

REV	DATE	REVISION RECORD	DWN	AUTH
-	04-13-07	Draft	SS	LR

**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 -125 dBc/Hz

1 kHz -155 dBc/Hz

10 kHz -170 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)

**Harmonics**

-30 dBc

**Sub-Harmonics and Products**

-50 dBc

**Non-Harmonic Spurious, typical**

-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**

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**

Machined aluminum housing

**Mounting**

Threaded inserts on sides, 16 places

Through holes, 4 places

Threaded inserts on base, 4 places

**POWER REQUIREMENTS**

**Supply Voltage**

+15 VDC

**Warm-Up Power**

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

**Total Power**

5 Watts at steady state +25°C

**ADJUSTMENT**

**Loop BW**

Target Bandwidth: 100 Hz  
Type 2 Loop

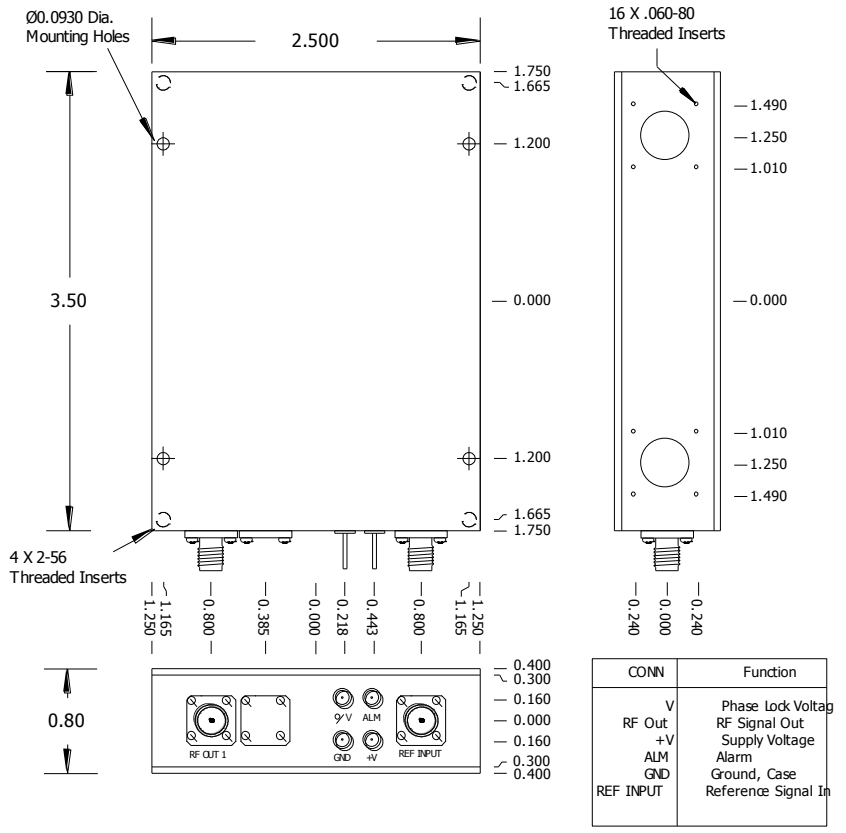
**CRYSTAL**

**Type**

SC-cut

**OTHER**

ROHS compliant



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

Title: **100 MHz-SC Phase Lock Crystal Oscillator (ROHS)**

P/N: <b>501-17448</b>	Rev: <b>-</b>	Date: <b>04-13-07</b>	Drawn:	Ref: 501-10137b
Tolerances: (except as noted) Dimensions are in inches		0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>

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