

INPUT**Frequency**

10 MHz

Level

+7 dBm ±5 dB into 50 ohms

OUTPUT**Frequency**

200 MHz

Level

+13 dBm ±2 dB into 50 ohms

STABILITY**Aging (free-running)**1 x 10⁻⁶ per year after 30 days operating, typical**Phase Noise L(f), typical, (free-running)**

100 Hz -123 dBc/Hz

1 KHz -149 dBc/Hz

10 KHz -167 dBc/Hz

100 KHz -168 dBc/Hz

Temperature Stability±5 x 10⁻⁷ free-running from 0 to +50°C

(Ref. +25°C)

Harmonics

-30 dBc

Sub-Harmonics and Products

-50 dBc

Spurious (Excluding DC line related noise)

-70 dBc

Phase Lock Alarm

TTL

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

Phase Lock Voltage Monitor

Voltage monitor pin supplied

MECHANICAL**Dimensions**

3.45 x 4 x 1"

Connectors

SMA(f)'s and solder pins on side

Feed-thru terminals for lock alarm, supply

and phase lock voltage monitor

Packaging

Machined aluminum housing – J1P

Mounting

Threaded inserts on base, 6 places

POWER REQUIREMENTS**Warm-Up Power**

≤ 14 Watts for 5 minutes

Total Power

≤ 11.5 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT**Loop BW**

Target Bandwidth: < 10 Hz

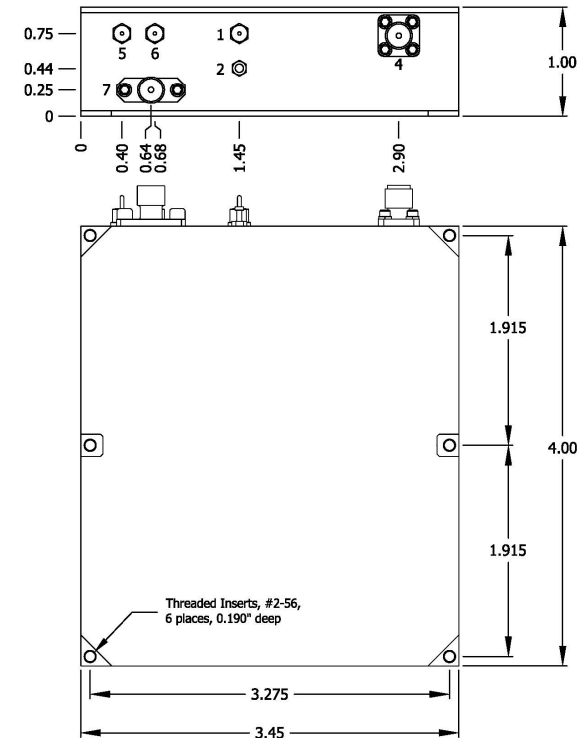
Type 2 Loop

CRYSTAL**Type**

100 MHz SC-cut with a x2 stage

| REV | DATE | REVISION RECORD | DWN | AUTH |
|-----|----------|---------------------------------|-----|------|
| - | 01-12-10 | Initial Release | VG | |
| A | 05-25-10 | Update outline dwg to remove MT | JH | |
| | | | | |
| | | | | |

| J1P MXO Connections | |
|---------------------|--------------------------|
| Connector | Function |
| 1 | Supply Voltage |
| 2 | Ground, Case |
| 4 | RF Output |
| 5 | Phase Lock Voltage |
| 6 | Phase Lock Alarm |
| 7 | External Reference Input |

**Wenzel Associates, Inc.**

Austin, Texas

Title:

200 MHz Phase Lock Multiplied Crystal Oscillator (MXO)

P/N:

501-21935

Rev:

A

Date:

05-25-10

Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

±0.010"

FSCM:

62821

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