

Ultra Low Noise and high linearity Amplifier for L Band with GaAs pHEMT MMIC

NEW

AD6IW@AD6IW.COM

Features:

800 - 1800MHz

NF

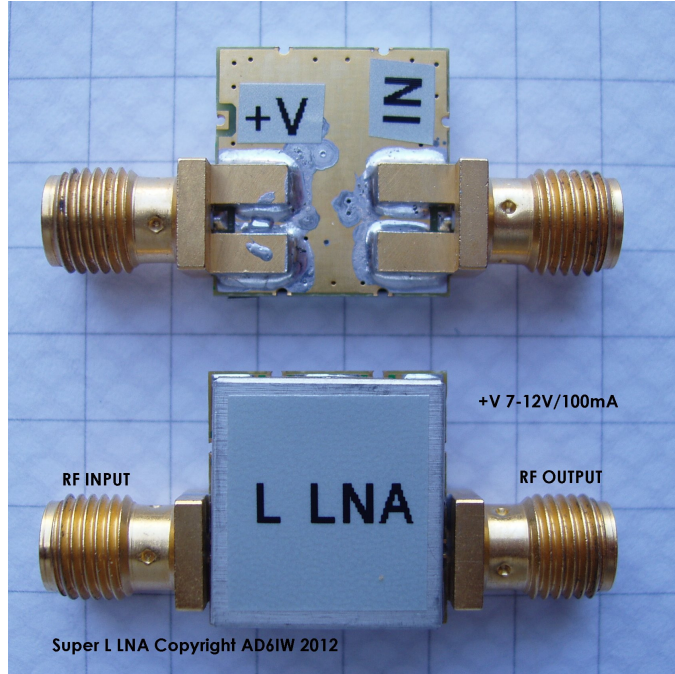
Noise Temp. 21 Kelvin
 0.3dB @ 1296MHz
 0.31dB @ 1420MHz
 0.32dB @ 1575MHz
 measured at 25 deg C

Gain

23dB +/- 1dB

IP3

High OIP3 performance
 +35dBm @ 1296MHz
 IIP3 +12dBm @ 1296MHz



Max input power

+24dBm

Supply voltage:

7 to 15V, 80-100mA

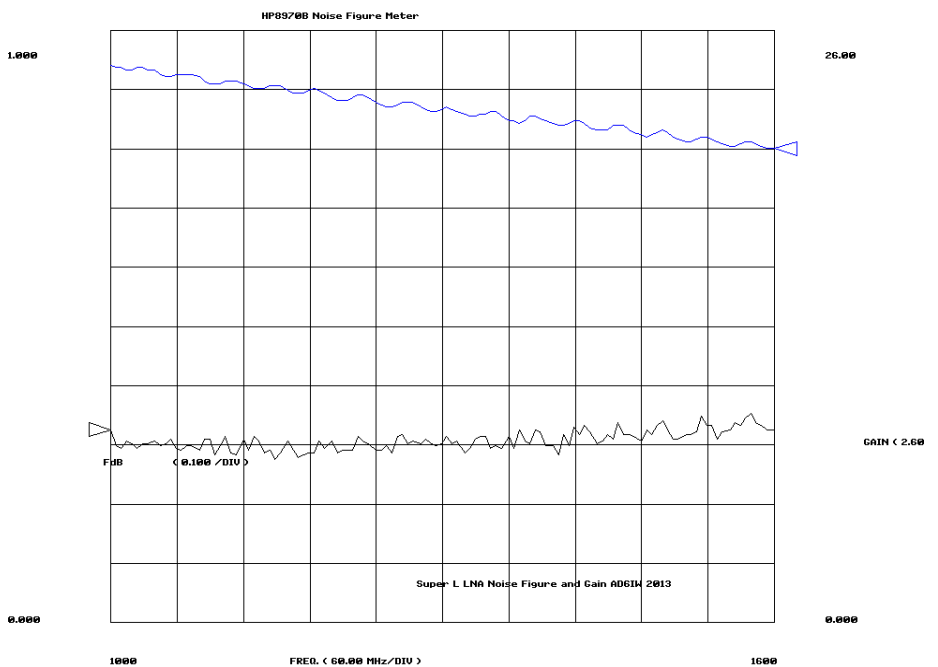
Built in voltage regulator *

Option: LPF, HPF, bias T

Unconditional stable LNA

Input RL >10dB

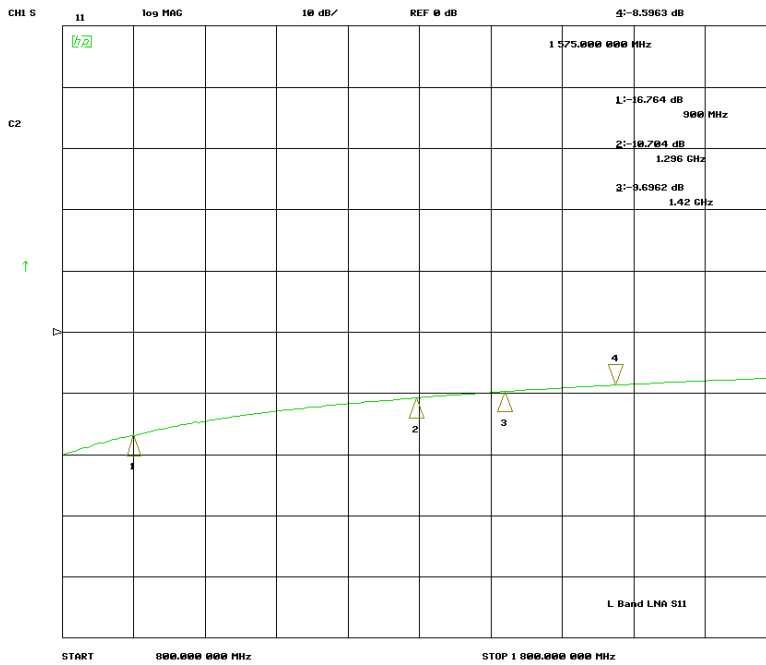
Output RL 20dB



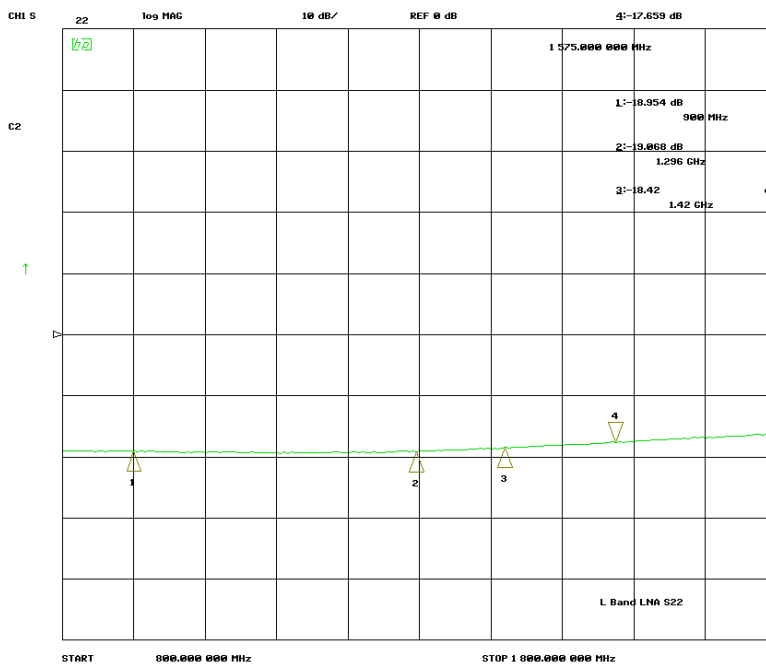
Noise Figure and Gain vs Frequency 1000 – 1600 MHz

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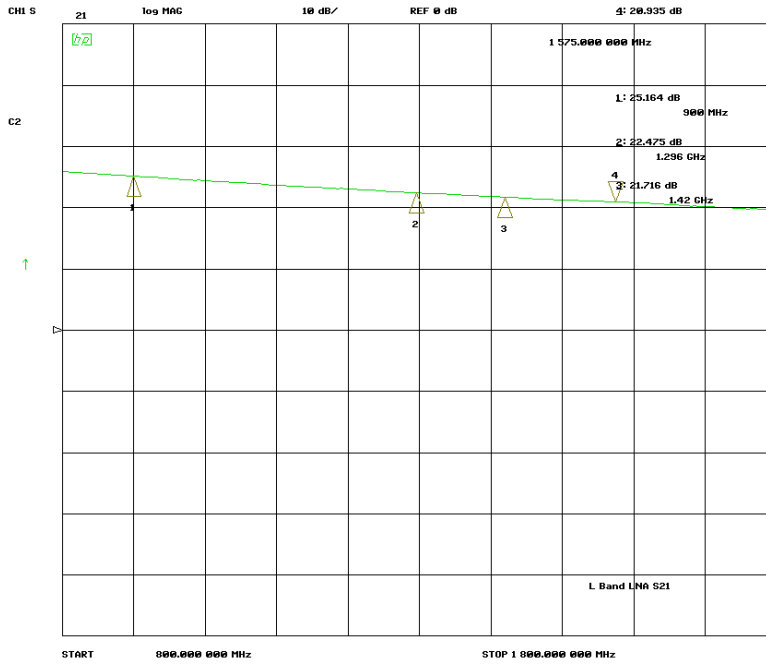
S11 Input Return Loss



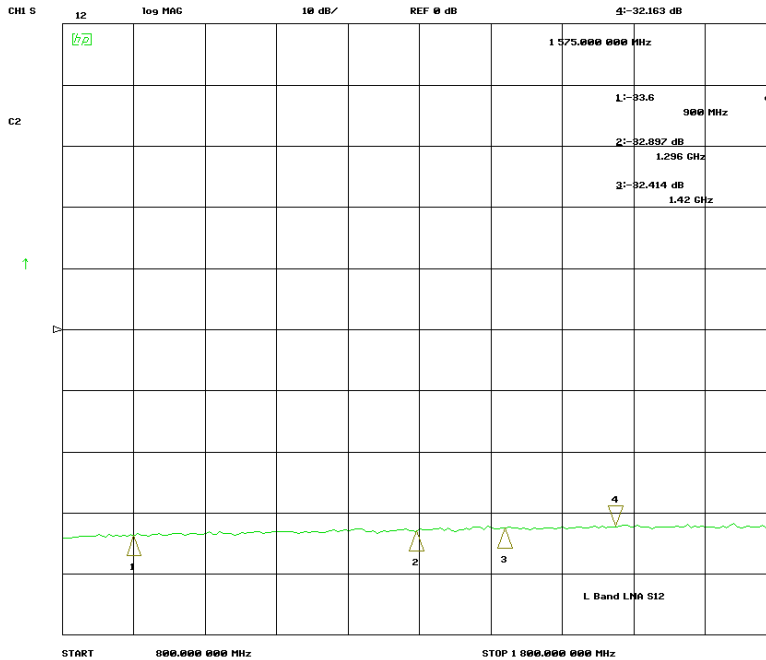
S22 Output Return Loss

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S21 Gain



S12 Isolation

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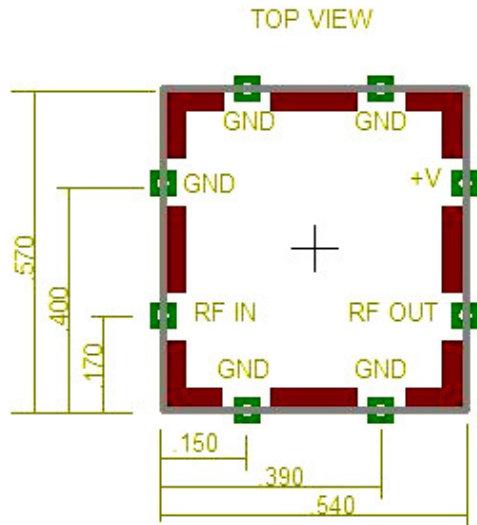
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Dimensions:

33 x 15 x 7mm SMA

15 x 15 x 3.7 mm Module

Both SMA and SMD Module for PCB mount versions available



SMD Module PCB footprint, size in inches

*NOTE

To keep LNA temperature low, and low noise figure it is recommended to:
Install LNA on small heat sink or chassis.

When supply voltage is 12V or higher install 56 Ohms $\frac{1}{2}$ W resistor in series with V+.