OUTPUTS

Output	Frequency	Level (into 50Ω)
A	10 MHz	+13 ±2 dBm
B	2 GHz	+13 ±2 dBm

STABILITY
Aging
1×10^{-7} first year
after 30 days operating, typical
5×10^{-8} second year, typical
3×10^{-8} per year thereafter, typical

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

	10 MHz	2 GHz
10 Hz	-140	-95
100 Hz	-160	-110
300 Hz	-165	-115
1 kHz	-172	-128
10 kHz	-174	-145
100 kHz	-174	-147
1 MHz	-174	-165
10 MHz	-174	-165

Temperature Stability
$\pm 1 \times 10^{-7}$, -20 to +60°C (Ref. +25°C)

Harmonics
≤ -25 dBc

Sub-Harmonics
≤ -60 dBc

PLL Reference Products
≤ -60 dBc

Spurious
≤ -80 dBc, excluding power
supply line related spurs

Phase Lock Alarm
TTL
Locked: +3.5 VDC to +5.2 VDC (Hi)
Out-of-Lock: +0.8 VDC max (Lo)

Phase Lock Voltage Monitor
Voltage monitor pin supplied

MECHANICAL
Dimensions
6.51 x 4 x 1"

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

Packaging
Nickel-plated machined
aluminum housing – J2PMX

Mounting
Threaded inserts on base,
#2-56, 11 places

POWER REQUIREMENTS
Warm-Up Power
≤ 23 Watts for 5 minutes

Total Power
≤ 16 Watts at +25°C

Supply Voltage
+15 VDC ±5%

ADJUSTMENT
Mechanical Tuning (Internal 10 MHz)
$\pm 1 \times 10^{-6}$

Loop BW (Internal 100 MHz PLL)
Target Bandwidth: ~250 Hz
Type 2 Loop

CRYSTAL
Type
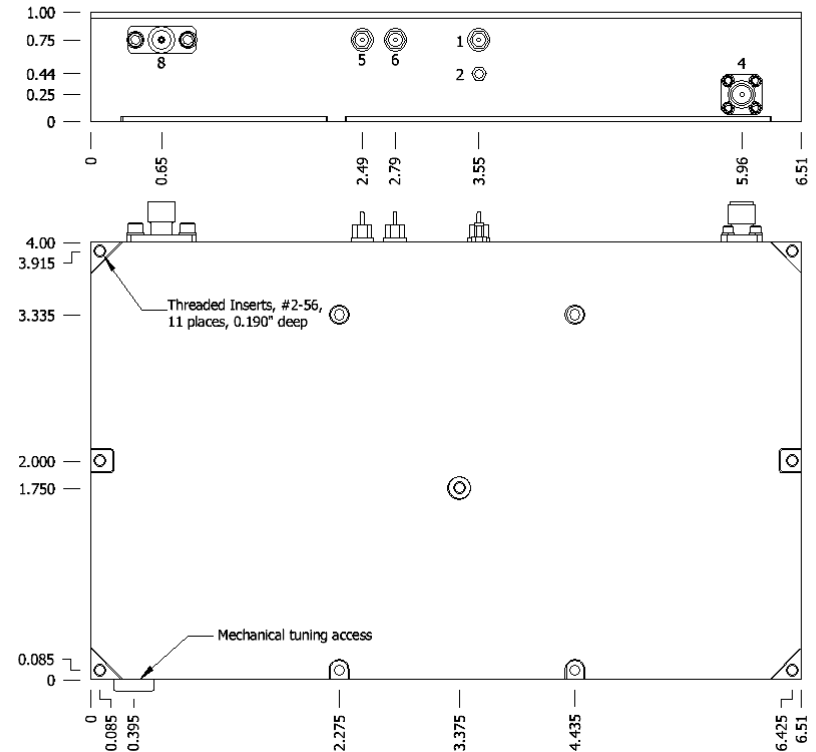100 MHz SC-cut (x20)

OTHER
Label
Use conventional label with the
following information:
501-29218 (Current Rev.)
10M/2G GQMXO-PLMX
+15 VDC
Serial # - Date Code
(Mark connectors with function)

Test Data
- Output Level
- Phase Noise
- Temperature Stability
- Harmonics, Subs, Products, Spurs
- Power – Warm-up and Total

J2PMX MXO Connections

Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output B
5	Phase Lock Voltage
6	Phase Lock Alarm
8	RF Output A

Threaded Inserts, #2-56, 11 places, 0.190" deep

Mechanical tuning access