



Absolute maximum ratings

Parameter	Min	Max
V_{ds}	-0.5 V	3 V
I_{ds}		100 mA
V_{gs}	-20 V	+20 V
RF Input drive level		-10 dBm
DC voltage on RF input and output	-30V	30V

Product features

- RF bandwidth: 1.5-3.5 GHz
- Noise Temperature: 1.6 K typical
- Noise Figure: 0.024 dB typical
- Gain: 25 dB
- DC-power: $V_d=0.50$ V, $I_d=11$ mA
- One gate and one drain supply only
- RF-connectors: female SMA
- DC-connector: 9-pin female Nano-D

Typical RF Characteristics

Parameter	Test Condition	Value	Unit
Gain	1.5-3.5 GHz	25	dB
Noise	1.5-3.5 GHz	1.6	K
IRL	1.5-3.5 GHz	11	dB
ORL	1.5-3.5 GHz	19	dB

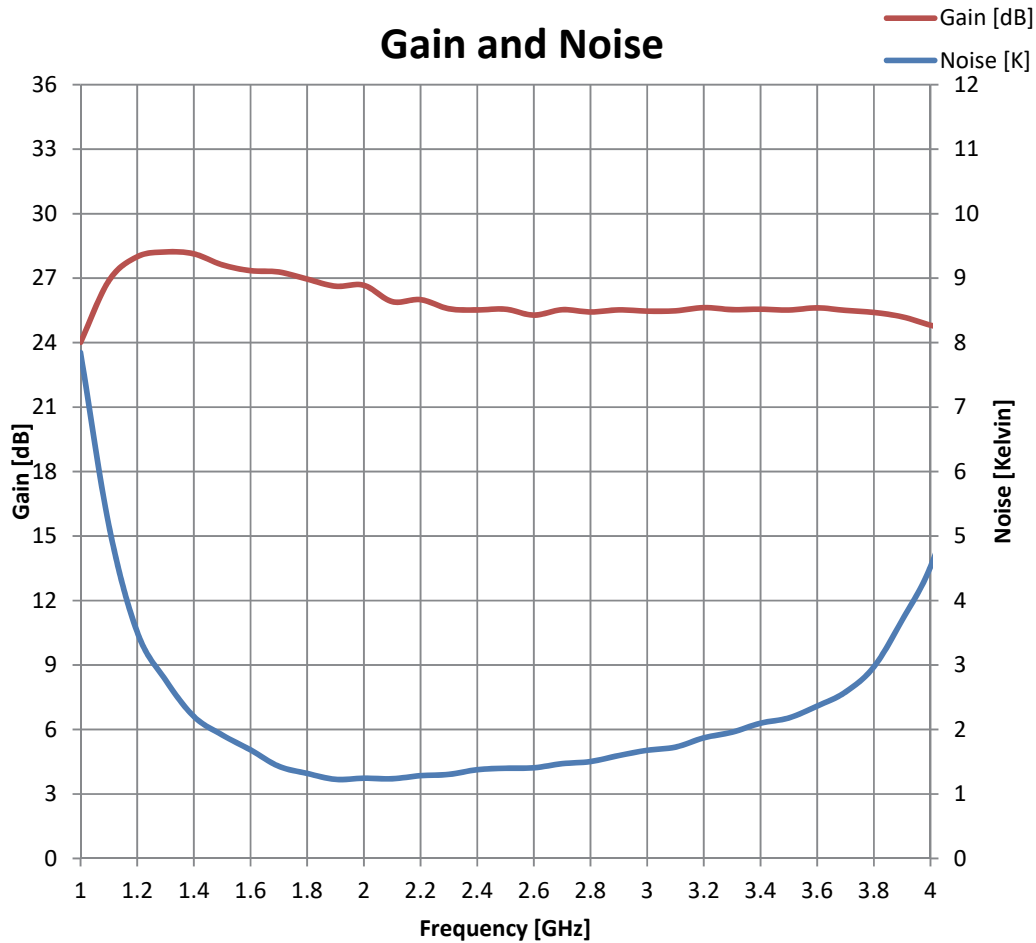
Product description

LNF-LNC1.5_3.5A is an ultra-low noise cryogenic amplifier operating in the 1.5-3.5 GHz frequency range. The LNA is packaged in a coaxial module using industry standard SMA and Nano-D connectors. The lightweight gold plated aluminum module measures 29.2*19.8*7.80 mm excluding the connectors.

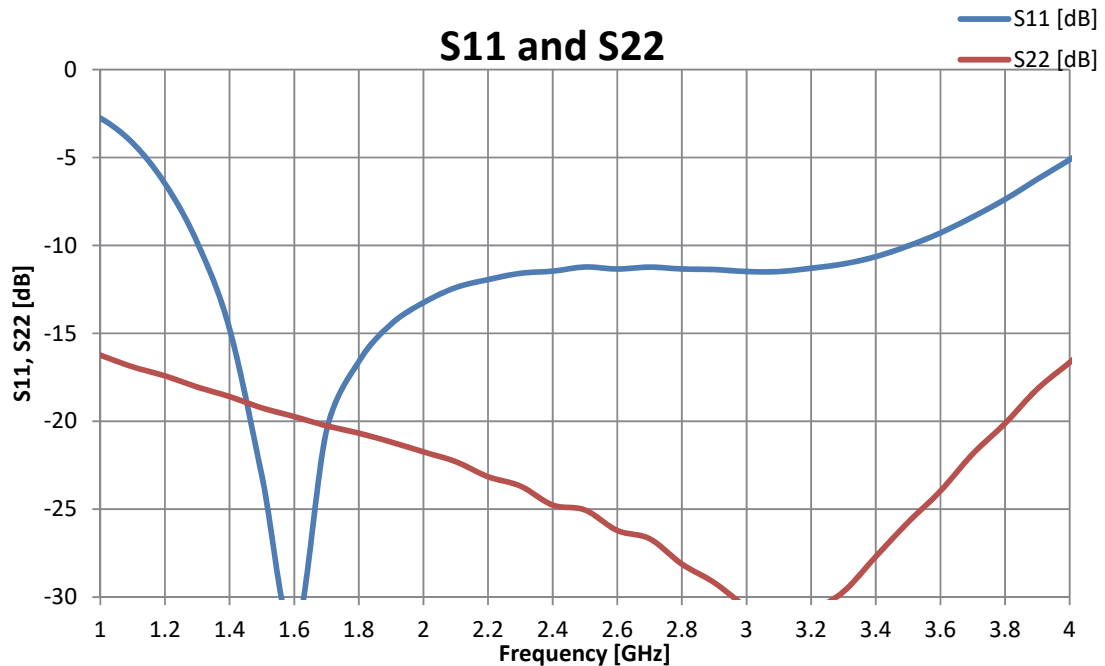
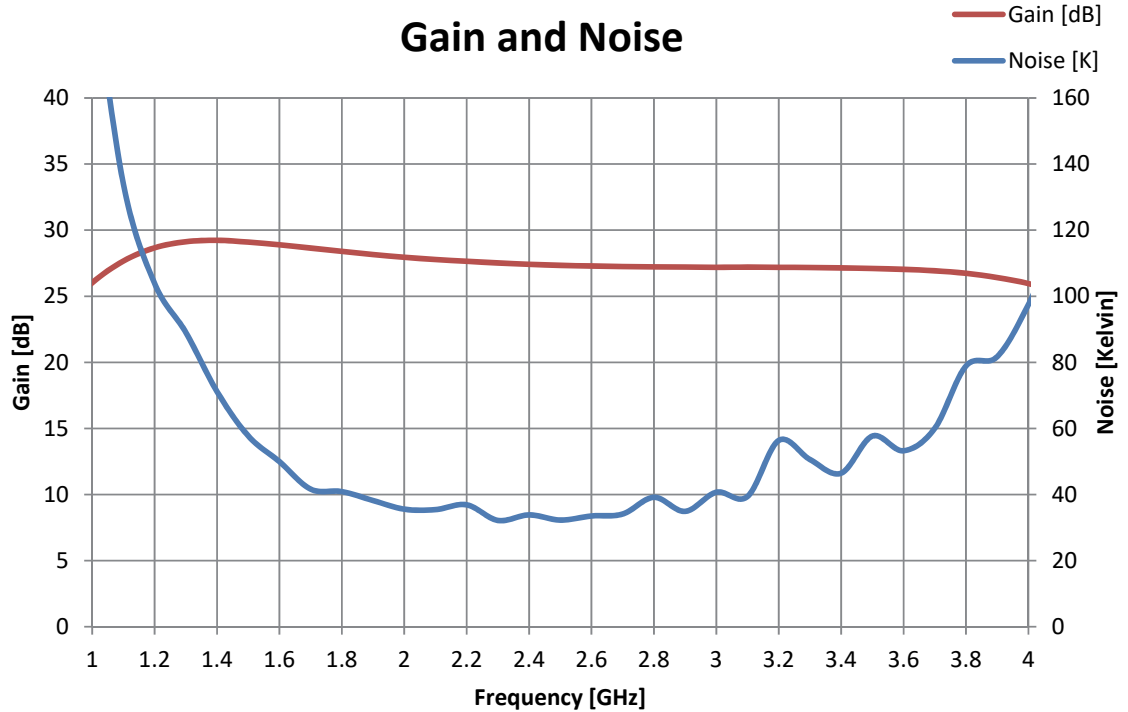
Typical DC Characteristics

Parameter	Value	Unit
V_{ds}	0.5	V
I_{ds}	11	mA
V_{gs}	+0.4	V
I_{gs}	36	μ A
P_{dc}	5.5	mW

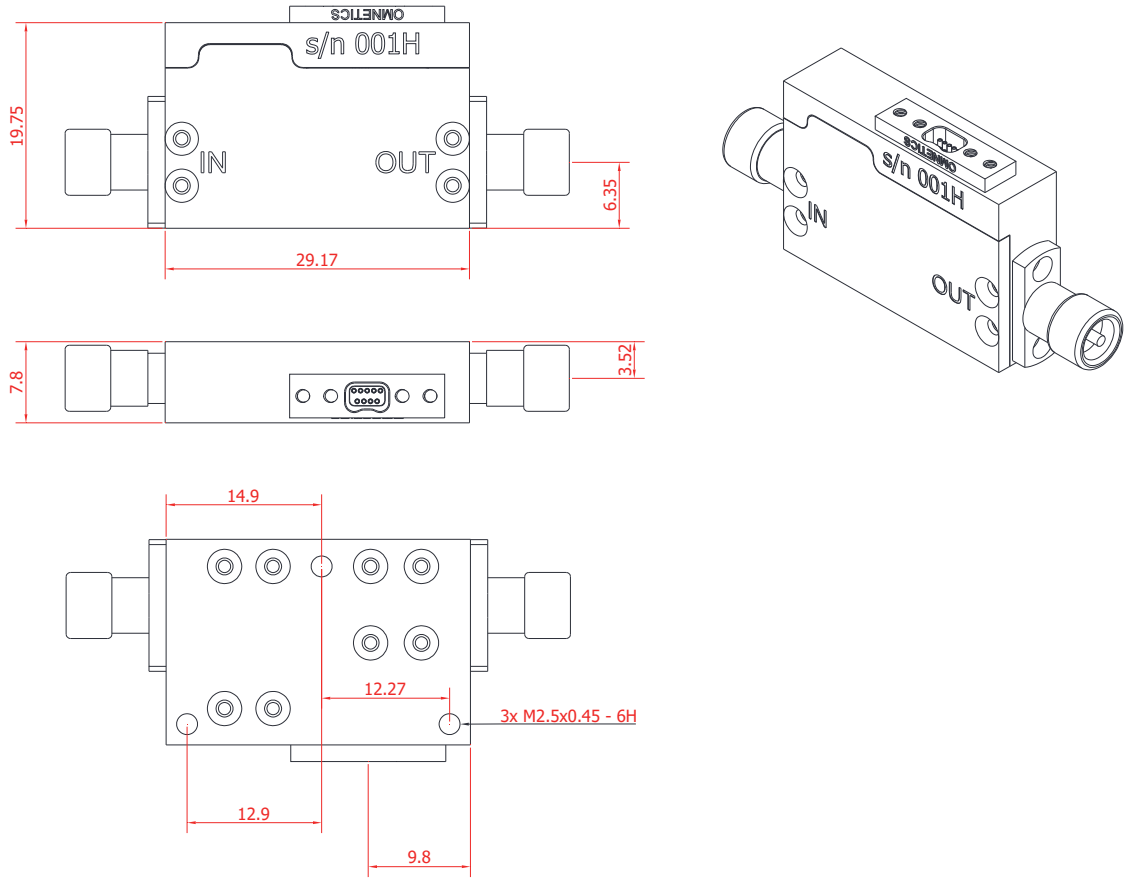
Measured typical data $T_{amb}=5\text{ K}$



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



Drawings



Dimensions are in millimeters