

OUTPUTS

Frequency 1

(1) 5 MHz

Level

+10 dBm ± 2 dB into 50 ohms

Frequency 2

(1) 100 MHz

Level

+10 dBm ± 2 dB into 50 ohms

STABILITY

Aging

5×10^{-10} per day after 30 days
operating, typical

Phase Noise L(f)

	5 MHz	100 MHz
10 Hz	-150 dBc/Hz	-120 dBc/Hz
100 Hz	-168 dBc/Hz	-135 dBc/Hz
300 Hz	-170 dBc/Hz	-140 dBc/Hz
1 KHz	-172 dBc/Hz	-155 dBc/Hz
10 KHz	-175 dBc/Hz	-174 dBc/Hz
100 KHz	-175 dBc/Hz	-174 dBc/Hz

Temperature Stability

$\pm 2 \times 10^{-8}$, 0° to +50°C (Ref +25°C)

Harmonics

≤ -25 dBc

Sub-Harmonics and related products

≤ -50 dBc

Spurious

≤ -80 , excluding power supply line
related spurs

Warm-Up

≤ 15 min to $\pm 1 \times 10^{-6}$ of 24-hour
frequency, target 5 min.

MECHANICAL

Dimensions

5 x 6 x 2.62"

Connectors

SMA(f) and feedthru capacitors

Packaging

Aluminum housing with extended
mounting cover

Mounting

0.156" diameter mounting holes,
4 places

POWER REQUIREMENTS

Warm-Up Power

≤ 18.5 Watts max for 5 minutes

Total Power

≤ 14 Watts at +25°C

Supply Voltage

+15 VDC $\pm 5\%$

ADJUSTMENT

Electrical Tuning

$\pm 1.5 \times 10^{-6}$, 0 to +10 VDC

CRYSTAL

Type

SC-cut

OTHER

Marking

Label connectors

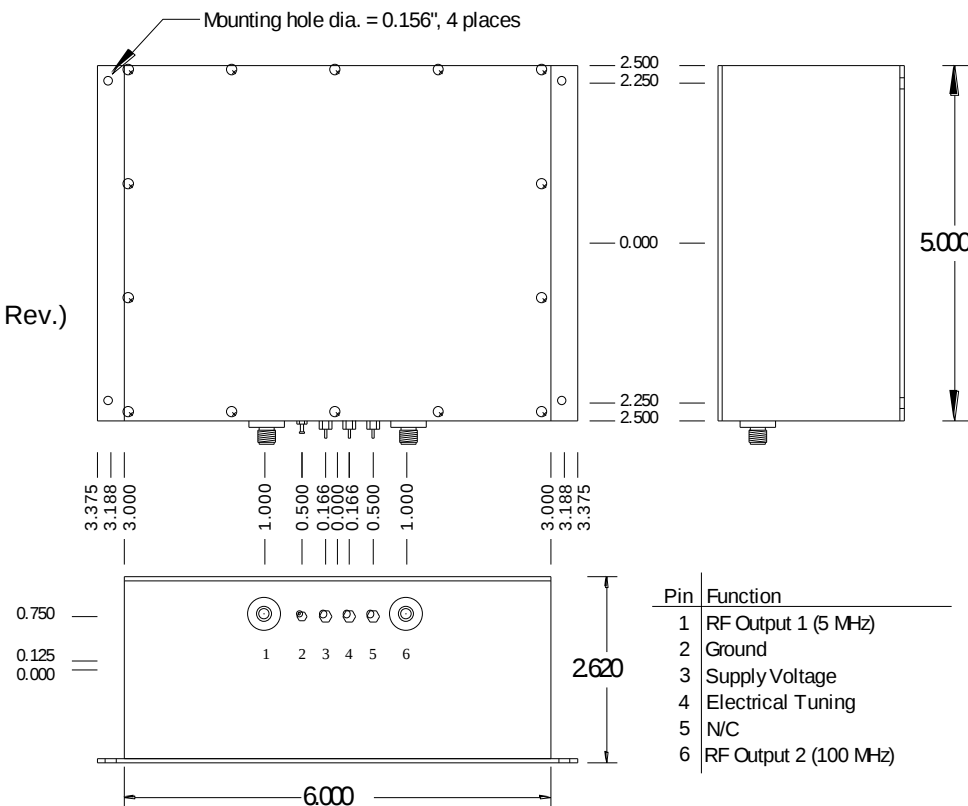
Label

Wenzel P/N: 501-17998 (Current Rev.)
5 MHz and 100 MHz
+15 VDC
Serial # - Date Code

Test Data

Output Levels
Phase Noise
Temperature Stability
Harmonics, Subs, Spurious
Current – Warm-up and Total
Tuning

REV	DATE	REVISION RECORD	DWN	AUTH
-	02-06-08	Draft	VG	
A	06-25-08	Phase Noise, Spurious; Test Data	PAC	



Wenzel Associates, Inc.

Austin, Texas

Title:

5 and 100 MHz-SC Sorcerer Frequency Source

P/N:

501-17998

Rev:

A

Date:

06-25-08

Drawn:

Ref:

15465B

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

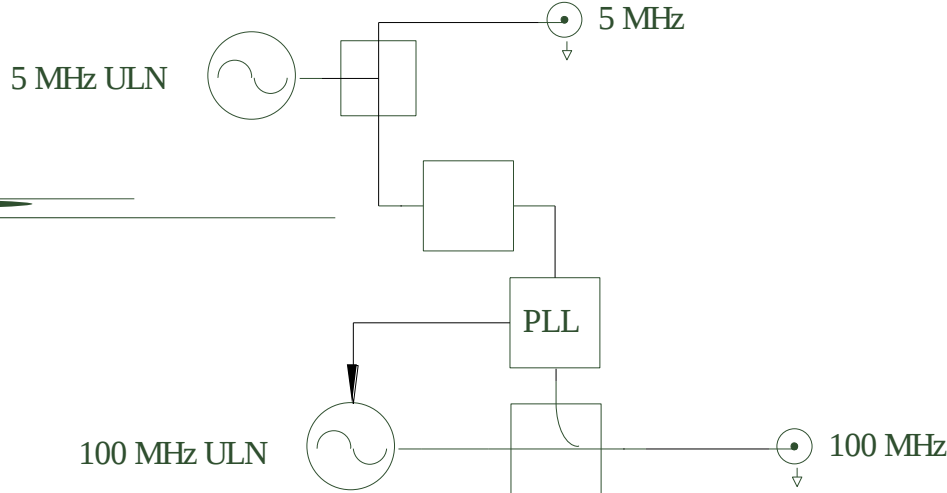
± 0.010 "

FSCM:

62821

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REV	DATE	REVISION RECORD	DWN	AUTH
-	02-06-08	Draft	VG	
A	06-25-08	Phase Noise, Spurious; Test Data	PAC	



Wenzel Associates, Inc. Austin, Texas				
Title: 5 and 100 MHz-SC Sorcerer Frequency Source				
P/N: 501-17998	Rev: A	Date: 06-25-08	Drawn:	Ref: 15465B
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 2 of 2