

OUTPUT

Frequency

5 MHz and 100 MHz

Level

5 MHz: +10 dBm ±2 dB into 50 ohms
 100 MHz: +10 dBm ±2 dB into 50 ohms

STABILITY

Aging

5 x 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

±2 x 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 ±1 x 10⁻⁶ of 24-hour
 frequency, target 5 min.

MECHANICAL

Dimensions

4.75 x 3.5 x 1"

Connectors

SMA(f) and feedthru capacitors

Packaging / Finish

Nickel-plated machined aluminum
 housing

Mounting

2-56 threaded insets, 6 places

POWER REQUIREMENTS

Warm-Up Power

≤ 15 Watts max for 5 minutes

Total Power

≤ 10 Watts at +25°C

Supply Voltage

+15 VDC ±5%

ADJUSTMENT

Mechanical Tuning (5 MHz)

±2 x 10⁻⁷

Electrical Tuning (5 MHz)

±1.5 x 10⁻⁶, 0 to +10 VDC
 Negative slope

Loop Bandwidth (Internal)

Target Loop BW 300 Hz

Crystal Type

SC-cut

OTHER

Marking

Label connectors

Label

Wenzel P/N: 501-19250 (Current Rev.)

5 MHz and 100 MHz

+15 VDC

Serial # - Date Code

Test Data

Output Levels

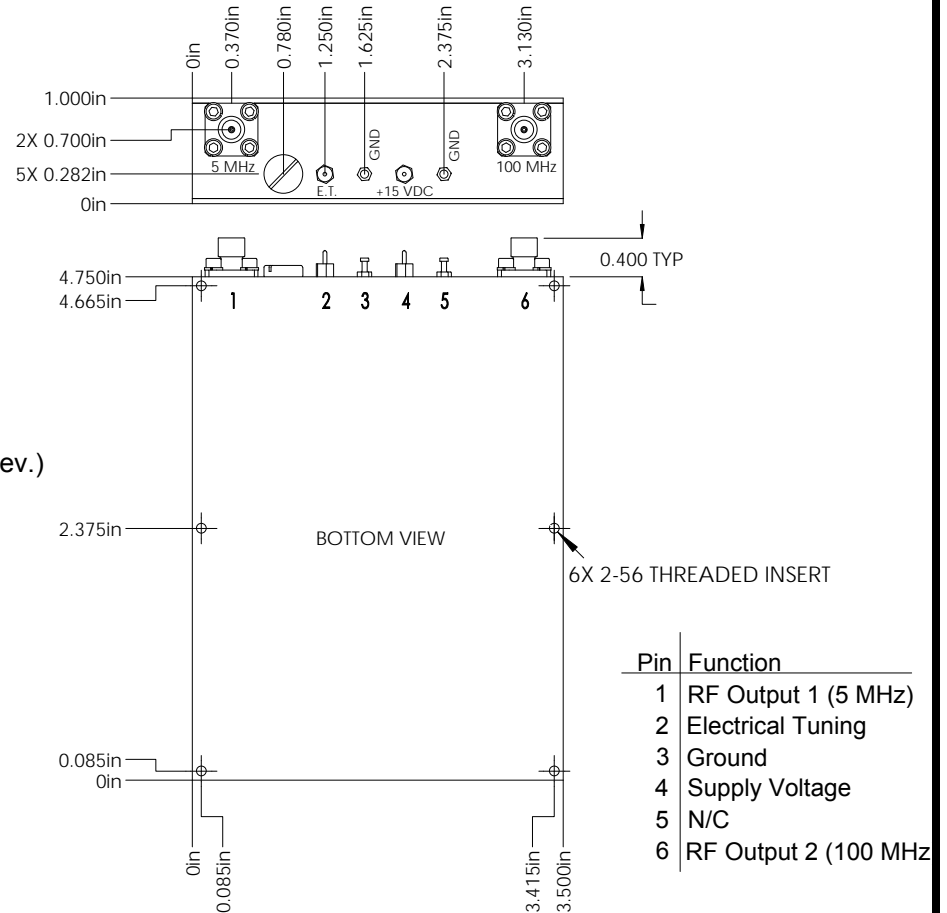
Phase Noise

Temperature Stability

Harmonics, Subs, Spurious

Current – Warm-up and Total
 Tuning

REV	DATE	REVISION RECORD	DWN	AUTH
-	06-13-08	Initial Release	PAC	
A	09-07-12	Loop BW	BH	LR
B	10-15-12	Loop BW change	BH	BB



Wenzel Associates, Inc.
 Austin, Texas

Title: **5 MHz and 100 MHz-SC Sorcerer II**

P/N: 501-19250	Rev: B	Date: 10-15-12	Drawn:	Ref: 500-18906
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Tolerances: (except as noted) Dimensions are in inches

0.XX Dec: ±0.030"	0.XXX Dec: ±0.010"	FSCM: 62821	Page 1 of 1
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