

**OUTPUT**

**Frequency**

700 MHz

**Level**

+13 dBm ±2 dB into 50 ohms

**STABILITY**

**Aging**

1 x 10<sup>-6</sup> first year  
 after 30 days operating, typical  
 5 x 10<sup>-7</sup> second year, typical  
 3 x 10<sup>-7</sup> per year thereafter, typical

**Phase Noise L(f), typical**

100 Hz -112 dBc/Hz  
 1 KHz -140 dBc/Hz  
 10 KHz -156 dBc/Hz  
 100 KHz -157 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**

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**

≤ 8.5 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>

**Electrical Tuning**

±5 x 10<sup>-7</sup>, ±5 VDC

Negative slope

**CRYSTAL**

**Type**

100 MHz SC-cut (x7)

**OTHER**

**Label**

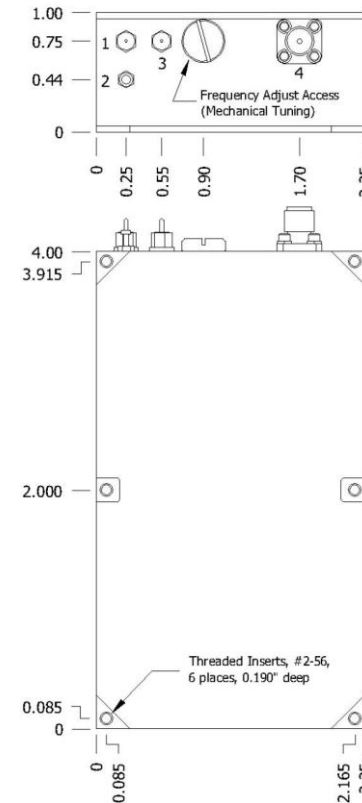
Use conventional label with the following information:  
 501-25393 (Current Rev.)  
 700 MHz MXO-FR  
 +15 VDC  
 Serial # - Date Code  
 (Mark connectors with function)

**Test Data**

Output Level  
 Phase Noise  
 Temperature Stability  
 Harmonics, Subs, Spurious  
 Power – Warm-up and Total  
 Tuning – MT and ET

| REV | DATE     | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| -   | 01-25-12 | Initial Release | PAC |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |

| J1 MXO Connections |                   |
|--------------------|-------------------|
| Connector          | Function          |
| 1                  | Supply Voltage    |
| 2                  | Ground, Case      |
| 3                  | Electrical Tuning |
| 4                  | RF Output         |



**Wenzel Associates, Inc.**  
 Austin, Texas

Title:  
**700 MHz Multiplied Crystal Oscillator (MXO-FR)**

|                          |           |                          |        |      |
|--------------------------|-----------|--------------------------|--------|------|
| P/N:<br><b>501-25393</b> | Rev:<br>- | Date:<br><b>01-25-12</b> | Drawn: | Ref: |
|--------------------------|-----------|--------------------------|--------|------|

|  |                             |                              |                       |             |
|--|-----------------------------|------------------------------|-----------------------|-------------|
| Tolerances:<br>(except as noted)<br>Dimensions are in inches | 0.XX Dec:<br><b>±0.030"</b> | 0.XXX Dec:<br><b>±0.010"</b> | FSCM:<br><b>62821</b> | Page 1 of 1 |
|--|-----------------------------|------------------------------|-----------------------|-------------|