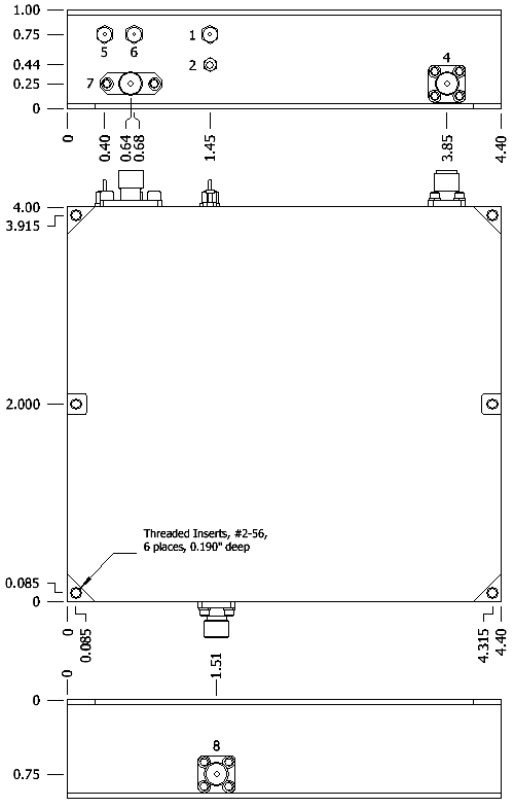
INPUT
Frequency
10 MHz
Level
+7 dBm ±6 dB into 50 ohms
OUTPUT A
Frequency
100 MHz
Level
+13 dBm ±2 dB into 50 ohms
OUTPUT B
Frequency
1 GHz
Level
+13 dBm ±2 dB into 50 ohms
STABILITY
Aging (free-running)
1×10^{-6} first year
after 30 days operating, typical
5×10^{-7} second year, typical
3×10^{-7} per year thereafter, typical
Phase Noise L(f), dBc/Hz, typical, (free-running)

	100 MHz	1 GHz
100 Hz	-130	-109
1 kHz	-158	-136
10 kHz	-174	-152
100 kHz	-175	-154
1 MHz	-176	-165
10 MHz	-176	-165

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/Outputs: 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
≤ 14 Watts for 5 minutes
Total Power
≤ 10 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 (x10 and filter)
OTHER
Label
Use conventional label with the
following information:
501-25711 (Current Rev.)
100M/1GHz 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

REV	DATE	REVISION RECORD	DWN	AUTH
-	03-26-12	Initial Release	PAC	

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



Wenzel Associates, Inc.
Austin, Texas

Title:
100 MHz & 1 GHz Multiplied Crystal Oscillator (MXO-PLD)

P/N:	Rev:	Date:	Drawn:	Ref:
501-25711	**-**	**03-26-12**		

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