

INPUT - Selectable**Frequency**

5 MHz, -2 to +17dBm into 50 ohms

OUTPUT – 5 MHz**Frequency**

5 MHz, +10dBm ±2 dB

Phase Noise

1 Hz -112 dBc/Hz
 10 Hz -142 dBc/Hz
 100 Hz -155 dBc/Hz
 1 kHz -160 dBc/Hz
 10 kHz -160 dBc/Hz

Harmonics, Subs, Spurious

-25, -85, -85 dBc

OUTPUT – 100 MHz**Frequency**

100 MHz, +12dBm ±2 dB

Output Phase Noise L(f)**Locked to Internal 5 MHz**

10 Hz -112 dBc/Hz
 100 Hz -125 dBc/Hz
 1 kHz -152 dBc/Hz
 10 kHz -170 dBc/Hz

Harmonics, Subs, Spurious

-25, -85, -85 dBc to 600 MHz

Loop BW

Target Bandwidth: 40 Hz, typical, type 2 Loop

STABILITY**Aging**±5 x 10⁻¹⁰ per day at time of shipment,**Temperature Stability**±1 x 10⁻⁸ without external input
-10 to +65°C, (Ref. +25°C)**Phase Lock Alarm - TTL**Locked: +3.5 to +5.2 VDC (Hi)
Unlocked: +0.8 VDC max (Lo)**Phase Lock Voltage Monitor**Voltage monitor pin supplied,
0 to +7.5 VDC range**Warm-Up**7 minutes to 1 x 10⁻⁷ of final frequency at 30 minutes at +25°C**MECHANICAL****Dimensions**

2.5 x 6.0 x 0.9"

ConnectorsSMA's
7 Pin D-subminiature, male**Packaging**

Nickel plated machined brass housing

POWER REQUIREMENTS**Supply Voltage**

+12 ±0.5VDC

Warm-Up Power

12.6 Watts maximum at start-up for 5 minutes at +25° C

Total Power

6 Watts, typical, steady state +25°C

ADJUSTMENT**Electrical Tuning**

±.3 to ±.6 ppm, 0 to +7 VDC
 ±.05 ppm of nominal at +3.5 volts, at room temperature, at time of shipment
 Negative Slope
 Suitable for use with a 100 k ohm pot

V Reference

+8 VDC, typical, buffered by 10 k ohms

Internal 100 MHz Tuning

8 to 11 ppm, 0 to +7.5 VDC

SPECIAL**Reference Select Switch – Internal 5 MHz By Pass**

>+4.0 Volts enables external reference, bypassing internal 5 MHz
 <+1.0 Volts disables external

Test Data (For both 5 MHz and Locked 100 MHz Signals)

Output signal power levels, spurious signal levels, absolute freq at Vtune, tuning, aging, phase noise, temp, locking voltage

| REV | DATE | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| - | 06-30-04 | Draft | Liz | Liz |
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**Wenzel Associates, Inc.**

Austin, Texas

Title:

Premium 5 and 100 MHz Phase Locked Oscillator

P/N:

501-12936

Rev:

-

Date:

06-30-04

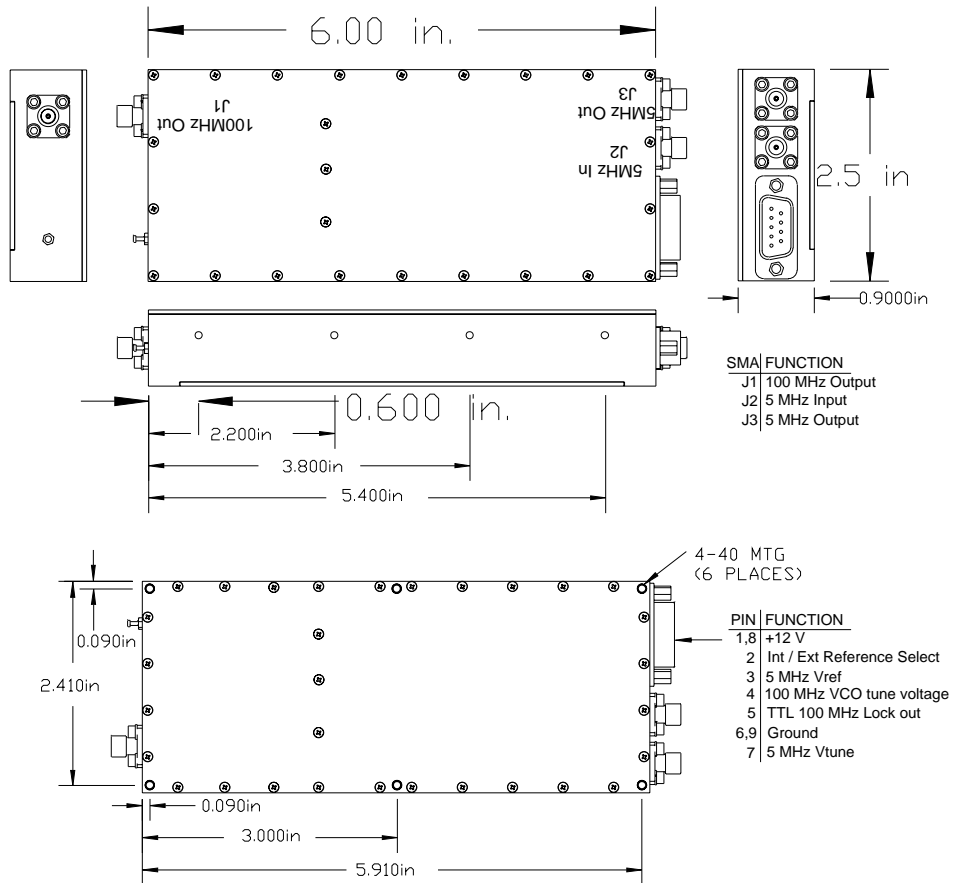
Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches0.XX Dec:
±0.030"0.XXX Dec:
±0.010"FSCM:
62821

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| WA | | Wenzel Associates, Inc. Austin, Texas | | |
| Title: Premium 5 and 100 MHz Phase Locked Oscillator | | | | |
| P/N: 501-12936 | Rev: - | Date: 06-30-04 | Drawn: | Ref: |
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