

## OUTPUT

Output	Frequency	Level (into 50Ω)
A	128 MHz	+13 ±2 dBm
B	2.048 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

	128 MHz	2.048 GHz
10 Hz	-98	-74
100 Hz	-130	-104
1 kHz	-159	-130
10 kHz	-177	-150
100 kHz	-182	-153

## 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

5.16 x 4 x 1"

### Connectors

SMA(f) and solder pins

### Packaging

Nickel-plated machined  
aluminum housing – G3-05

### 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

128 MHz SC-cut (x16)

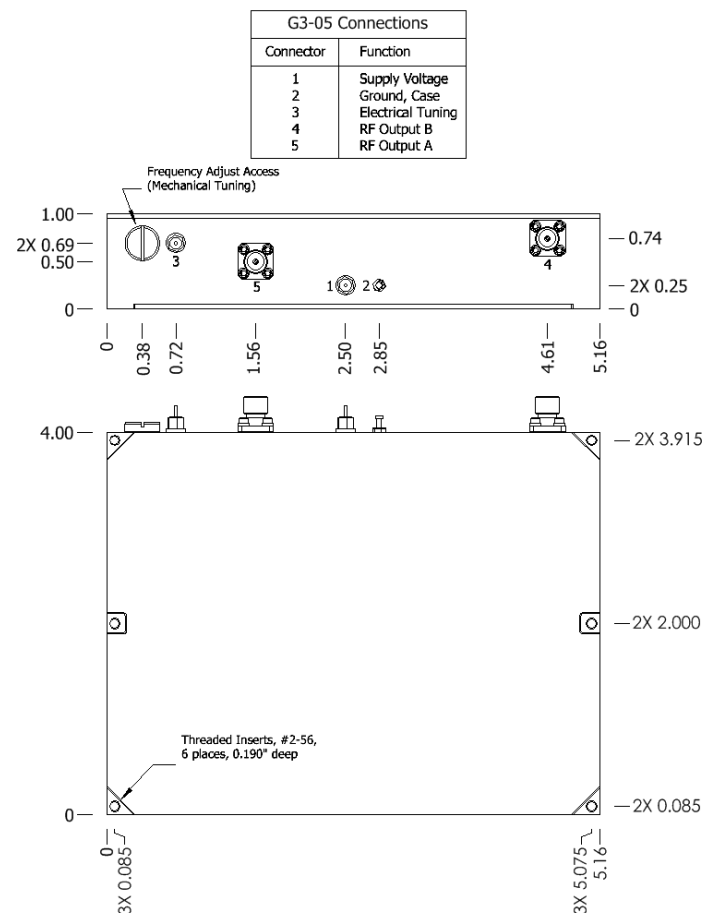
### Label

Use conventional label with the  
following information:  
501-31165 (Current Rev.)  
128M/2.048G 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
-	09-12-17	Initial Release	CB	



**Wenzel Associates, Inc.**  
Austin, Texas

Title: <b>128 MHz &amp; 2.048 GHz Golden Multiplied Crystal Oscillator (GMXO-FR)</b>				
P/N: <b>501-31165</b>	Rev: <b>-</b>	Date: <b>09-12-17</b>	Drawn:	Ref: 501-27183
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>	Page 1 of 1