

**OUTPUTS**

Output	Frequency	Level (into 50Ω)
A	640 MHz	+13 ±2 dBm
B	1.28 GHz	+10 ±2 dBm
C	2.56 GHz	+10 ±2 dBm
D	5.12 GHz	+10 ±2 dBm
E	10.24 GHz	+10 ±2 dBm

**STABILITY****Aging  
(free-running)**

- 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  
(free-running)**

	640 MHz	1.28 GHz	2.56 GHz	5.12 GHz	10.24 GHz
10 Hz	-85	-78	-72	-66	-60
100 Hz	-115	-108	-102	-96	-90
1 kHz	-141	-135	-129	-123	-117
10 kHz	-163	-157	-151	-144	-138
100 kHz	-164	-158	-152	-145	-139

**Temperature Stability**

- ±5 x 10<sup>-7</sup>, 0 to +50°C (Ref. +25°C), free-running

**Harmonics**

- ≤ -25 dBc

**Sub-Harmonics**

- ≤ -60 dBc

**Spurious**

- ≤ -80 dBc, excluding power supply line related spurs (DC to 42 GHz)

**MECHANICAL****Dimensions**

- 5.16 x 4 x 1"

**Connectors**

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

**Packaging**

- Nickel-plated machined aluminum housing – G3-12345

REV	DATE	REVISION RECORD	DWN	AUTH
-	5-20-16	Initial Release	CB	

**Mounting**

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

**POWER REQUIREMENTS****Warm-Up Power**

- ≤ 23 Watts for 5 minutes

**Total Power**

- ≤ 19 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 (x5,x2,x2,x2,x2)

**OTHER****Label**

- Use conventional label with the following information:  
501-30054 (Current Rev.)  
640M & 1.28/2.56/5.12/10.24G 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

**Wenzel Associates, Inc.**

Austin, Texas

Title:

**640MHz and 1.28/2.56/5.12/10.24 GHz Golden  
Multiplied Crystal Oscillator (GMXO-FR)**

P/N:

**501-30054**

Rev:

**-**

Date:

**05-20-16**

Drawn:

Ref:

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

**±0.030"**

0.XXX Dec:

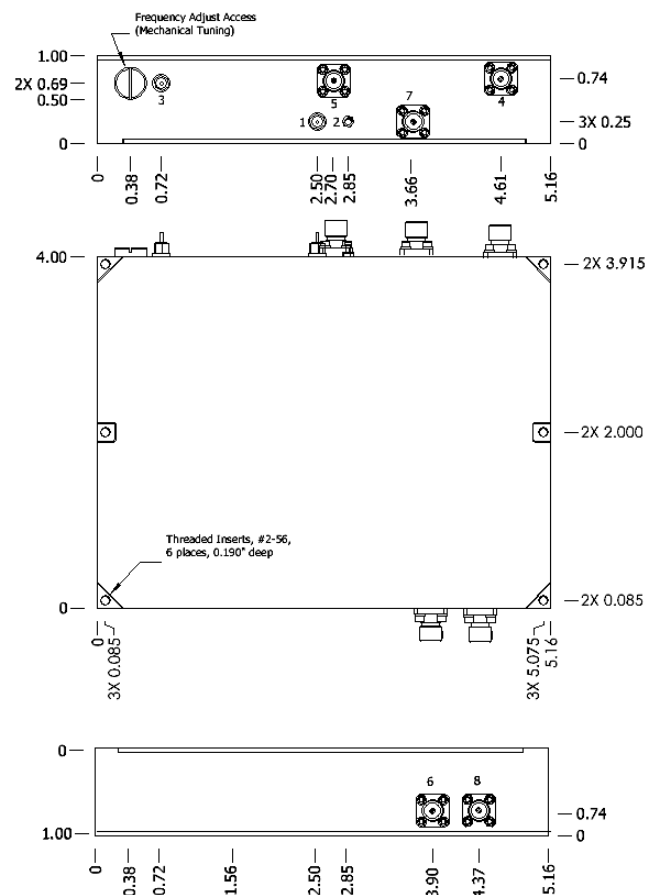
**±0.010"**

FSCM:

**62821**

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G3-12345 Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
3	Electrical Tuning
4	RF Output E
5	RF Output A
6	RF Output B
7	RF Output C
8	RF Output D



## Wenzel Associates, Inc.

Austin, Texas

Title:

**640/1280/2560/5120/10240 MHz Golden  
Multiplied Crystal Oscillator (GMXO-FR)**

P/N:  
**501-30054**

Rev.:  
**-**

Date:  
**05-20-16**

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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