

**INPUT****Frequency**10 MHz,  $\pm 2 \times 10^{-6}$ **Level**+7 dBm  $\pm 5$  dB into 50 ohms**OUTPUT****Frequency**

100 MHz

**Level**+13 dBm  $\pm 2$  dB into 50 ohms**STABILITY****Output Phase Noise L(f)****(Free-Running)**

100 Hz -130 dBc/Hz

1 kHz -155 dBc/Hz

10 kHz -175 dBc/Hz

100 kHz -176 dBc/Hz

**Aging** $\pm 1 \times 10^{-6}$  per year after 30 days  
operating, typical**Temperature Stability** $\pm 5 \times 10^{-7}$  free-running from 0 to +50°C,  
(Ref. +25°C)**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

**SPECTRAL PURITY****Harmonics** $\leq -30$  dBc**Sub-Harmonics** $\leq -50$  dBc**PLL Divider Products** $\leq -80$  dBc**Spurious** $\leq -80$  dBc, excluding power  
supply line related spurs**MECHANICAL****Dimensions**

2.5 x 3.5 x 0.8"

**Connectors**SMA's and solder pins on side  
Feed-thru terminals for lock alarm,  
supply and phase lock voltage monitor**Packaging**Nickel-plated machined  
aluminum housing**Mounting**

Tapped holes on sides, 16 places

Through holes, 4 places

Threaded inserts on base, 4 places

**POWER REQUIREMENTS****Supply Voltage**+12 VDC  $\pm 5\%$ **Warm-Up Power** $\leq 8$  Watts at start-up for 5 minutes  
at +25°C**Total Power** $\leq 5$  Watts at steady state +25°C**ADJUSTMENT****Loop BW**

Detector Lock Frequency: 5 MHz

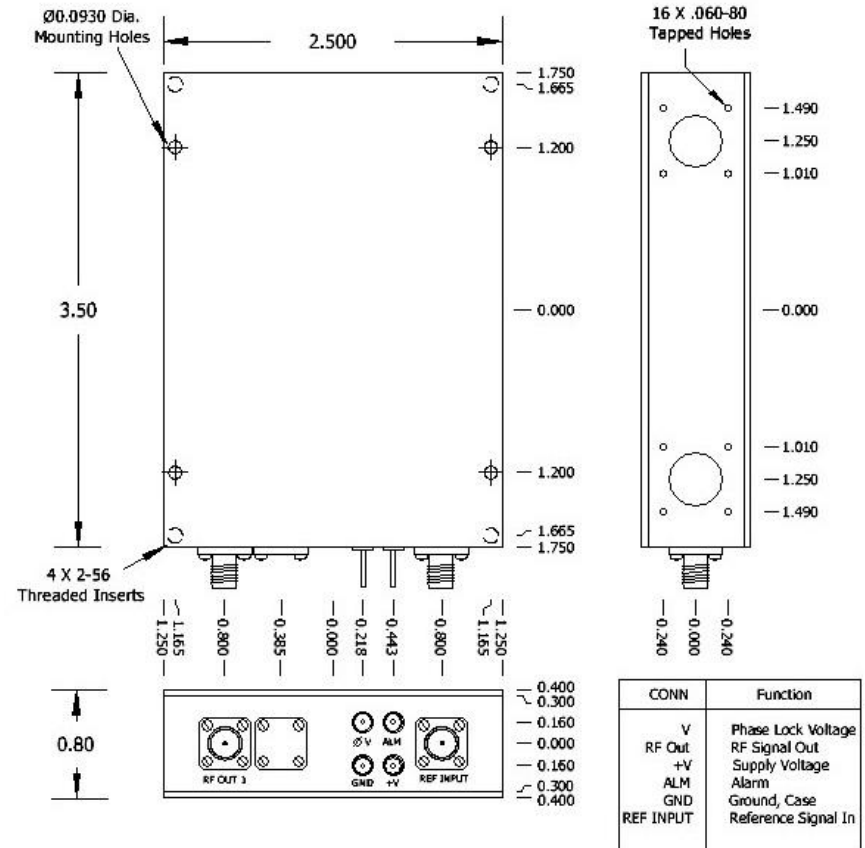
Target Bandwidth: &lt; 60 Hz

Type 2 Loop

**CRYSTAL****Type**

SC-cut

| REV | DATE     | REVISION RECORD | DWN | AUTH |
|-----|----------|-----------------|-----|------|
| -   | 08-24-11 | Initial Release | PAC |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |
|     |          |                 |     |      |

**Wenzel Associates, Inc.**

Austin, Texas

Title:

**Premium 100 MHz-SC Phase Lock Crystal Oscillator**

P/N:

**501-24897**

Rev.:

-

Date:

**08-24-11**

Drawn:

Ref.:

ULN

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

 $\pm 0.030$ "

0.XXX Dec:

 $\pm 0.010$ "

FSCM:

62821

Page 1 of 1