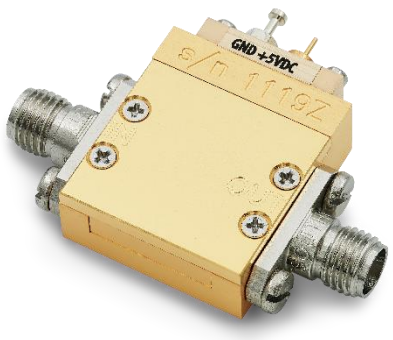
Date
2022-03-15

Low Noise Factory

Datasheet

LNF-LNR6_20A_SV

6-20 GHz Low Noise Amplifier



Product Features	
RF Bandwidth	6-20 GHz
Noise Temperature	70.6 K
Noise Figure	0.95 dB
Gain	31 dB
DC power (typical)	V_{ds} = 5 V, I_{ds} = 50 mA*
RF Connectors	Female SMA**
DC Connectors	2-pin Turret Connector
Single 5V supply only	

* See test report for actual optimum bias for your unit

** Contact Factory for alternative configuration

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	10	dB
ORL	18	dB
Output P1dB	-3	dBm
OIP3	7	dBm
Weight	14	grams

LNF-LNR6_20A_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 coaxial module using industry standard SMA connectors for the RF ports and 2-pin turret connectors to provide the DC. The lightweight gold plated aluminum body measures 22.0x19.6x7.8 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.

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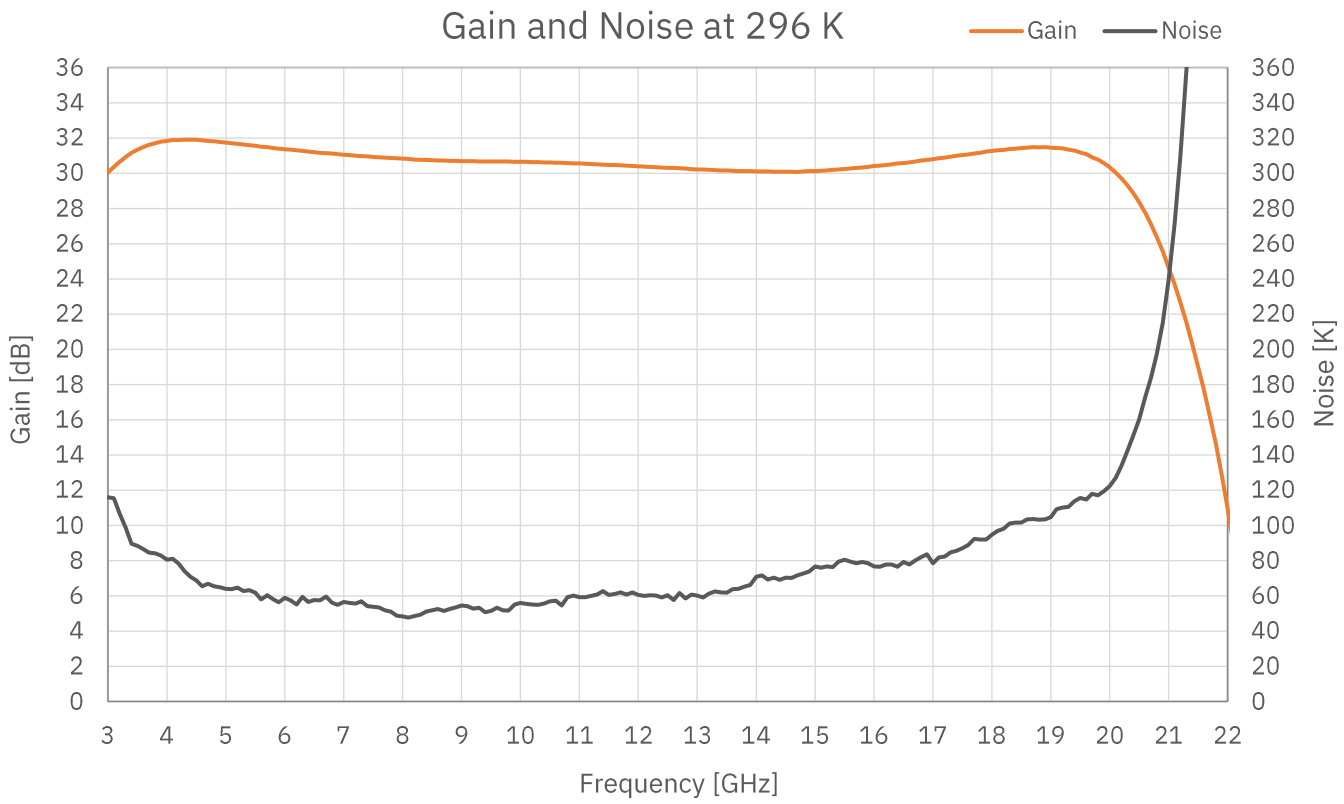
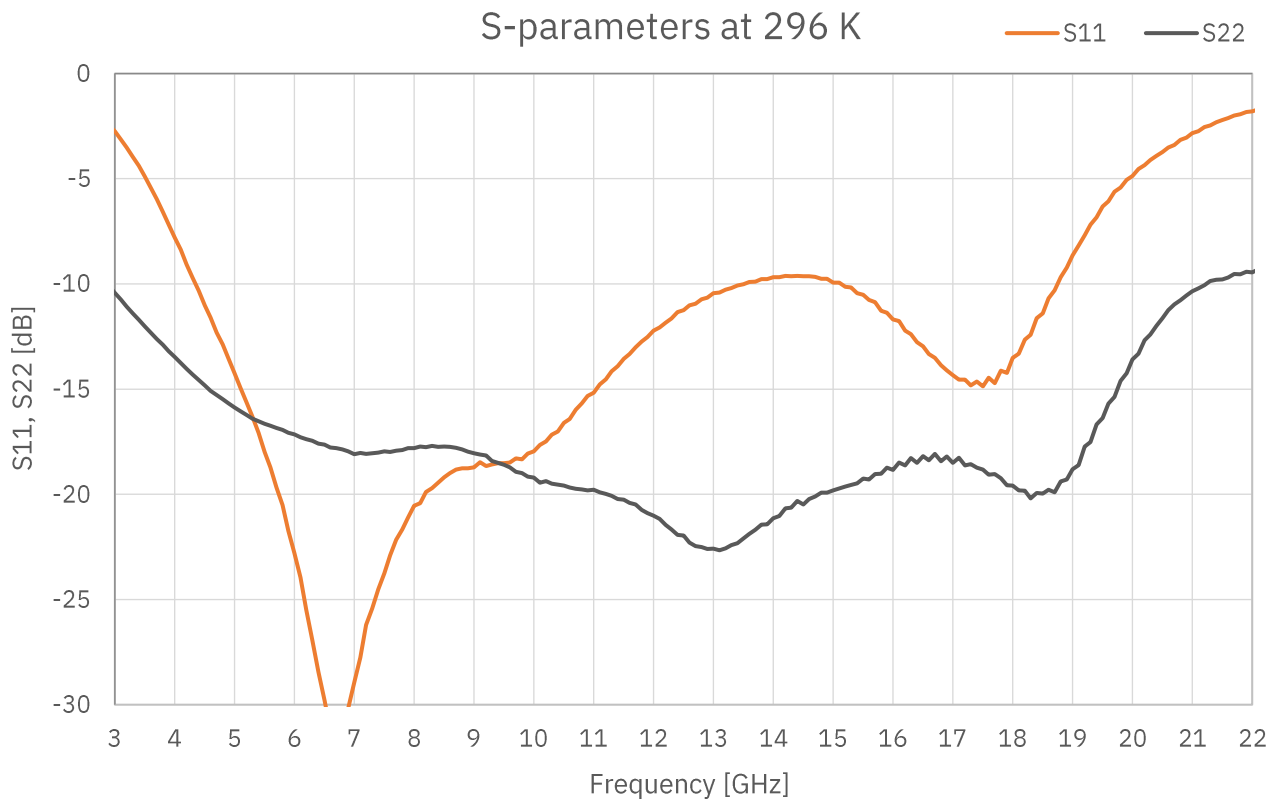
Measured data, T_{amb} = 296 K





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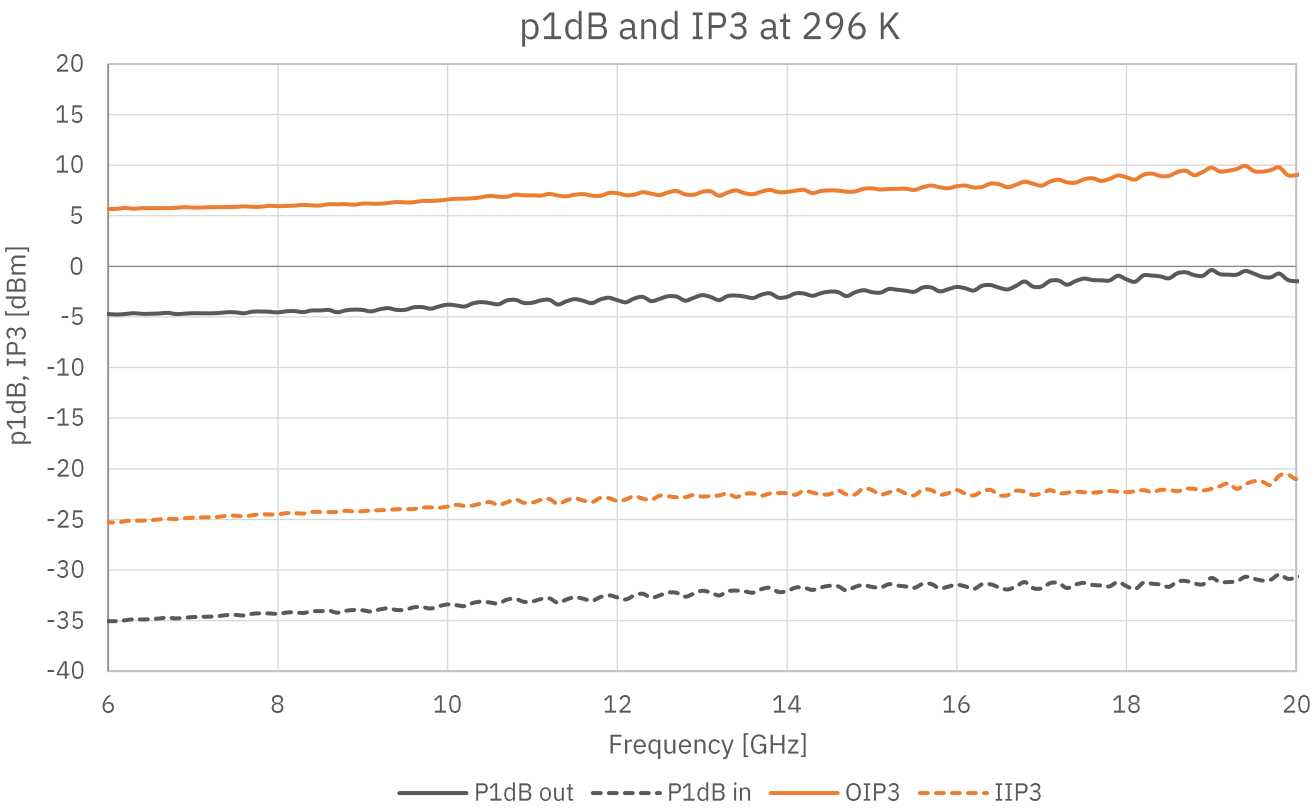
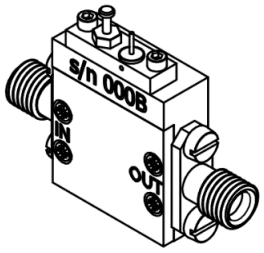
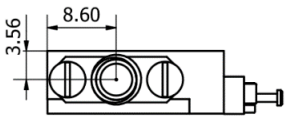
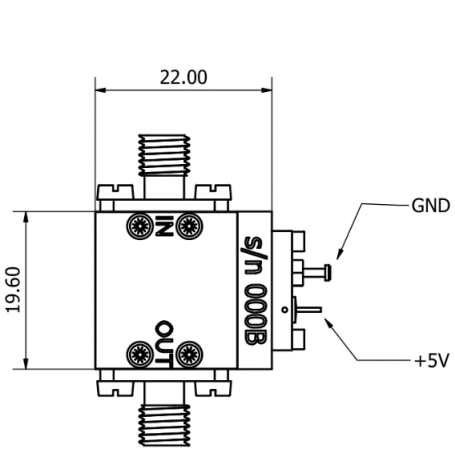
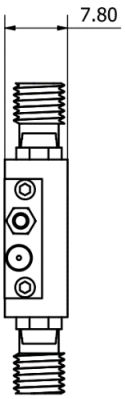
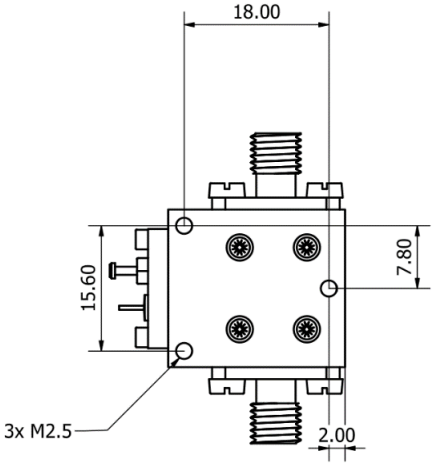


Dimensions and wiring

Units: mm