EXTERNAL REFERENCE INPUT

Frequency
10 MHz

Level
+1 to +15 dBm into 50 ohms

OUTPUT

Frequency
10 MHz

Level
+13 dBm ±2 dB into 50 ohms

STABILITY

Aging
5×10^{-10} /day after 30 days operating
5×10^{-8}/year, second year, typical

Phase Noise L(f), unlocked

10 Hz	-130 dBc/Hz
100 Hz	-155 dBc/Hz
1 KHz	-165 dBc/Hz

Temperature Stability
$\pm 1 \times 10^{-8}$, 0° to +50°C (Ref +25°C), unlocked

Frequency Accuracy
$\pm 5 \times 10^{-8}$ at time of shipment (+25°C)

Type 2 Loop Characteristics
Target BW: ≤ 1 Hz
<5 minute to within $\pm 1 \times 10^{-9}$ of input

SPECTRAL PURITY

Harmonics
≤ -30 dBc

PLL Divider Products
≤ -60 dBc

Spurious
≤ -80 dBc, excluding power supply line related spurs

MECHANICAL

Dimensions
2.375" x 2.750" x 1.1" housing with bracket, mounting holes, Diam. 0.125"

Connectors
SMA Output, SMA Input, Feedthru capacitors

Packaging
Solder sealed steel can

POWER REQUIREMENTS

Warm-Up Power
<6 Watts for 5 minutes

Total Power
<4 Watts at +25°C

Supply Voltage
+15 VDC ±5%

ADJUSTMENT

Mechanical, for Frequency Accuracy
$\pm 5 \times 10^{-7}$, typical

CRYSTAL

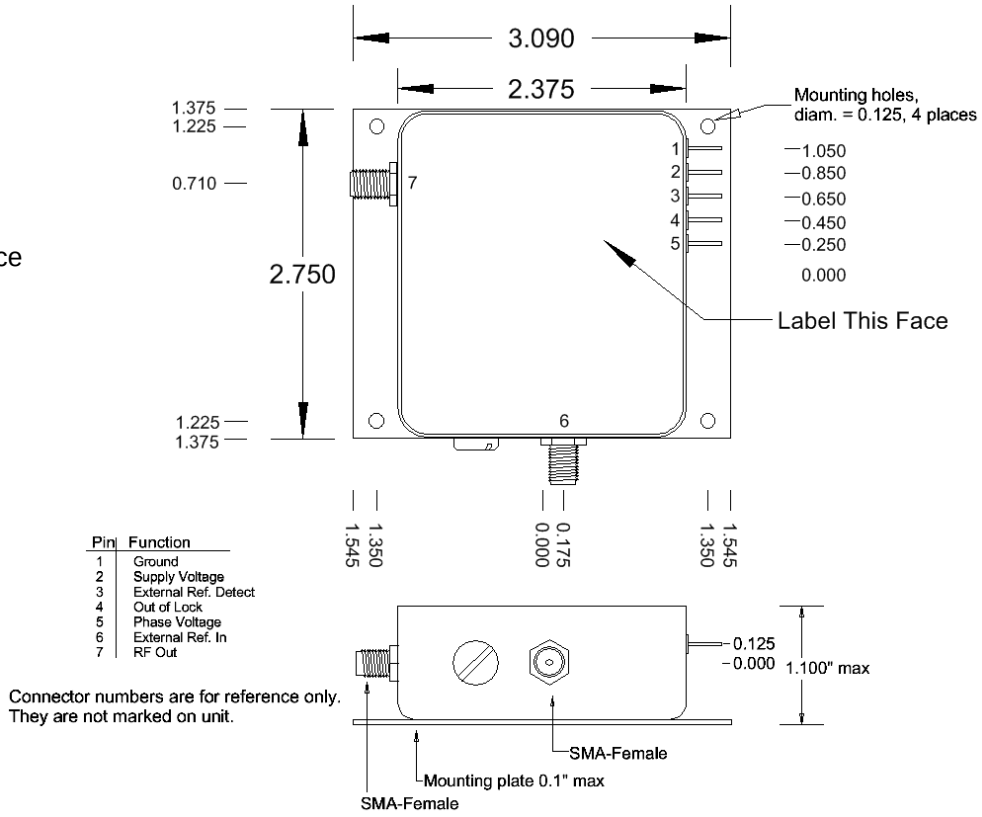
Type
10 MHz SC-cut

STATUS BITS

External Reference Loss
TTL, Low = loss of reference Oscillator will "self " center when reference is lost.

Out-of-Lock Alarm
TTL, High = Locked

REV	DATE	REVISION RECORD	DWN	AUTH
-	11-05-14	Initial Release	PAC	
A	12-30-14	Added spectral purity specs; Lock Alarm	PAC	



Pin	Function
1	Ground
2	Supply Voltage
3	External Ref. Detect
4	Out of Lock
5	Phase Voltage
6	External Ref. In
7	RF Out

Connector numbers are for reference only. They are not marked on unit.

Wenzel Associates, Inc.
Austin, Texas

Title:
10 MHz-SC Phase Locked Crystal Oscillator

P/N:	Rev:	Date:	Drawn:	Ref:
501-28561	**A**	**12-30-14**		501-09815g

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