OUTPUT Frequency 200 MHz Level +13 dBm ±2 dB into 50 ohms **STABILITY** Aging 1 x 10⁻⁶ first vear after 30 days operating, typical 5×10^{-7} second year, typical 3×10^{-7} per year thereafter, typical Phase Noise L(f), typical 100 Hz -123 dBc/Hz 1 KHz -151 dBc/Hz 10 KHz -167 dBc/Hz 100 KHz -168 dBc/Hz **Temperature Stability** $\pm 5 \times 10^{-7}$, 0° to $\pm 50^{\circ}$ C (Ref $\pm 25^{\circ}$ C) Harmonics ≤ -25 dBc Sub-Harmonics ≤ -70 dBc Spurious \leq -80 dBc, excluding power supply line related spurs **MECHANICAL** Dimensions 2.25 x 4 x 1" Connectors SMA(f) and solder pins Packaging Nickel-plated machined aluminum housing - J1 Mounting Threaded inserts on base. #2-56, 6 places POWER REQUIREMENTS Warm-Up Power \leq 7 Watts for 5 minutes Total Power ≤ 4 Watts at +25°C Supply Voltage +15 VDC ±5%

ADJUSTMENT **Mechanical Tuning**

±4 x 10⁻⁶

CRYSTAL

Type

OTHER

Label

Electrical Tuning

 $\pm 5 \times 10^{-7}, \pm 5 \text{ VDC}$

100 MHz SC-cut (x2)

following information:

200 MHz MXO-FR

Serial # - Date Code

Temperature Stability

Tuning - MT and ET

+15 VDC

Output Level

Phase Noise

Test Data

Negative slope

11-29-11 Initial Release PAC -**J1 MXO Connections** Connector Function Supply Voltage 1 2 Ground, Case Electrical Tuning 3 4 **RF** Output Use conventional label with the 1.00 0.75 10 0 501-25228 (Current Rev.) 0.44 20 Frequency Adjust Acces (Mechanical Tuning) 0 0 25 0.55 1.70 06.0 2.25 (Mark connectors with function) 4.00 3.915 Harmonics, Subs, Spurious Power - Warm-up and Total 0 -0 2.000 Threaded Inserts, #2-56, 6 places, 0.190" deep 0.085 0 -11 2.165 2.25 0.085 Wenzel Associates, Inc. W Austin, Texas Title: 200 MHz Multiplied Crystal Oscillator (MXO-FR) P/N: Rev: Date: Drawn: Ref: 501-25228 11-29-11 -Tolerances: 0.XX Dec 0.XXX Dec: FSCM: (except as noted) Page 1 of 1 62821 ±0.030" ±0.010" Dimensions are in inches

REVISION RECORD

DWN

AUTH

REV

DATE