OUTPUT Frequency 20 MHz Level +13 dBm ±2 dB into 50 ohms **STABILITY** Aging  $5 \times 10^{-10}$  per day after 30 days operating, typical Phase Noise L(f), Static 10 Hz -128 dBc/Hz 100 Hz -153 dBc/Hz 1 kHz -165 dBc/Hz 10 kHz -167 dBc/Hz 100 kHz -168 dBc/Hz **Temperature Stability**  $\pm 5 \times 10^{-8}$ , 0° to  $\pm 50^{\circ}$ C (Ref  $\pm 25^{\circ}$ C) Harmonics ≤ -30 dBc Sub-Harmonics  $\leq -50 \, \text{dBc}$ **Non-Harmonic Spurious**  $\leq$  -80 dBc, excluding power supply line related spurs **MECHANICAL** Dimensions 2.25" x 2.25" x 1.3" Connectors SMA(f) and solder pins on one side Packaging Nickel-plated machined aluminum housing (CHP-1A) Mounting Threaded inserts, # 2-56, 4 places Tapped holes on sides, 16 places (provisions for shock mounts) **POWER REQUIREMENTS** Warm-Up Power ≤ 9 Watts for 5 minutes at +25°C **Total Power** ≤ 6 Watts at +25°C Supply Voltage +15 VDC ±5%

ADJUSTMENT

±1 x 10<sup>-6</sup>

CRYSTAL

Type

OTHER Label

**Electrical Tuning** 

Negative slope

 $\pm 2 \times 10^{-7}$  min.  $\pm 5$  VDC

10 MHz SC-cut (x2)

**Acceleration Sensitivity** 

**Operating Temperature** 

following information:

20 MHz Citrine Plus

Serial # - Date Code

Phase Noise – Static

Temperature Stability

Tuning – MT and ET

Harmonics, Subs, Spurious

Power - Warm-up and Total

501-25558 (Current Rev.)

**Storage Temperature** 

-40° to +85°C

+15 VDC

Output Level

Test Data

**ENVIRONMENTAL** 

 $0^{\circ}$  to  $+50^{\circ}$ C

 $\leq 5 \times 10^{-10}$ /g per axis, typical

Use conventional label with the

**Mechanical Tuning** 

REVISION RECORD REV DATE DWN AUTH 02-13-12 Initial Release PAC -Α 03-27-13 Corrected dimension 7 2.25 6 0.00-0.00 2.25 Mechanical 2X 0.80 0.99 2X 1.84 Tuning 0.00 0.35 Access Screw 1.30 **00** -2X 1.13 1.08 00 -0.92 0.83**b** d 4X 0.67 +**63**11 0.27 0.00 -0.00 0.00 16X 0.060-80 0.00 0.53 Tapped Holes for Shock Mounts 4X 2-56 Threaded Inserts 0.000 2X 0.085 CHP-1A Connector Function **P**1 Ground, Case P2 Supply Voltage P3 Electrical Tuning J1 **RF** Output Connector numbers are for reference 2X 2.165 - 🔂 🝙 only and will not be marked on unit Wenzel Associates, Inc. Austin, Texas Title Premium 20 MHz Citrine Plus Crystal Oscillator P/N. Date: Drawn: Rev: Ref: ULN 501-25558 Α 03-27-13 Tolerances: 0.XXX Dec: 0.XX Dec: FSCM: (except as noted) Page 1 of 1 62821 ±0.030" ±0.010" Dimensions are in inches