14	Output Level to +16 dBm	PAC	

G2 Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output



Wenzel Associates, Inc.

Austin, Texas

Title:

**500 MHz Golden Multiplied Crystal Oscillator
(GMXO-FR) with SAW**

P/N:

501-27189

Rev:

A

Date:

02-06-14

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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