

INPUT

Frequency

10 MHz

Level

+4 dBm to +15 dBm into 50 ohms

OUTPUT

Frequency

100 MHz, eight outputs

Level

+17 dBm min. into 50 ohms, each output

Port-to-Port Isolation

20 dB, min

STABILITY

Output Phase Noise L(f), Static

100 Hz -130 dBc/Hz

1 kHz -155 dBc/Hz

10 kHz -170 dBc/Hz

Aging

$\pm 1 \times 10^{-6}$ per year after 30 days operating,
typical

Temperature Stability

$\pm 5 \times 10^{-7}$, 0 to +55°C, (Ref. +25°C)

Harmonics

-30 dBc

Non-Harmonic Spurious, Goal

100 kHz -122 dBc

5 MHz -88 dBc

10 MHz -82 dBc

Phase Lock Alarm

TTL

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

LED (Red) indicator on front panel for out-of-lock condition.

MECHANICAL

Dimensions

19" rack mount, suitable for vibration

16.88 x 8 x 1.75"

Connectors

TNC flange mount (f) for RF signals

MS3470W12-10P for primary power

POWER REQUIREMENTS

Supply Voltage

+28 VDC

Warm-Up Power

< 27 Watts at start-up for 5
minutes at +25°C

Total Power

< 18 Watts at steady state
(Ref. +25°C)

SPECIAL

Airborne Application
Provide full shock mounting for
internal 100 MHz PLO, target
70 Hz resonant frequency

DC Connector

P/N: MS3470W12-10P

A Ground, Case

B Ground, Case

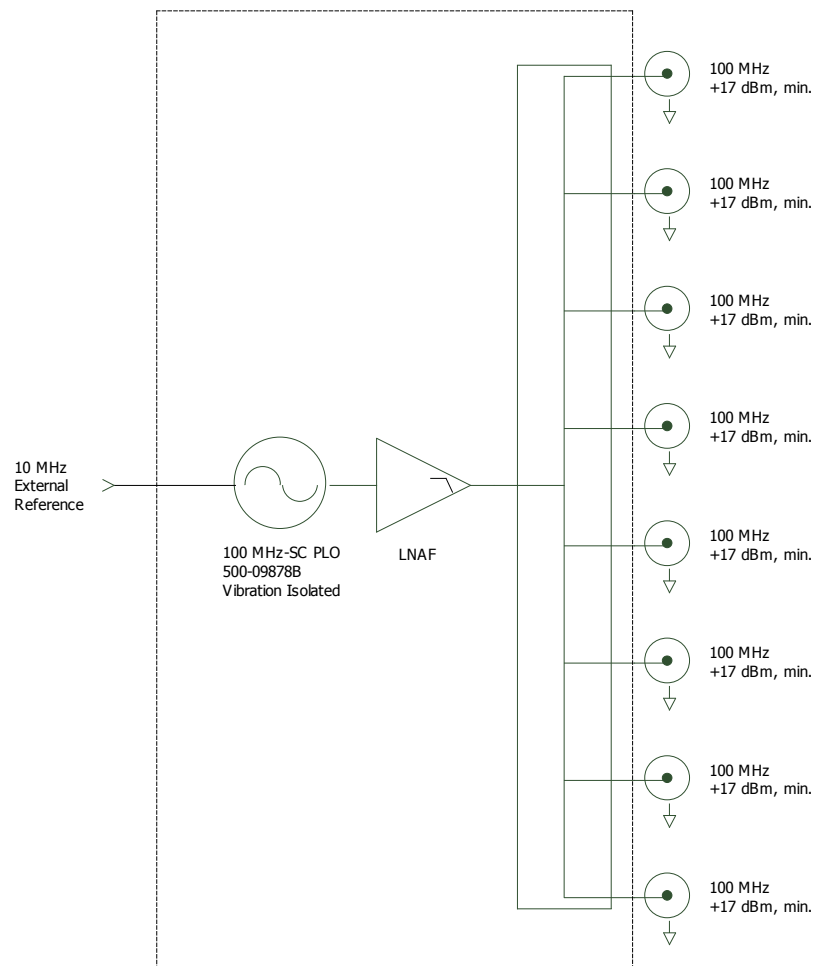
H Phase Lock Alarm (TTL)

J +28 VDC

TEST DATA

Warm Up Power, Total Power,
Output Frequency, Input
Frequency, Input VSWR,
Output VSWR, Output Level,
Output Isolation, Harmonics,
Non-Harmonic Spurious, Phase
Noise, Temperature Stability

REV	DATE	REVISION RECORD	DWN	AUTH
-	02-28-14	Initial Release	PAC	



Wenzel Associates, Inc.

Austin, Texas

Title:

100 MHz-SC PLO Reference Oscillator Assembly

P/N:

501-27896

Rev:

-

Date:

02-28-14

Drawn:

Ref:

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

± 0.030 "

0.XXX Dec:

± 0.010 "

FSCM:

62821

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