OUTPUT Frequency 250 MHz Level +13 dBm ±2 dB into 50 ohms **STABILITY** Aging 1 x 10<sup>-6</sup> first vear after 30 days operating, typical  $5 \times 10^{-7}$  second year, typical  $3 \times 10^{-7}$  per year thereafter, typical Phase Noise L(f), typical 100 Hz -116 dBc/Hz 1 KHz -145 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 4 x 2.25 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  $\leq$  8 Watts for 5 minutes Total Power ≤ 5 Watts at +25°C Supply Voltage +15 VDC ±5%

ADJUSTMENT **Mechanical Tuning** 

±4 x 10<sup>-6</sup>

CRYSTAL

Type

OTHER

Label

**Electrical Tuning** 

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

125 MHz SC-cut (x2)

following information:

250 MHz MXO-FR

Serial # - Date Code

**Temperature Stability** 

Tuning - MT and ET

Harmonics, Subs, Spurious

Power - Warm-up and Total

+15 VDC

Output Level

Phase Noise

**Test Data** 

501-26847 (Current Rev.)

Negative slope

## 05-21-13 Initial Release -**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 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 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: 250 MHz Multiplied Crystal Oscillator (MXO-FR) P/N: Rev: Date: Drawn: 501-26847 05-21-13 -

0.XX Dec

±0.030"

0.XXX Dec:

±0.010"

FSCM:

62821

REV

Tolerances:

(except as noted)

Dimensions are in inches

DATE

REVISION RECORD

DWN

PAC

Ref:

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AUTH