INPUT

Frequency
   10 MHz
Level
   +7 dBm ±6 dB into 50 ohms

OUTPUT

RF Output	Frequency	Output Level (into 50 ohms)
A	100 MHz	+13 dBm ±2 dB
B	3 GHz	+13 dBm ±2 dB

STABILITY

Aging (free-running)
   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), typical, (free-running)

	100 MHz	3 GHz
10 Hz	-100	-68
100 Hz	-130	-98
1 kHz	-158	-125
10 kHz	-175	-142
100 kHz	-176	-143

Temperature Stability
   $\pm 5 \times 10^{-7}$ free-running from 0 to +50°C
   (Ref. +25°C)
Harmonics
   -25 dBc
Sub-Harmonics
   -60 dBc
PLL Divider 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
   4.4 x 4 x 1"
Connectors
   RF Input/Output: SMA(f)
   Power, Monitoring: Feed Thru Terminals
   GND: Ground Turret
Packaging
   Nickel-plated machined
   aluminum housing – J2P-03
Mounting
   Threaded inserts on base,
   #2-56, 6 places

POWER REQUIREMENTS

Warm-Up Power
   ≤ 15 Watts for 5 minutes
Total Power
   ≤ 12 Watts at +25°C
Supply Voltage
   +15 VDC ±5%

ADJUSTMENT

Loop BW
   Target Bandwidth: ≤ 10 Hz
   Type 2 Loop

CRYSTAL

Type
   100 MHz SC-cut (x30)

OTHER

Label
   Use conventional label with the
   following information:
   501-28527 (Current Rev.)
   100M/3G MXO-PLD
   +15 VDC
   Serial # - Date Code
   (Mark connectors with function)
Test Data
   - Output Level
   - Phase Noise – free-running
   - Temperature Stability – free-running
   - Harmonics, Subs, Products, Spurious
   - Power – Warm-up and Total

J2P-03 MXO Connections	
Connector	Function
1	Supply Voltage
2	Ground, Case
4	RF Output B
5	Phase Lock Voltage
6	Phase Lock Alarm
7	External Reference Input
8	RF Output A

Threaded Inserts, #2-56,
6 places, 0.190" deep
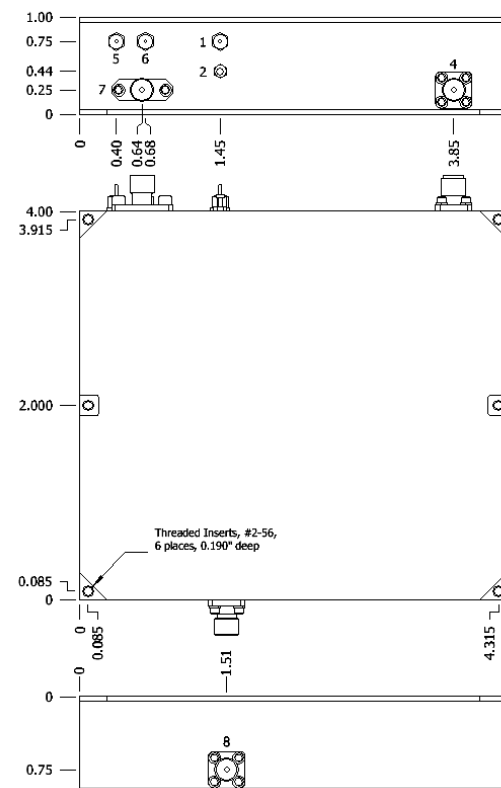
WA **Wenzel Associates, Inc.**
Austin, Texas

Title:
100M/3G Multiplied Crystal Oscillator (MXO-PLD)

P/N: 501-28527	Rev: -	Date: 10-23-14	Drawn:	Ref:

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1