INPUT
Frequency
10 MHz
Level
+7 dBm ±6 dB into 50 ohms
OUTPUT
Frequency
13 GHz
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), Maximum, (free-running
10 Hz -44 dBc/Hz
100 Hz -74 dBc/Hz
1 KHz -103 dBc/Hz
10 KHz -128 dBc/Hz
100 KHz -129 dBc/Hz 1 MHz -129 dBc/Hz
1 MHz -129 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
5.36 x 4 x 1"
0.00 8 7 8 1

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Terminals

GND: Ground Turret

Packaging

Nickel-plated machined aluminum housing – J3P

Mounting

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

POWER REQUIREMENTS

Warm-Up Power

≤ 16.5 Watts for 5 minutes

Total Power

≤ 13 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Loop BW

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

CRYSTAL

Type

130 MHz SC-cut (x100)

OTHER

Label

Use conventional label with the

following information:

501-29415 (Current Rev.)

13 GHz 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
-	09-21-15	Initial Release	CB	

J3P MXO Connections		
Connector	Function	
1 2 4 5 6 7	Supply Voltage Ground, Case RF Output Phase Lock Voltage Phase Lock Alarm External Reference Input	



