

Datasheet

LNF-LNR45_77WA_SV

45-77 GHz Low Noise Amplifier



Product Features

RF Bandwidth	45-77 GHz
Noise Temperature	210 K
Noise Figure	2.37 dB
Gain	37 dB
DC power (typical)	V = 5 V, I = 50 mA
RF Connector	WR15, UG387/U
DC Connectors	2-pin Turret Connector
Single 5V supply only	

Absolute maximum ratings

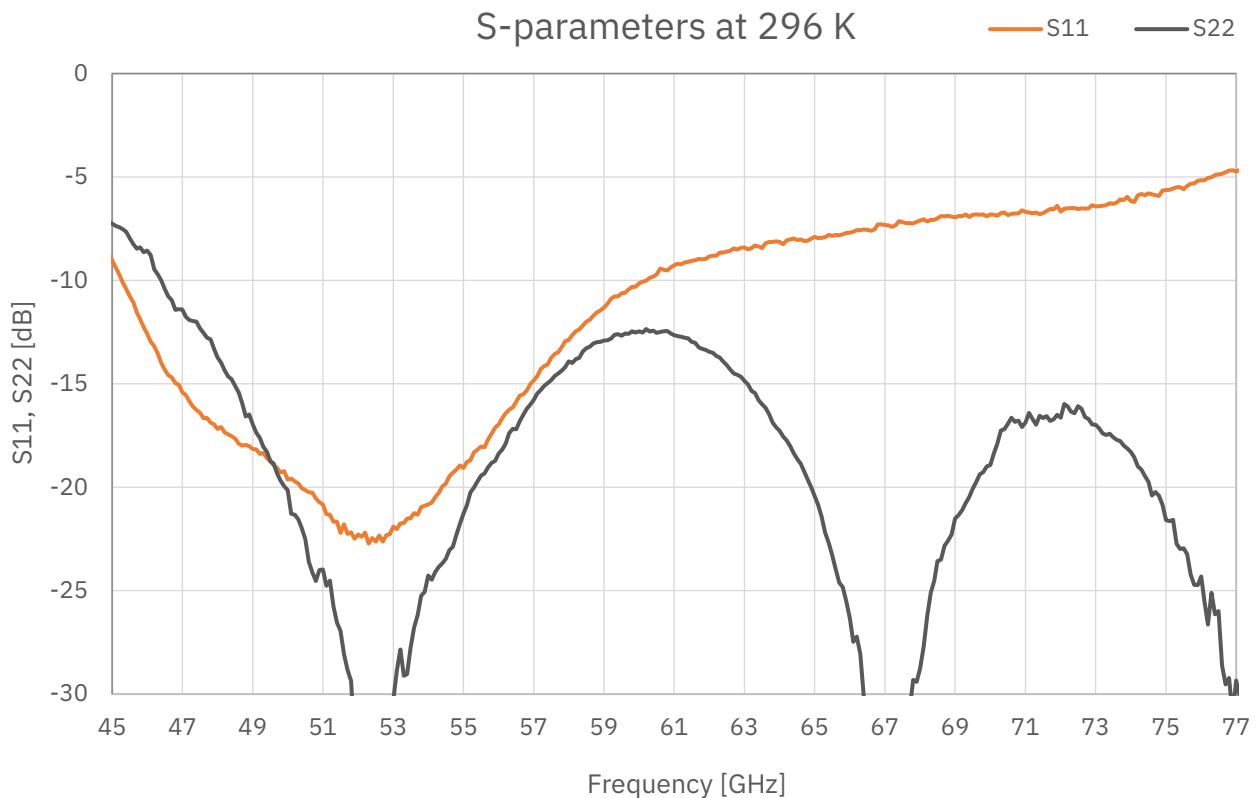
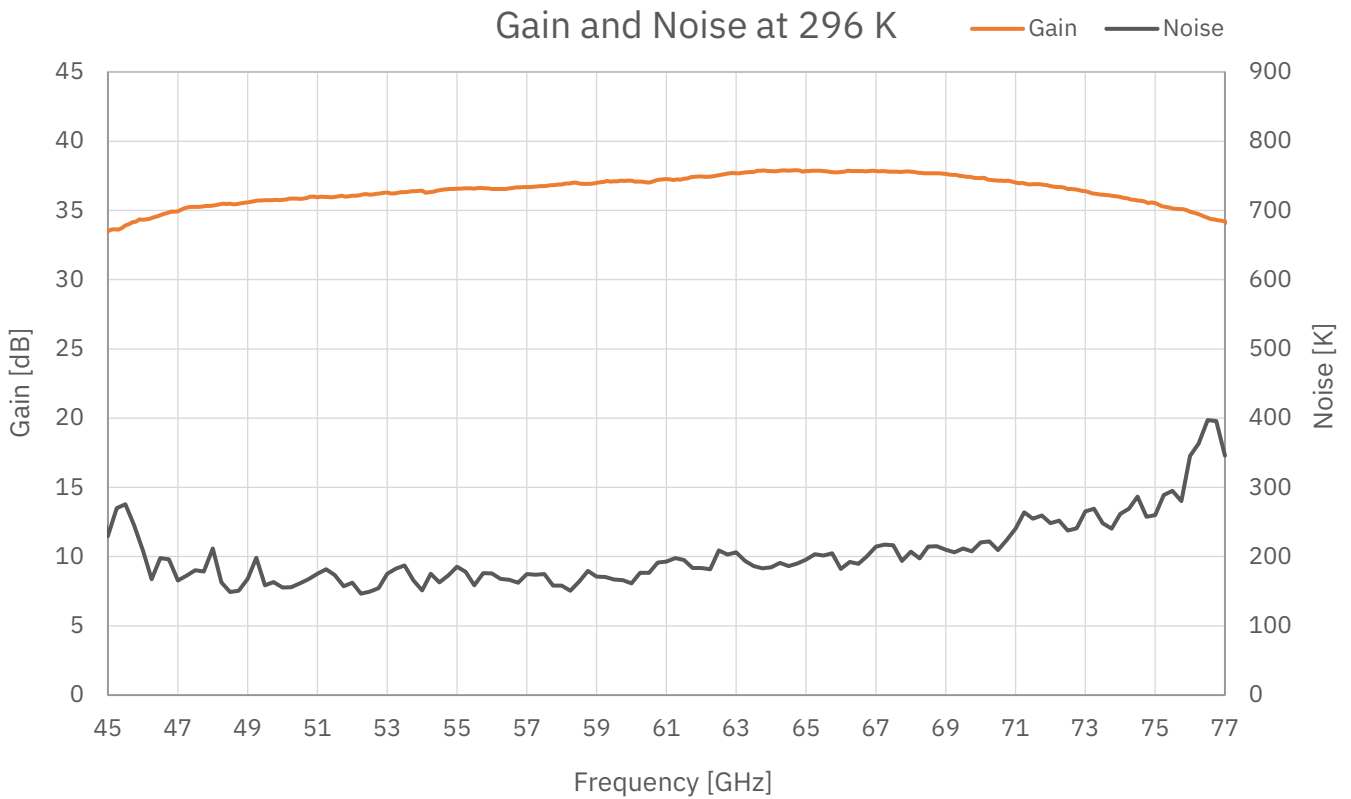
Parameter	Min	Max
DC Voltage on Input and Output	-30 V	30 V
RF Input Power		0 dBm
Operating Temperature	-40 °C	+85 °C

Typical Characteristics

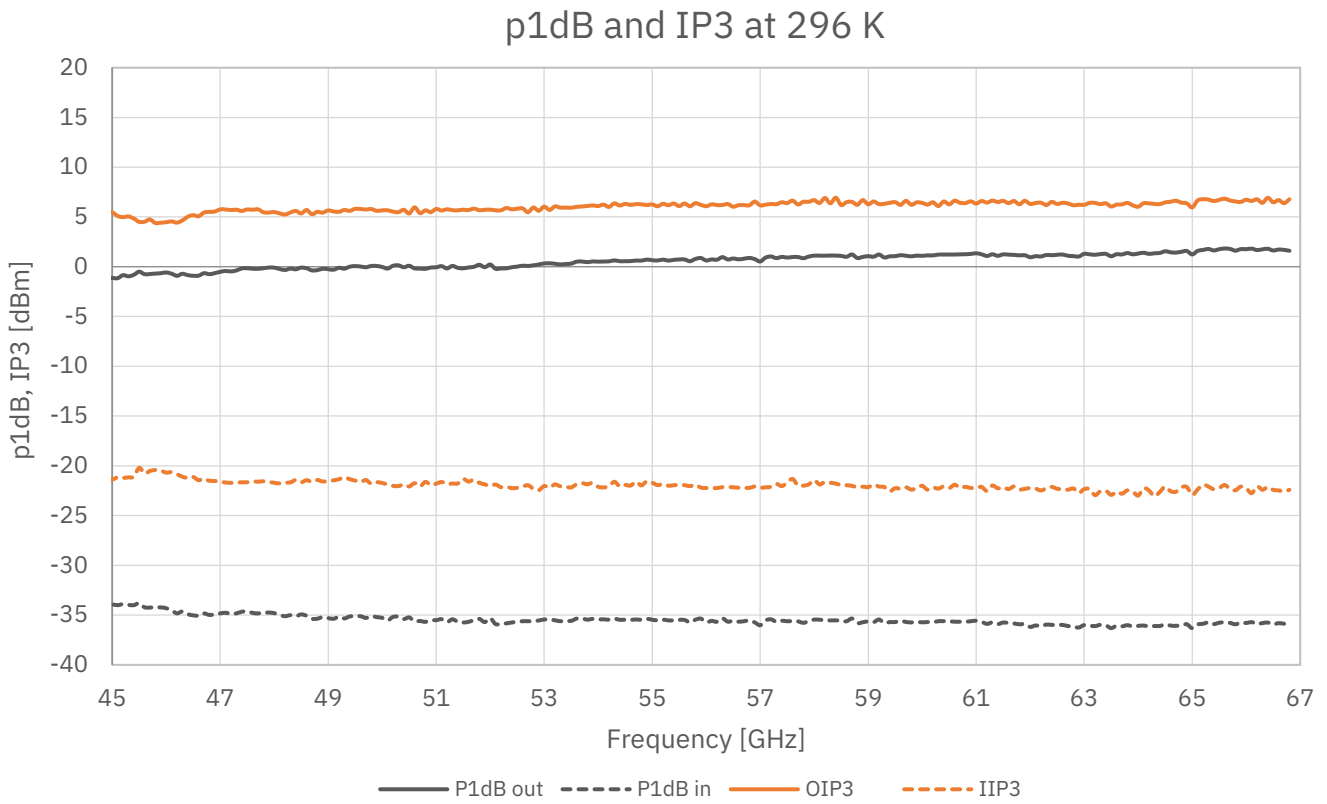
Parameter	Value	Unit
IRL	7	dB
ORL	12	dB
Output P1dB	0	dBm
OIP3	6	dBm
Weight	23	grams

LNF-LNR45_77WA_SV is a room temperature amplifier using LNF's proprietary InP HEMT technology. MMIC technology ensures excellent unit-to-unit variation. The LNA is packaged in a waveguide module using industry standard WR15 connectors for the RF ports and 2-pin turret connectors to provide the DC. The lightweight gold plated aluminum body measures 16.63x26.55x19.20 mm excluding the connectors. The LNA is not hermetic and must be operated in a vacuum environment when below the dewpoint. All amplifiers are tested at 296 K and delivered with a test report.

Measured data, $T_{amb} = 296\text{ K}$



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Dimensions and wiring

Units: mm

