

REV	DATE	REVISION RECORD	DWN	AUTH
-	12-06-02	Draft	Liz	LR
A	04-30-03	Updated drawing and phase noise specs	PAC	LR
B	07-03-03	Updated drawing and mounting	SS	PAC

INPUT

Frequency

5 MHz, $\pm 2 \times 10^{-6}$

Level

+7 dBm ± 5 dB into 50 Ohms

OUTPUT

Frequency

100 MHz

Level

+13 dBm ± 2 dB into 50 ohms

STABILITY

Output Phase Noise L(f)

(Free-Running)

100 Hz -125 dBc

1 kHz -155 dBc

10 kHz -170 dBc

Aging

$\pm 1 \times 10^{-6}$ per year after 90 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

-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

Tapped holes 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

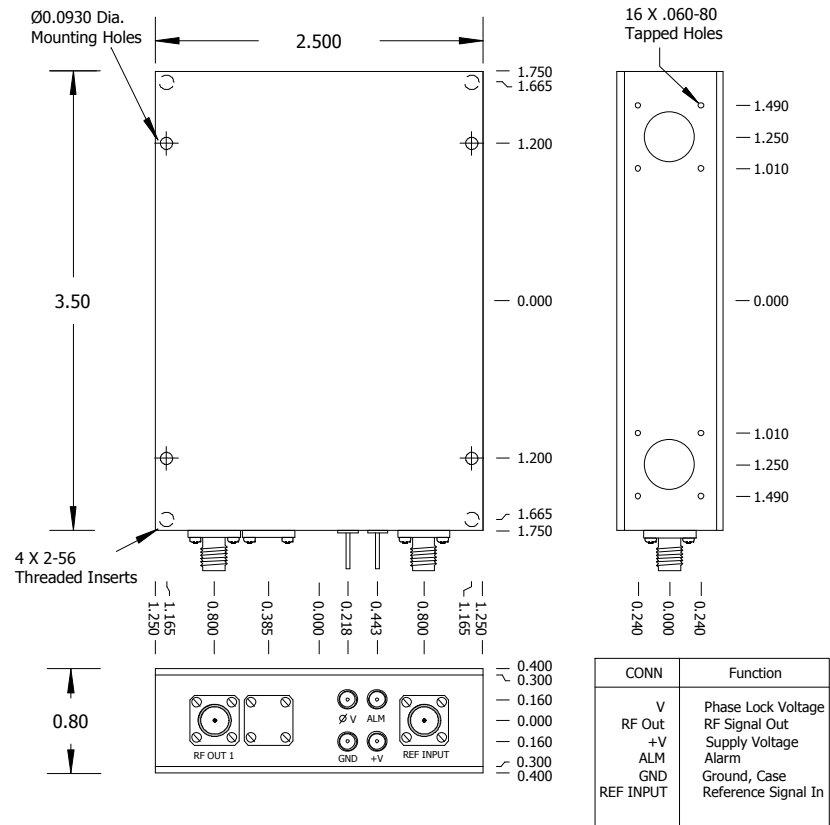
Loop BW

Target Bandwidth: 200 Hz
Type 2 Loop

CRYSTAL

Type

SC-cut



Wenzel Associates, Inc.

Austin, Texas

Title:

100 MHz-SC Phase Lock Crystal Oscillator

P/N:

501-10227

Rev:

B

Date:

07-03-03

Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

± 0.010 "

FSCM:

62821

Page 1 of 1