REV	DATE	REVISION RECORD	DWN	AUTH
-	07-18-17	Draft	BH	

INPUT

Frequency

10 MHz, ±5 x 10^{-7}

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	-130 dBc/Hz
1 kHz	-155 dBc/Hz
10 kHz	-168 dBc/Hz

Aging

±1 x 10^{-6} per year after 30 days operating, typical

Temperature Stability

±5 x 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 +25º C

Total Power

5 Watts at steady state +25ºC

ADJUSTMENT

Loop BW

Target Bandwidth: <10 Hz

Type 2 Loop

CRYSTAL

Type

SC-cut

OTHER

Test Data

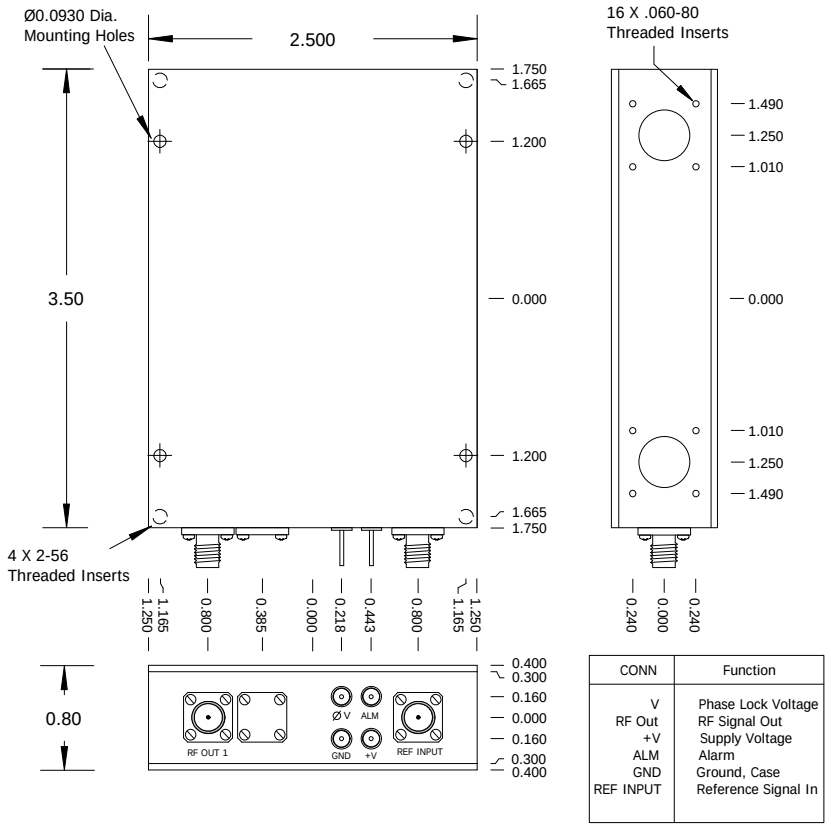
Output Level

Temperature Stability (free-running)

Phase Noise (free-running)

RoHS

This part is RoHS compliant



CONN	Function
V	Phase Lock Voltage
RF Out	RF Signal Out
+V	Supply Voltage
ALM	Alarm
GND	Ground, Case
REF INPUT	Reference Signal In

Wenzel Associates, Inc.
Austin, Texas

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

P/N:	Rev:	Date:	Drawn:	Ref:
501-31062	**-**	**07-18-17**		

Tolerances: (except as noted) Dimensions are in inches	0.XX Dec:	0.XXX Dec:	FSCM:	Page 1 of 1
	±0.030”	±0.010”	62821	