

INPUT

Frequency

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

Level

+7 dBm ± 5 dB into 50 ohms

OUTPUT

Frequency

160 MHz

Level

+10 dBm ± 2 dB into 50 ohms

STABILITY

Output Phase Noise L(f)

(Free-Running)

100 Hz -120 dBc/Hz

1 kHz -147 dBc/Hz

10 kHz -162 dBc/Hz

100 kHz -163 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

SPECTRAL PURITY

Harmonics

≤ -30 dBc

Sub-Harmonics and products of 100 MHz

≤ -50 dBc

PLL Divider Products

≤ -60 dBc

Spurious

≤ -70 dBc

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

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

≤ 10 Watts at start-up for 5 minutes
at +25°C

Total Power

≤ 7 Watts at steady state +25°C

ADJUSTMENT

Loop BW

Target Bandwidth: ≤ 5 Hz

Type 2 Loop

CRYSTAL

Type

80 MHz SC-cut (w/x2 stage)

OTHER

Test Data

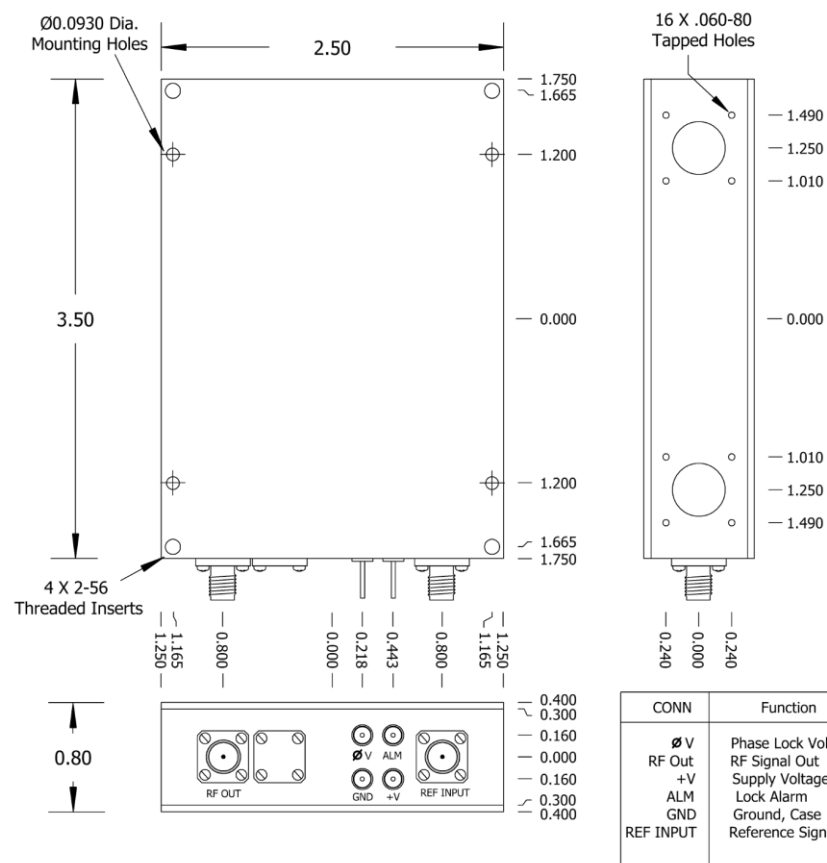
Output Level

Phase Noise (free-running)

Temperature Stability (free-running)

Harmonics, PLL Products, Spurious

REV	DATE	REVISION RECORD	DWN	AUTH
-	10-08-12	Initial Release	Liz/PC	



Wenzel Associates, Inc.

Austin, Texas

Title:

160 MHz-SC Phase Lock Crystal Oscillator

P/N:

501-26345

Rev:

-

Date:

10-08-12

Drawn:

Ref:

SPR

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:
 ± 0.030 "

0.XXX Dec:
 ± 0.010 "

FSCM:
62821

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