

OUTPUT Frequency

10 MHz

Level

+13 dBm ± 2 dB into 50 ohms

STABILITY

Aging

$\pm 5 \times 10^{-10}$ per day at time of shipment

2×10^{-8} per year, typical over 15 years

Phase Noise L(f)

Static and Dynamic (typical)

1 Hz -110 dBc/Hz

10 Hz -135 dBc/Hz

100 Hz -155 dBc/Hz

300 Hz -160 dBc/Hz

1 kHz -165 dBc/Hz

10 kHz -165 dBc/Hz

G-Sensitivity (10 Hz, typical)

2.6e-11/g per axis

Temperature Stability

$\pm 1 \times 10^{-7}$, +10° to +60°C (Ref +25°C)

Normal operating temp, +22°C

Harmonics,

-30 dBc

Spurious

-75 dBc

MECHANICAL

Dimensions

5 x 6 x 2.7"

Connectors

SMA for RF Out & Electrical Tuning

Male DB 9 Connector for DC & BIT

Packaging

Machined Aluminum enclosure

POWER REQUIREMENTS

Warm-Up Power

≤ 18 Watts for 10 minutes, typical

Total Steady-State Power

≤ 13 Watts, 10 minutes after turn-on

Supply Voltage

+15 VDC

ADJUSTMENT

Electrical Tuning Sensitivity

$> \pm 5 \times 10^{-7}$ min, 0 to +10 VDC,

5% linearity

Electrical Tuning Bandwidth

> 50 kHz

OTHER

Vibration Test Profile

Vibe Freq Hz (g^2 /Hz)

10 .0001

350 .0001

500 .00005

1000 5e-6

Design

Vibration isolation/compensation system for best noise under vibration

Utilizes Bootstrap Technology

Test Data

Current warm up, current steady state, RF output power, harmonics, Spurious, output frequency offset, temperature stability, phase noise under vibration

Marking

Marking on all I/O

RF Out, +15 VDC, GND, ET

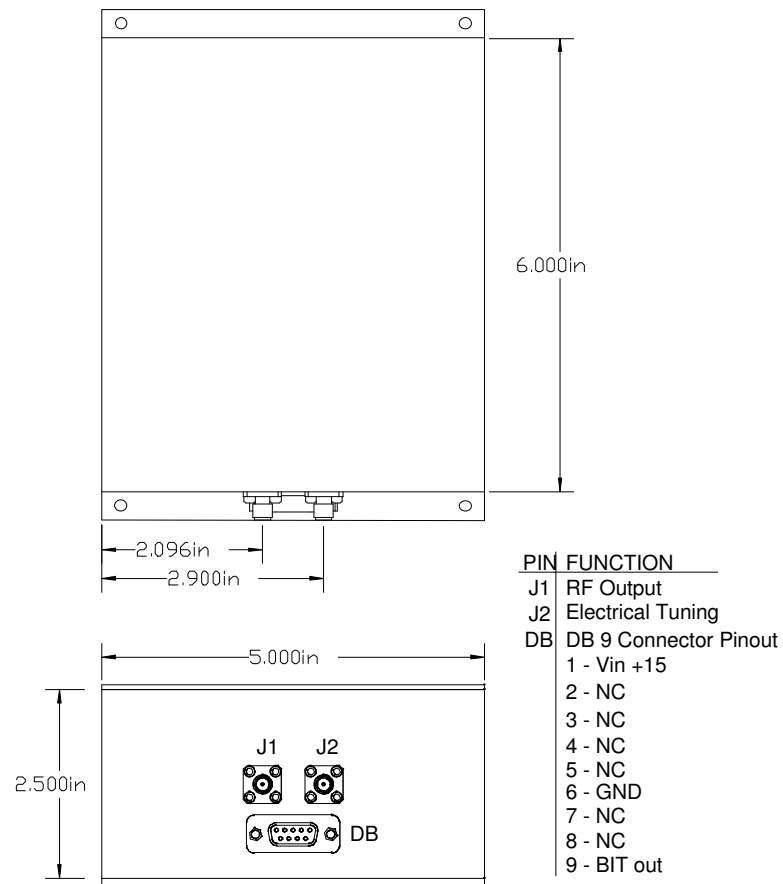
CRYSTAL

Type

10 MHz SC-cut, TO-8

Selected to -140 crystals, static

REV	DATE	REVISION RECORD	DWN	AUTH
-	02-18-14	Draft	Liz/PAC	
A	04-16-14	Noise	Liz	
B	04-17-14	G-sense, ET BW	Liz	



Wenzel Associates, Inc.

Austin, Texas

Title:

10 MHz Bootstrap Low Vibration Oscillator

P/N:

501-27851

Rev:

B

Date:

04-17-14

Drawn:

Ref:

16177e

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

± 0.010 "

FSCM:

62821

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