

**INPUT**

**Frequency**

10 MHz,  $\pm 5 \times 10^{-7}$

**Level**

+7 dBm  $\pm 5$  dB into 50 Ohms

**OUTPUT**

**Frequency**

10 MHz, Dual

**Level**

+10 dBm  $\pm 2$  dB into 50 ohms

**STABILITY**

**Output Phase Noise L(f)**

**Free-Running**

1 Hz -100 dBc  
 10 Hz -130 dBc  
 100 Hz -158 dBc  
 1 kHz -172 dBc  
 10 kHz -172 dBc

**Aging**

$\pm 1 \times 10^{-7}$  per year after 30 days operating, typical

**Temperature Stability**

$\pm 1 \times 10^{-8}$  free-running from 0 to +50°C, (Ref. +25°C)

**Harmonics**

-30 dBc

**Sub-Harmonics and Products**

-50 dBc

**Non-Harmonic Spurious**

-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 .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 or machined brass housing

**Mounting**

Shock mount patterns on sides

Thru holes, 4 places

Threaded inserts on base, 4 places

**POWER REQUIREMENTS**

**Supply Voltage**

+15 VDC

**Warm-Up Power**

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

**Total Power**

6 Watts at steady state +25°C

**ADJUSTMENT**

**Loop BW**

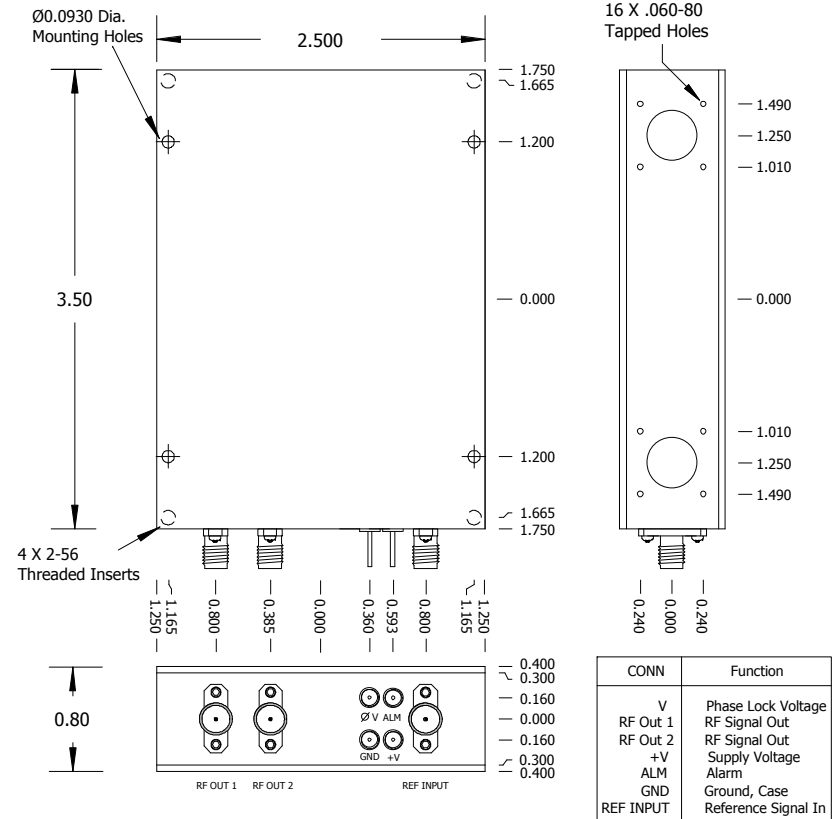
Target Bandwidth: < 1 Hz

Type 2 Loop, < 5 minutes to  $\pm 1 \times 10^{-9}$  of input

**CRYSTAL Type**

SC-cut

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-07-02	Draft	PAC	LR
A	05-16-03	Added dimensions on drawing	SS	PAC
B	01-10-05	Phase, Power, Connectors, drawing	SS	LR



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

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Title: **10 MHz-SC Dual Output Phase Lock Crystal Oscillator**

P/N: <b>501-10136</b>	Rev: <b>B</b>	Date: <b>01-10-05</b>	Drawn:	Ref: 501-07499E
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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>	Page 1 of 1
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