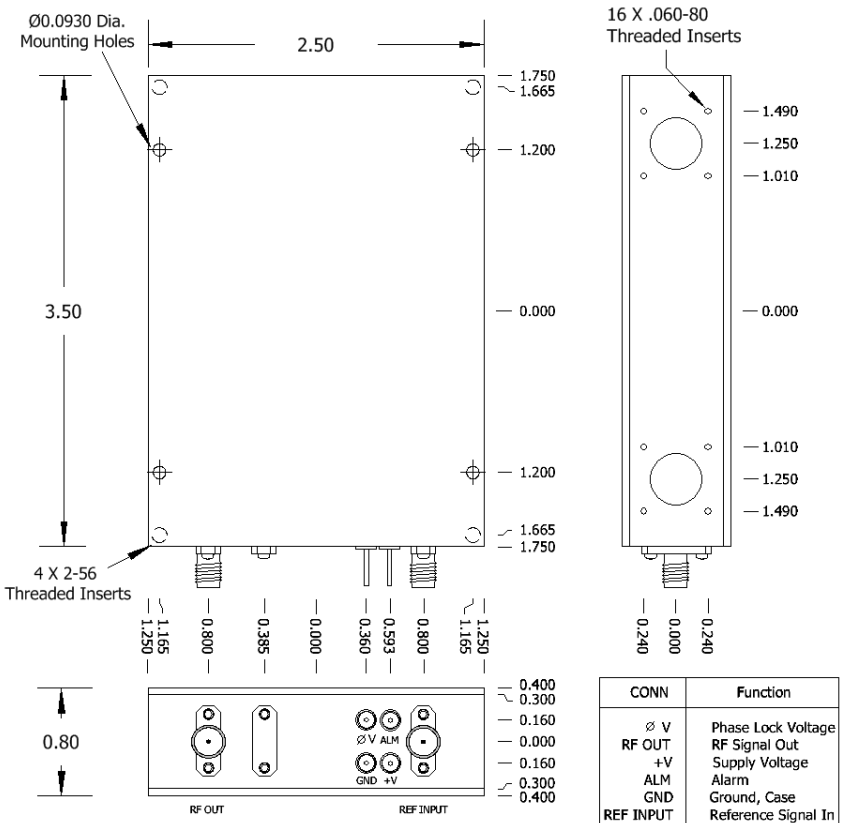
REV	DATE	REVISION RECORD	DWN	AUTH
-	01-26-12	Initial Release	PAC	
A	02-07-14	Close-In noise	Liz	

INPUT
Frequency
10 MHz, ±2 x 10^{-7}
Level
+7 dBm ±5 dB into 50 Ohms
OUTPUT
Frequency
10 MHz
Level
+13 dBm ±2 dB into 50 ohms
STABILITY
Output Phase Noise L(f)
Free-Running

10 Hz	-138 dBc/Hz
100 Hz	-160 dBc/Hz
1 kHz	-172 dBc/Hz
10 kHz	-174 dBc/Hz

Aging
±1 x 10^{-7} per year after 30 days operating, typical
Temperature Stability
±1 x 10^{-8} free-running from 0 to +50°C, (Ref. +25°C)
Harmonics
-30 dBc
Sub-Harmonics
-50 dBc
PLL Divider 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
Nickel-plated machined aluminum housing
Mounting
Shock mount patterns on sides
Through holes, 4 places
Threaded inserts on base, 4 places
POWER REQUIREMENTS
Supply Voltage
+15 VDC ±5%
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: < 1 Hz
Type 2 Loop, < 5 minutes
to ±1 x 10^{-9} of input
CRYSTAL
Type
10 MHz SC-cut
OTHER
Test Data
Output Level
Phase Noise (free-running)
Temperature Stability (free-running)
Harmonics, PLL Products, Spurious



CONN	Function
Ø 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:
10 MHz-SC ULN Phase Lock Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-25524	**A**	**02-07-14**		501-10136B

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