OUTPUT Frequency 11 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  $5 \times 10^{-7}$  second year, typical  $3 \times 10^{-7}$  per year thereafter, typical Phase Noise L(f), typical 100 Hz -77 dBc/Hz 1 KHz -105 dBc/Hz 10 KHz -127 dBc/Hz 100 KHz -128 dBc/Hz **Temperature Stability** ±5 x 10<sup>-7</sup>, 0 to +50°C (Ref. +25°C) Harmonics -25 dBc Sub-Harmonics -60 dBc Spurious -80 dBc, excluding power supply line related spurs **MECHANICAL** Dimensions 4.16 x 4.00 x 1" Connectors SMA(f)'s and solder pins on side Packaging Nickel-plated machined aluminum housing - J3 Mounting Threaded inserts on base, #2-56, 6 places **POWER REQUIREMENTS** Warm-Up Power ≤ 15 Watts for 5 minutes **Total Power** ≤ 12 Watts at +25°C Supply Voltage +15 VDC +5%

## 01-26-12 Initial Release -**J3 MXO Connections** Connector Function 1 Supply Voltage 2 Ground, Case 3 Electrical Tuning 4 **RF** Output 1 00 Use conventional label with the 0.75 10 0 0 44 20 501-25414 (Current Rev.) Frequency Adjust Access (Mechanical Tuning) 0 0.25 0.55 8 3.61 (Mark connectors with function) 4.00 3.915 Phase Noise - free-running Temperature Stability - free-running Harmonics, Subs, Spurious Power - Warm-up and Total 2.000 -0 Threaded Inserts, #2-56, 6 places, 0.190" deep 0.085 0 0 Wenzel Associates, Inc. M Austin, Texas Title<sup>.</sup> 11 GHz Multiplied Crystal Oscillator (MXO-FR) P/N: Rev: Date: Drawn: 501-25414 01-26-12 -Tolerances: 0.XX Dec: 0.XXX Dec: FSCM:

(except as noted)

Dimensions are in inches

±0.030"

REV

ADJUSTMENT

 $\pm 4 \times 10^{-6}$ 

CRYSTAL

Type

OTHER

Label

**Electrical Tuning** 

Mechanical Tuning

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

110 MHz SC-cut (x100)

following information:

Serial # - Date Code

Tuning – MT and ET

11 GHz MXO-FR

+15 VDC

Output Level

Test Data

Negative slope

DATE

REVISION RECORD

DWN

PAC

16

0

10

-1

4.16

Ref:

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62821

±0.010"

AUTH