

REV	DATE	REVISION RECORD	DWN	AUTH
-	04-19-11	Initial Release	PAC	
A	08-28-12	Drawing; Bandwidth	PAC	

INPUT

Frequency

10 MHz, $\pm 1 \times 10^{-7}$

Level

+7 dBm ± 5 dB into 50 ohms

OUTPUT

Frequency

80 MHz

Level

+13 dBm ± 2 dB into 50 ohms

STABILITY

Output Phase Noise L(f)
(Free-Running)

100 Hz -128 dBc/Hz
 1 kHz -155 dBc/Hz
 10 kHz -170 dBc/Hz
 100 kHz -171 dBc/Hz

Aging

$\pm 1 \times 10^{-6}$ per year after 30 days
 operating, typical

Temperature Stability

$\pm 5 \times 10^{-7}$ free-running from 0 to +50°C,
 (Ref. +25°C)

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

Harmonics

≤ -30 dBc

Sub-Harmonics

≤ -50 dBc

PLL Divider Products

≤ -60 dBc

Spurious

≤ -70 dBc, excluding power
 supply line related spurs

MECHANICAL

Dimensions

2.5 x 3.5 x 0.8"

Connectors

SMA(f)'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

Tapped holes on sides, 16 places
 Through holes, 4 places
 Threaded inserts on base, 4 places

POWER REQUIREMENTS

Supply Voltage

+15 VDC $\pm 5\%$

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: < 5 Hz
 Type 2 Loop

CRYSTAL

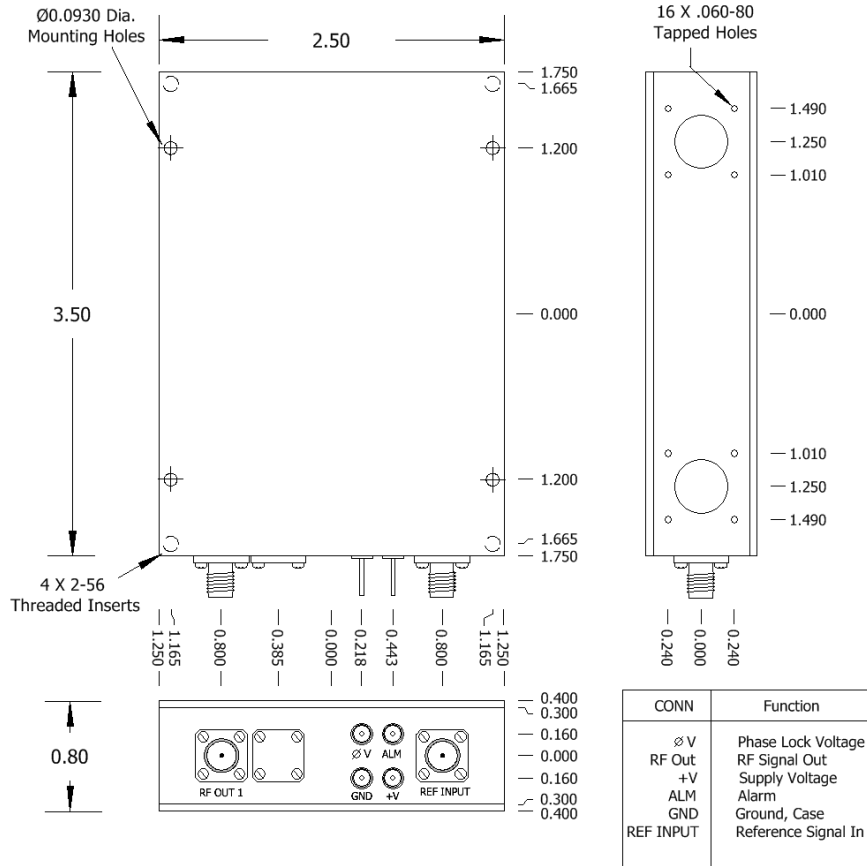
Type


80 MHz SC-cut

OTHER

Test Data

Output Level
 Phase Noise (free-running)
 Temperature Stability (free-running)
 Harmonics, PLL Products, Spurious




Wenzel Associates, Inc.
 Austin, Texas

Title:
Standard 80 MHz-SC Phase Lock Crystal Oscillator

P/N: 501-14057	Rev: A	Date: 08-28-12	Drawn:	Ref: SPR 14160b
Tolerances: (except as noted) Dimensions are in inches		0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821

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