

Product features

- RF bandwidth: 65-115 GHz
- Noise Figure: 3.50 dB typical
- Gain: 23 dB
- DC-power: $V_d=1.70$, $I_d=34$ mA
- One gate and one drain supply only
- RF-connectors: WR10
- DC-connector: 9-pin female Nano-D

Product description

LNF-LNR65_115WB is an ultra-low noise amplifier operating in the 65-115 GHz frequency range. The LNA is packaged in a waveguide module using industry standard WR10 and Nano-D connectors. The lightweight gold plated aluminum module measures 14.92*24.00*20.75 mm. MMIC technology ensures reliable and repeatable unit-to-unit result.

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

Typical RF Characteristics

Parameter	Test Condition	Value	Unit
Gain	65-115 GHz	23	dB
Noise Figure	68-110 GHz	3.5	dB
IRL	65-115 GHz	8	dB
ORL	65-115 GHz	12	dB

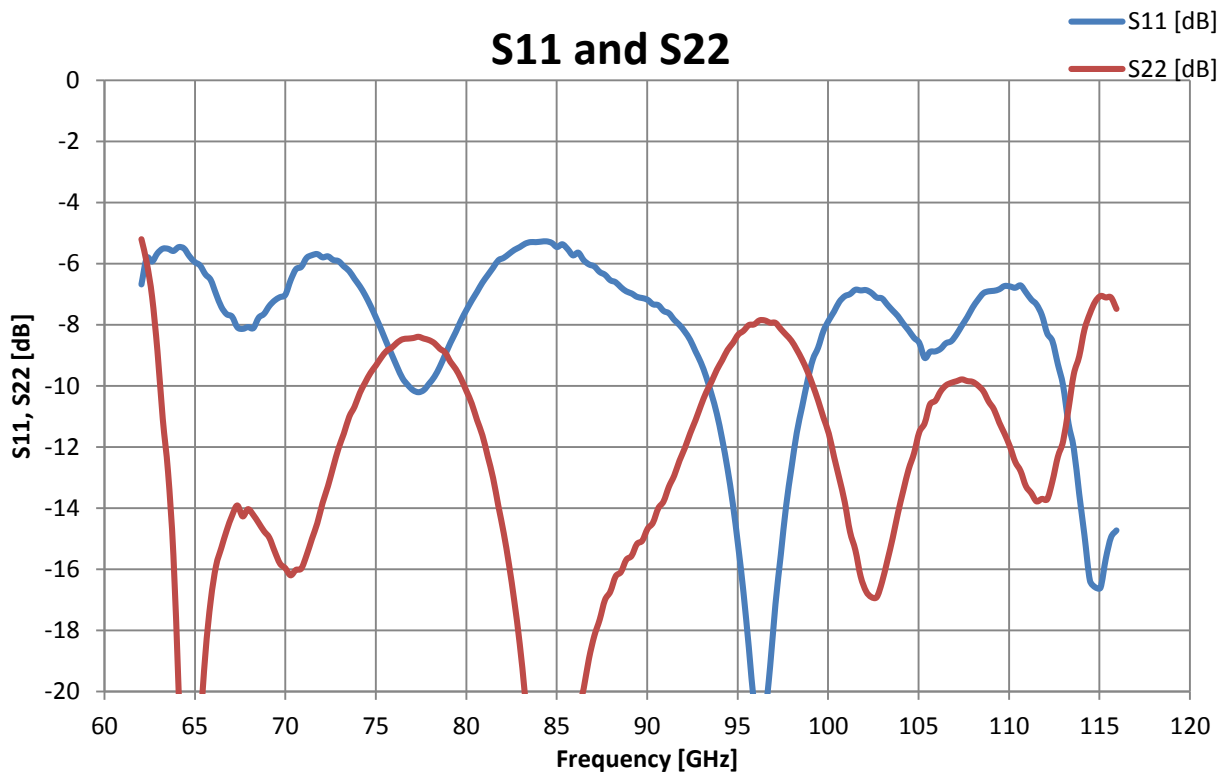
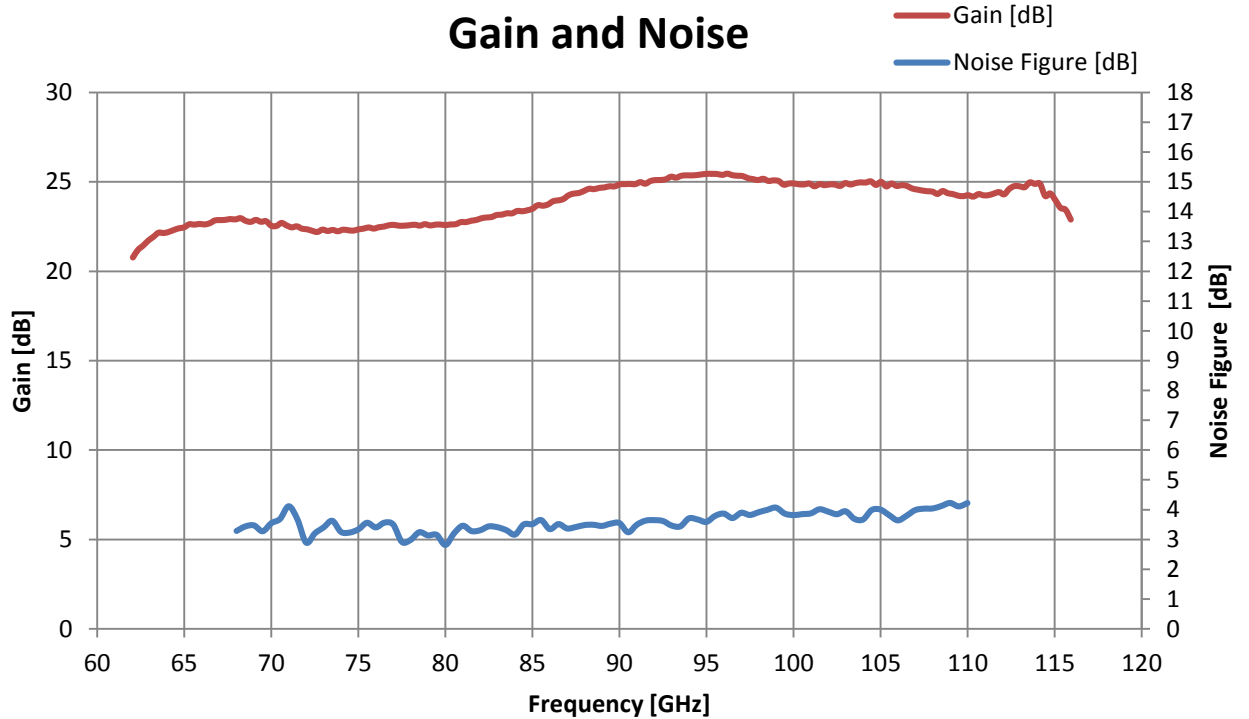
Typical DC Characteristics

Parameter	Value	Unit
V_{ds}	1.70	V
I_{ds}	34	mA
V_{gs}	0.7 ¹	V
I_{gs}	60	μ A
P_{dc}	58	mW

- ¹ Will vary slightly from unit to unit. Adjust to give $I_{ds}=34$ mA

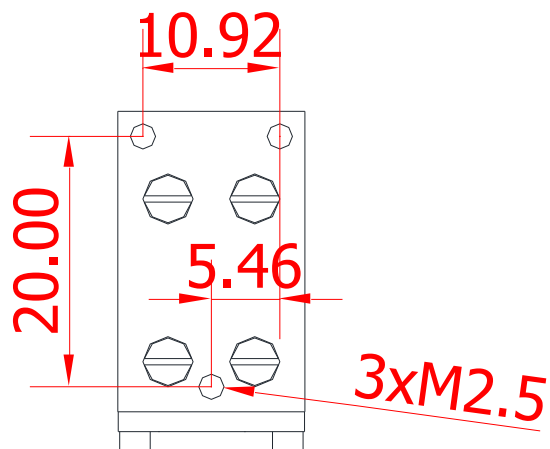
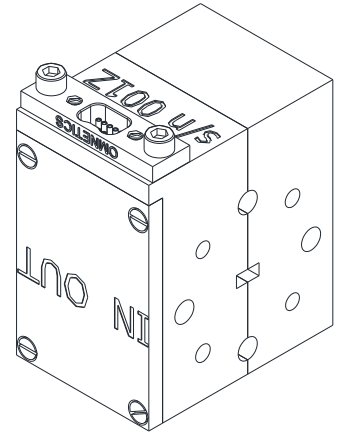
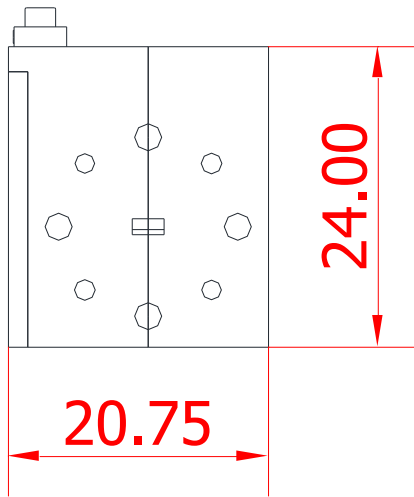
May, 2015

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



May, 2015

Drawings



Dimensions are in millimeters