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 1 x 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), typical, free-running 10 Hz -71 dBc/Hz 100 Hz -98 dBc/Hz 1 KHz -119 dBc/Hz 10 KH z -129 dBc/Hz 30 KHz -131 dBc/Hz 100 KHz -138 dBc/Hz 1 MHz -157 dBc/Hz 3 MHz -159 dBc/Hz 10 MHz -159 dBc/Hz **Temperature Stability** $\pm 5 \times 10^{-7}$ free-running from 0 to $\pm 50^{\circ}$ 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

4.4 x 4 x 1"

#2-56. 6 places

Warm-Up Power

Supply Voltage

ADJUSTMENT

+15 VDC

- Output Level

Test Data

Loop BW

CRYSTAL

Type

OTHER

Label

+15 VDC +5%

Type 2 Loop

Total Power

Dimensions

Connectors

Packaging

Mounting

REVISION RECORD REV DATE DWN AUTH 06-01-15 Initial Release LR/PC -J2P MXO Connections SMA(f) and solder pins Connector Function Nickel-plated machined 1 Supply Voltage Ground, Case 2 aluminum housing - J2P 4 RF Output 5 Phase Lock Voltage 6 Phase Lock Alarm Threaded inserts on base. External Reference Input 7 POWER REQUIREMENTS 1.00 0.75 00 1 🛈 ≤ 14 Watts for 5 minutes Š 6 2 🛈 0.44 0.25 ≤ 11 Watts at +25°C 0 凸 0 0.40 0.64 0.68 1.45 3.85 40 \mathbb{A} ÀÀ 4.00 -0 3.915 _ Target Bandwidth: ≤ 10 Hz 100 MHz SC-cut (x25) 0 2.000 -0 Use conventional label with the following information: 501-29091 (Current Rev.) 2.5 GHz GQMXO-PLD Serial # - Date Code Threaded Inserts, #2-56, 6 Places, 0.150" deep (Mark connectors with function) 0.085 _ 6 0 15 - 10.085 4.315 4.40 - Phase Noise - free-running - Temperature Stability - free-running Wenzel Associates, Inc. - Harmonics, Subs, Products, Spurious - Power - Warm-up and Total Austin. Texas Title: 2.5 GHz Golden-Q Multiplied Crystal Oscillator (GQMXO-PLD) P/N: Rev: Date: Ref: Drawn. 501-29091 06-01-15 -Tolerances: 0.XXX Dec: 0.XX Dec: FSCM: (except as noted) Page 1 of 1 62821 ±0.030" ±0.010" Dimensions are in inches