

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

5×10^{-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

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 $\pm 5\%$

ADJUSTMENT

Mechanical Tuning (5 MHz)

$\pm 2 \times 10^{-7}$

Electrical Tuning (5 MHz)

$\pm 1.5 \times 10^{-6}$, 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

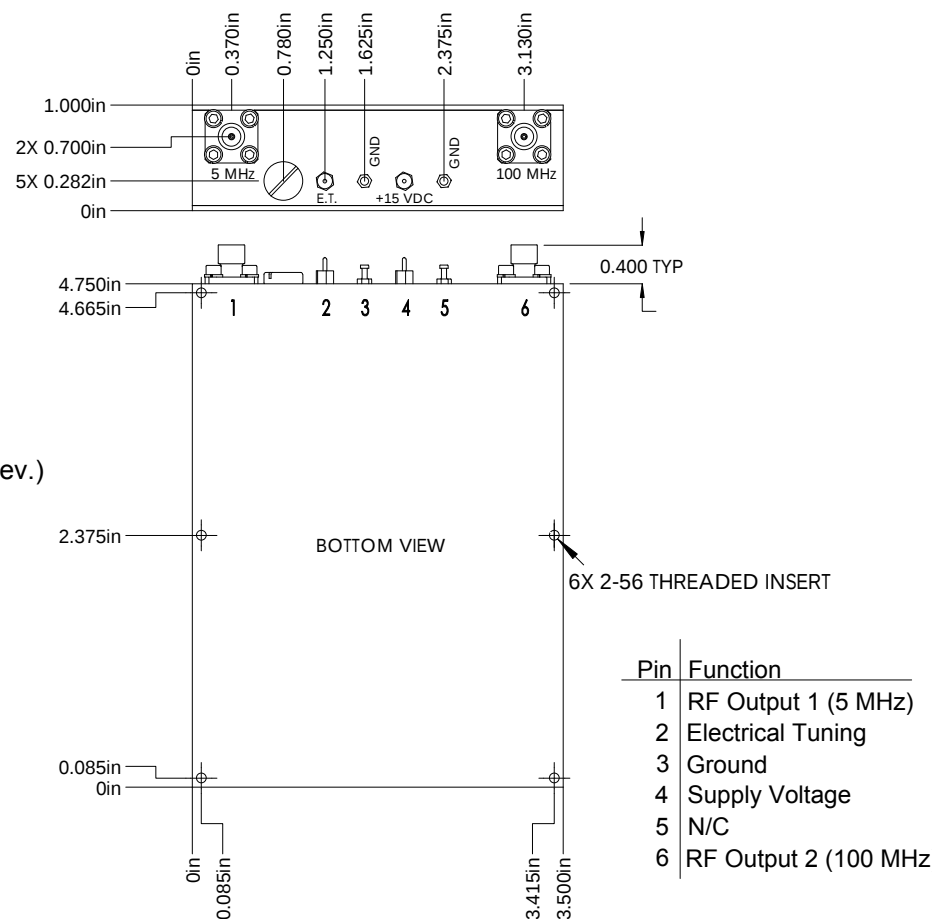
Temperature Stability

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

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

± 0.010 "

FSCM:

62821

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