INPUT Frequency 10 MHz

Level

+7 dBm ±6 dB into 50 ohms

OUTPUTS

RF Output	Frequency	(into 50 ohms)		
Α	500 MHz	+13 dBm ±2 dB		

+13 dBm ±2 dB

1 GHz

B **STABILITY**

Aging (free-running)

1 x 10⁻⁶ first year after 30 days operating, typical 5 x 10⁻⁷ second year, typical

 3×10^{-7} per year thereafter, typical

Phase Noise L(f), dBc/Hz, typical, (free-running)

	500 MHz	1 GHz
10 Hz	-85	-79
100 Hz	-115	-109
1 kHz	-143	-136
10 kHz	-159	-153
100 kHz	-160	-154
1 MHz	-160	-154
10 MHz	-160	-154

Temperature Stability

±5 x 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-13

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 13 Watts for 5 minutes

Total Power

≤ 9 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 (x5, x2)

OTHER

Label

Use conventional label with the following information:

501-28257 (Current Rev.)

500M/1G MXO-PLD

+15 VDC

Serial # - Date Code

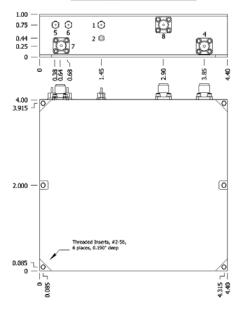
(Mark connectors with function)

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
-	07-16-14	Initial Release	LR/PAC	
Α	03-10-15	Changed to current input connector	СВ	

J2P-13 MXO Connections			
Connector	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		





Title:

500 MHz & 1 GHz
Multiplied Crystal Oscillator (MXO-PLD)

P/N:	Rev:	Date:		Drawn:		Ref:	
501-28257		Α		03-10-15			
Tolerances: (except as noted) Dimensions are in inches	-	0.XX Dec: ±0.030"		0.XXX Dec: ±0.010"	scм: 62821	Page	e 1 of 1