INPUT
Frequency
10 MHz
Level
+7 dBm ±6 dB into 50 ohms
OUTPUT
Frequency
2.5 GHz
Level
+13 dBm ±2 dB into 50 ohms
STABILITY
Aging (free-running)
1 x 10 <sup>-6</sup> first year
after 30 days operating, typical
5 x 10 <sup>-7</sup> second year, typical
3 x 10 <sup>-7</sup> per year thereafter, typical
Phase Noise L(f), typical, (free-running)
10 Hz -74 dBc/Hz
100 Hz -105 dBc/Hz
1 kHz -131 dBc/Hz
10 kHz -152 dBc/Hz
100 kHz -154 dBc/Hz 1 MHz -154 dBc/Hz
1 MHz -154 dBc/Hz
10 MHz -154 dBc/Hz
Temperature Stability
±5 x 10 <sup>-7</sup> 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
MECHANICAL
Dimensions
5.4 x 4 x 1"
Connectors
RF Input/Output: SMA(f)
Power, Monitoring: Feed Thru Terminals
GND: Ground Turret

Pac	kad	ina	
ıac	nay	my	

Nickel-plated machined aluminum housing - G2P

## Mounting

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

# **POWER REQUIREMENTS**

#### Warm-Up Power

≤ 18 Watts for 5 minutes

#### **Total Power**

≤ 14 Watts at +25°C

## Supply Voltage

+15 VDC ±5%

### **ADJUSTMENT**

## Loop BW

Target Bandwidth: ≤ 10 Hz

Type 2 Loop

## PHASE LOCK STATUS

#### **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**

Electrical tuning monitor pin supplied

# **CRYSTAL**

# Type

100 MHz SC-cut (x25)

# **OTHER**

#### Label

Use conventional label with the following information:

501-29092 (Current Rev.)

2.5 GHz GMXO-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
-	06-01-15	Initial Release	LR/PC	

G2P MXO Connections		
Connector	Function	
1 2 4	Supply Voltage Ground, Case RF Output	
5 6 7	Phase Lock Voltage Phase Lock Alarm External Reference Input	





