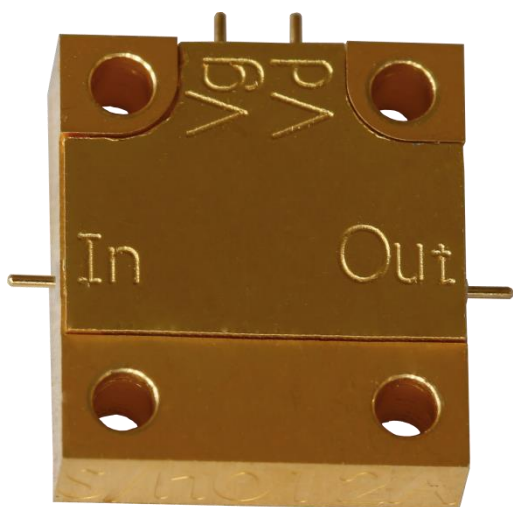


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Absolute maximum ratings

Parameter	Min	Max
V_{ds}	-0.5 V	2 V
I_{ds}		100 mA
V_{gs}	-20 V	+20 V
RF Input drive level		0 dBm

Product features

- RF bandwidth: 15-29 GHz
- Noise: 9.8K typical
- Gain: 27dB
- DC-power: $V_d=1.10V$ @ 6mA
- One gate and one drain supply only
- RF-connectors: $d=0.23$ mm pins
- DC-connector: $d=0.23$ mm pins

Typical RF Characteristics

Parameter	Test Condition	Value	Unit
Gain	15-29 GHz	27	dB
Noise	15-29 GHz	9.8	K
IRL	15-29 GHz	12	dB
ORL	15-29 GHz	17	dB
P_{1dB}	15-29 GHz	-7	dBm
OIP3	15-29 GHz	3	dBm

Product description

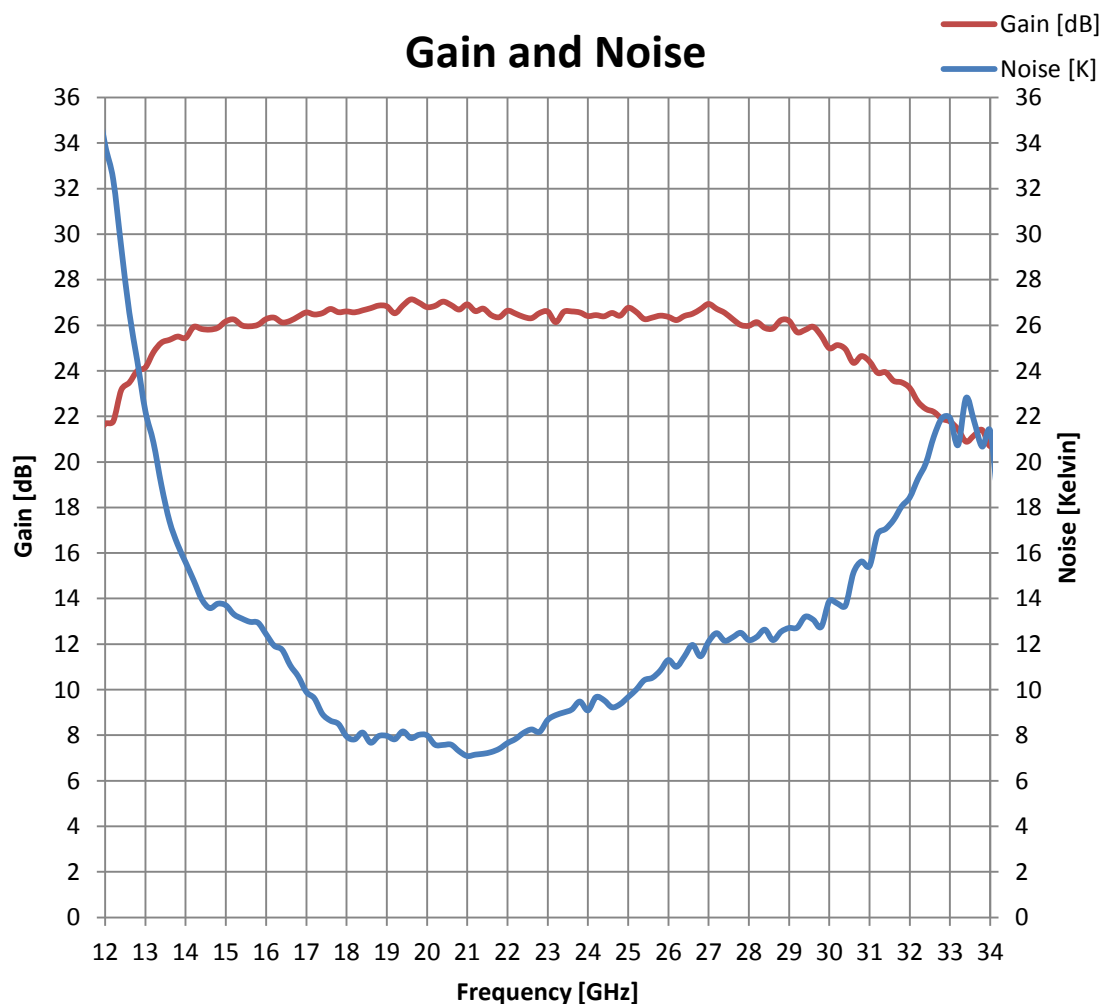
LNF-LNC15_29DRPA is an ultra-low noise cryogenic drop-in amplifier operating in the 15-29 GHz frequency range. The LNA is packaged in a module using 0.23 mm diameter solderable pins for DC and RF connection. The lightweight gold plated aluminum module measures 7.65*8.50*2.40 mm excluding the pins. MMIC technology ensures reliable and repeatable unit-to-unit result.

Typical DC Characteristics

Parameter	Value	Unit
V_{ds}	1.10	V
I_{ds}	6	mA
V_{gs}	0.0 V	V
I_{gs}	1	μA
P_{dc}	6.6	mW

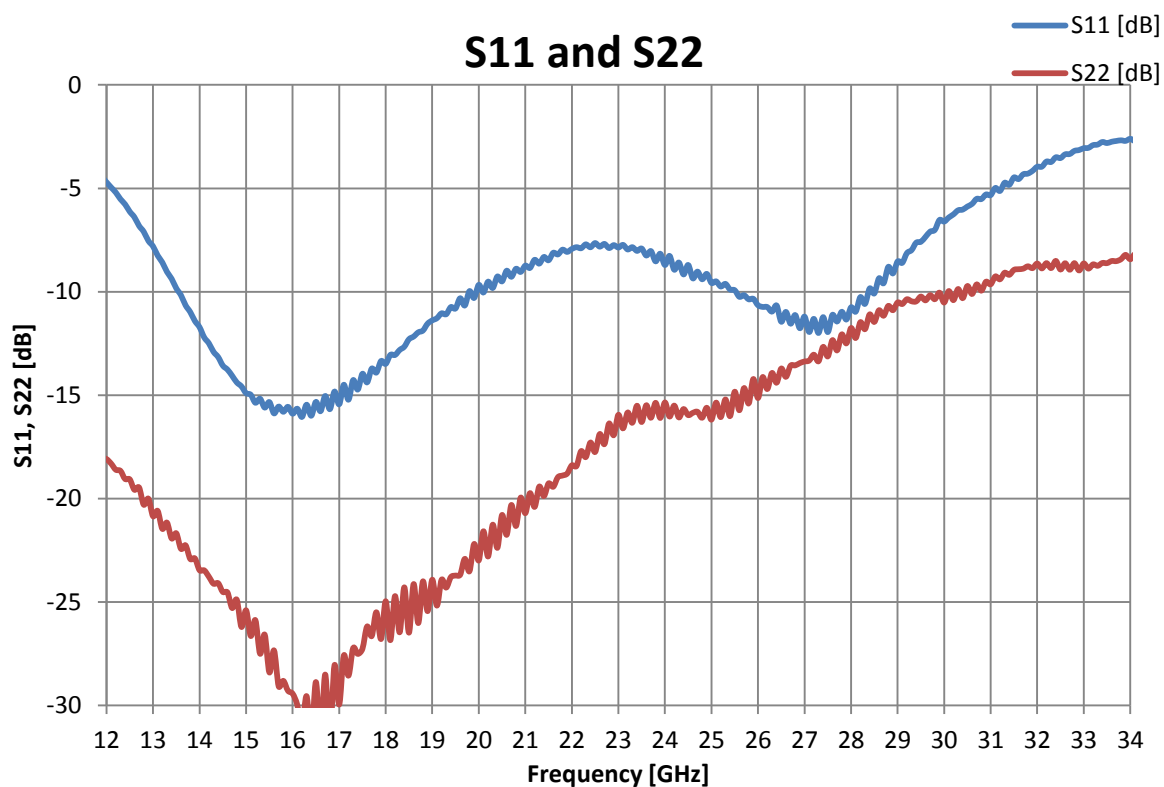
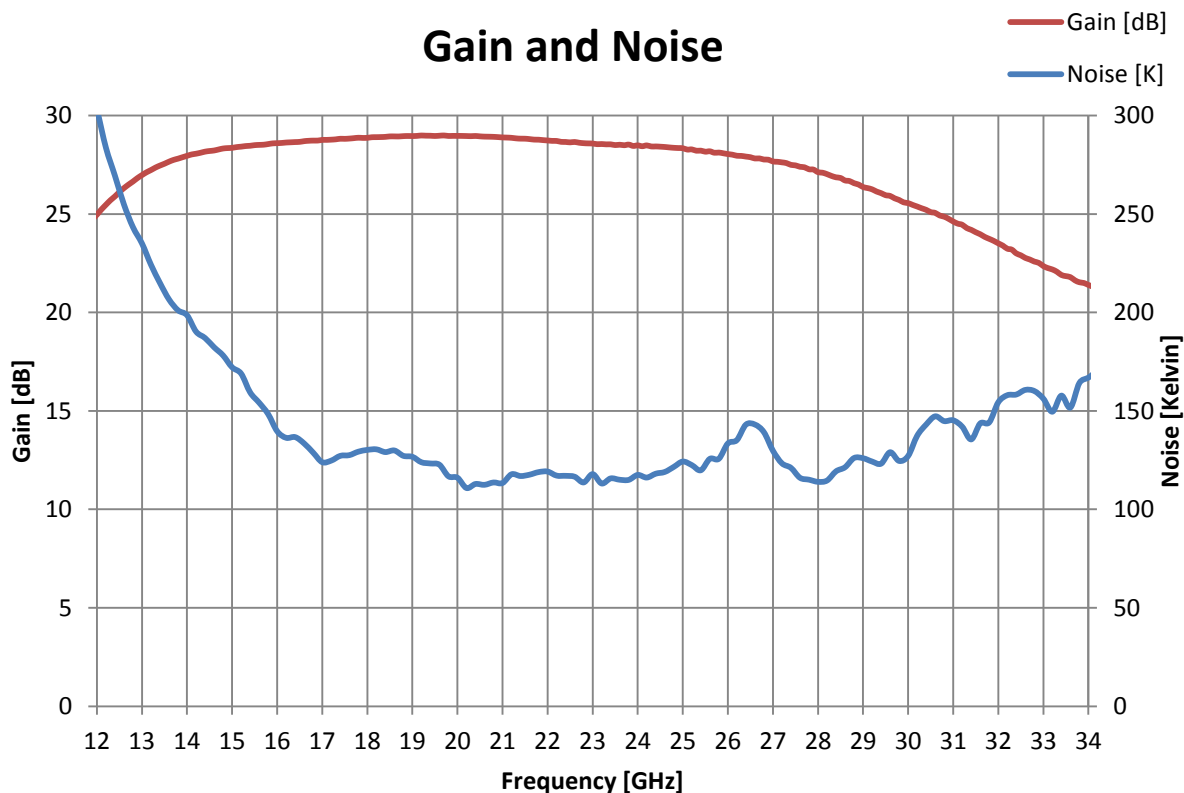
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Measured typical data $T_{\text{amb}}=5\text{ K}$



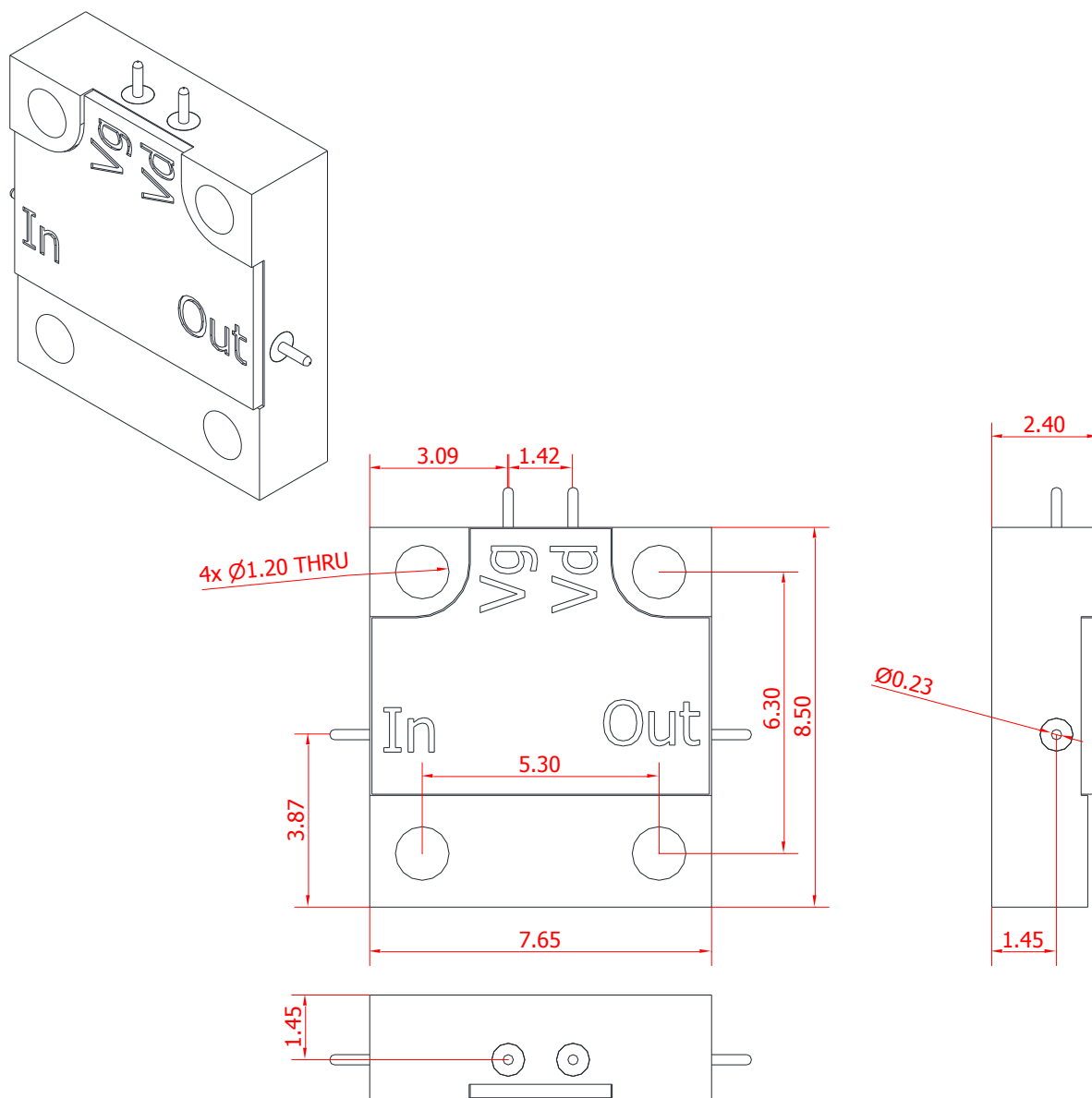
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Measured typical data @ $T_{amb}=296K$



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Drawings



Dimensions are in millimeters

Minimum heat should be applied when soldering the pins. Since the solder inside the LNA will reflow, keep the pin from sliding while applying heat to it.