

## OUTPUTS

Output	Frequency	Level (into 50Ω)
A	600 MHz	+13 ±2 dBm
B	1.2 GHz	+13 ±2 dBm

## STABILITY

### Aging

- 1 x 10<sup>-6</sup> first year
- after 30 days operating, typical
- 5 x 10<sup>-7</sup> second year, typical
- 3 x 10<sup>-7</sup> per year thereafter, typical

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

	600 MHz	1.2 GHz
10 Hz	-84	-78
100 Hz	-114	-108
1 kHz	-138	-132
10 kHz	-161	-155
100 kHz	-163	-157
1 MHz	-164	-158

### Temperature Stability

±5 x 10<sup>-7</sup>, 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 – G2-13

### Mounting

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

## POWER REQUIREMENTS

### Warm-Up Power

≤ 16 Watts for 5 minutes

### Total Power

≤ 12 Watts at +25°C

### Supply Voltage

+15 VDC ±5%

## ADJUSTMENT

### Mechanical Tuning

±4 x 10<sup>-6</sup>

### Electrical Tuning

±5 x 10<sup>-7</sup>, ±5 VDC

Negative Slope

## CRYSTAL

### Type

120 MHz SC-cut (x5, x2)

## OTHER

### Label

Use conventional label with the  
following information:

501-31537 (Current Rev.)

600M/1.2G GMXO-FR

+15 VDC

Serial # - Date Code

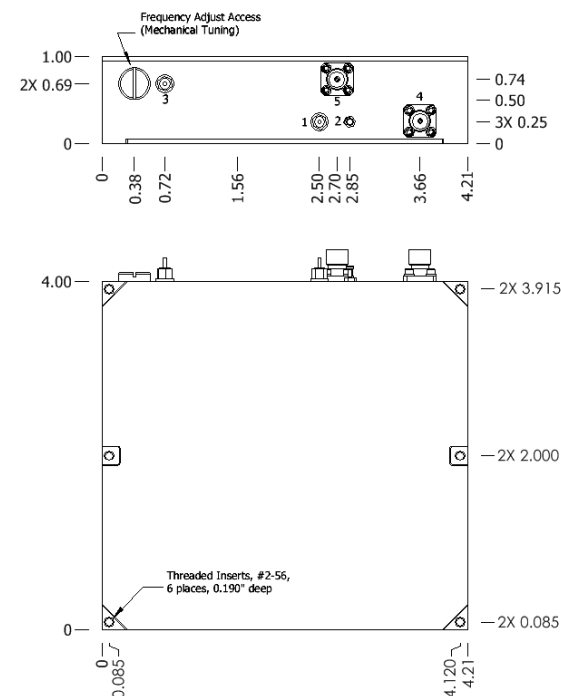
(Mark connectors with function)

### Test Data

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

REV	DATE	REVISION RECORD	DWN	AUTH
-	03-15-18	Initial Release	CB	

G2-13 Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output B
5	RF Output A



**Wenzel Associates, Inc.**

Austin, Texas

Title:

**600 MHz & 1.2 GHz Golden  
Multiplied Crystal Oscillator (GMXO-FR)**

P/N:

**501-31537**

Rev:

**-**

Date:

**03-15-18**

Drawn:

**62821**

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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