

Product features

- RF bandwidth: 4-8 GHz
- Noise Temperature: 32 K typical
- Noise Figure: 0.45 dB typical
- Gain: 42 dB
- DC-power: $V_{in}=5\text{ V}$, $I_{in}=50\text{ mA}$
- Single supply operation
- RF-connectors: female SMA
- DC-connector: nano 4-pin polarized connector
- Reverse polarity and overvoltage protection

Product description

LNF-LNR4_8ART is an ultra low noise amplifier operating in the 4-8 GHz frequency range. The LNA is packaged in a coaxial module using industry standard SMA connectors. The lightweight gold plated aluminum module measures 25.66*21.2*7.0 mm. InP HEMTs ensures lowest noise and power dissipation in the industry.

Absolute maximum ratings

Parameter	Min	Max
V_{in}	-20 V	20 V
RF Input drive level		0 dBm
DC voltage on RF input and output	-20V	20V

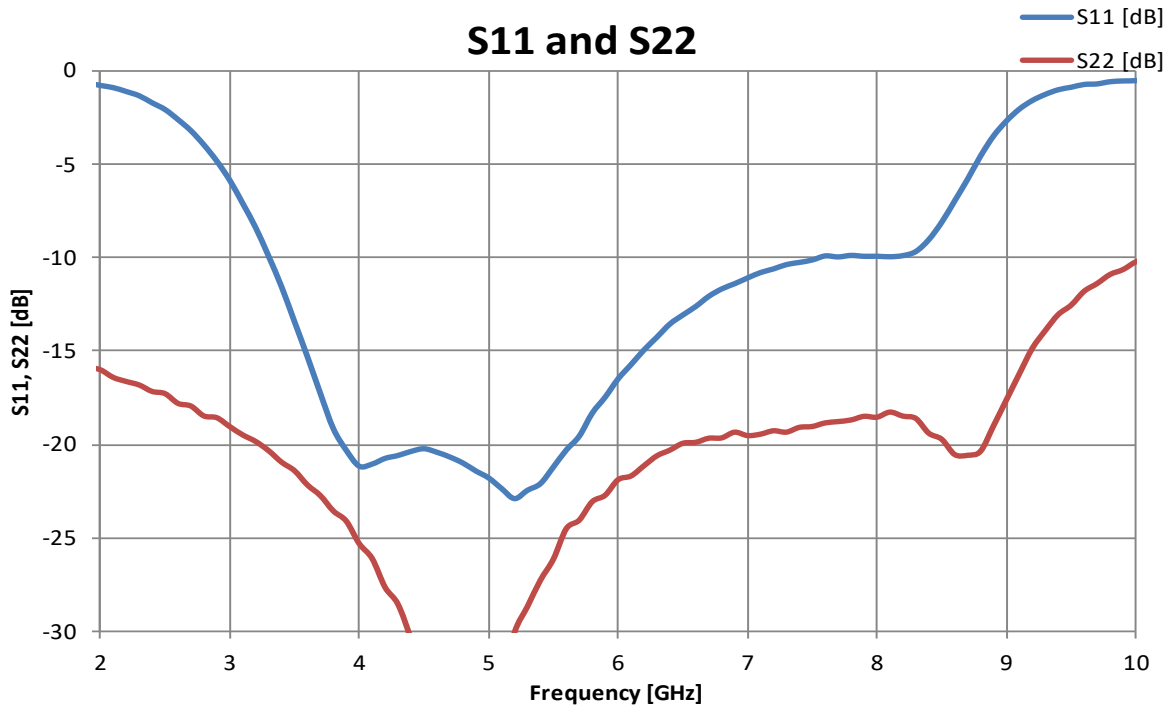
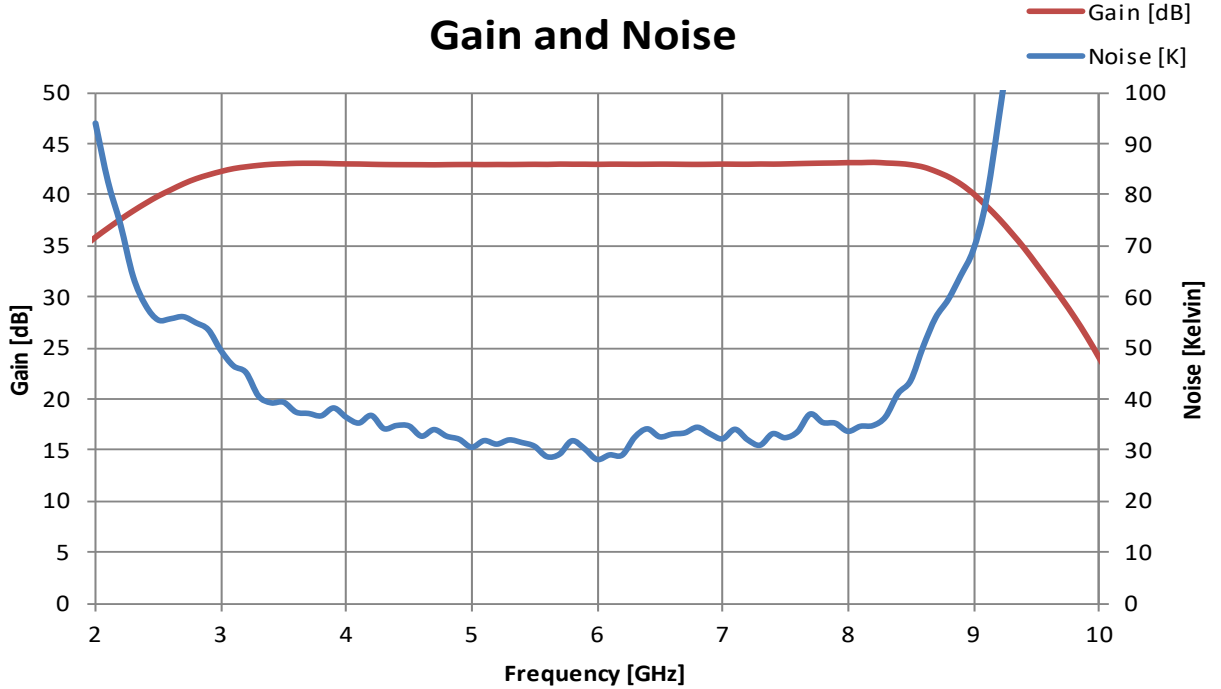
Typical RF Characteristics

Parameter	Test Condition	Value	Unit
Gain	4-8 GHz	42	dB
Noise Temperature	4-8 GHz	32	K
IRL	4-8 GHz	17	dB
ORL	4-8 GHz	17	dB
P_{1dB}	4-8 GHz	0	dBm
OIP3	4-8 GHz	≈9	dBm

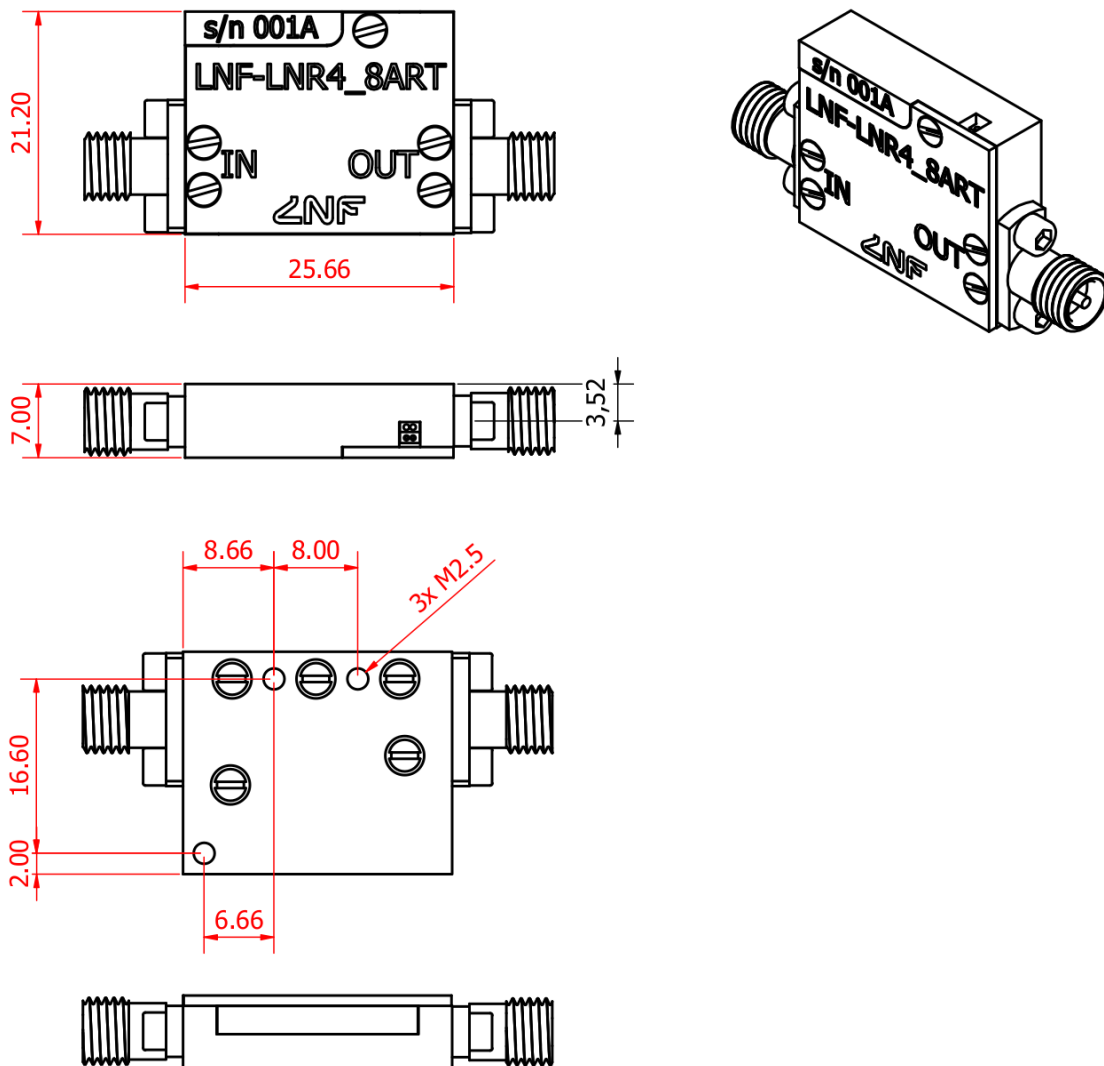
Typical DC Characteristics

Parameter	Value	Unit
V_{in}	5	V
I_{in}	50	mA
P_{dc}	250	mW

Measured typical data, $T_{amb}=296$ K



Drawings



Dimensions are in millimeters