INPUT				
Frequency				
10 MHz				
Level				
+7 dBm ±6 dB into 50 ohms				
OUTPUT				
Frequency				
500 MHz				
Level				
+13 dBm ± 2 dB into 50 ohms				
STABILITY				
Aging (free-running)				
1 x 10 ⁻⁶ first year				
after 30 days operating, typical				
5 x 10 ⁻⁷ second year, typical				
3 x 10 ⁻⁷ per year thereafter, typical				
Phase Noise L(f), typical, (free-running)				
100 Hz -115 dBc/Hz				
1 KHz -143 dBc/Hz				
10 KHz -159 dBc/Hz 100 KHz -160 dBc/Hz				
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				
3.45 x 4 x 1"				

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined aluminum housing – J1P

Mounting

Threaded inserts on base,

6 places, #2-56

POWER REQUIREMENTS

Warm-Up Power

≤ 10 Watts for 5 minutes

Total Power

≤ 7 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Loop BW

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

CRYSTAL

Tvpe

100 MHz SC-cut (x5)

OTHER

Label

Use conventional label with the

following information:

501-23950 (Current Rev.)

500 MHz MXO-PLD

+15 VDC

Serial # - Date Code

(Mark connectors with function)

Test Data

- Output Level
- Phase Noise free-running
- Harmonics, Subs, Products, Spurious
- Power Warm-up and Total

REV	DATE	REVISION RECORD	DWN	AUTH
-	05-02-11	Initial Release	PAC	

J1P MXO Connections			
Connector	Function		
1	Supply Voltage		
2	Ground, Case		
4	RF Output		
5	Phase Lock Voltage		
6	Phase Lock Alarm		
7	External Reference Input		



