

FEATURES:

- 1.0 – 12.0 GHz;
- 13.0 dB Gain;
- 3.1 dB Noise Figure;
- 17.0 dBm P_{1dB};
- 27.0 dBm IP₃;
- Unconditional Stable;
- RoHS Compliant

APPLICATIONS:

- Radar;
- Receivers;
- ECM System;
- WBA Systems;
- Point to Point;
- Test & Measurement;
- Wide Band PA Driver



LNA100012000A – 1.0 ~ 12.0 GHz WIDE BAND AMPLIFIER

ELECTRICAL SPECIFICATIONS @ 25 °C

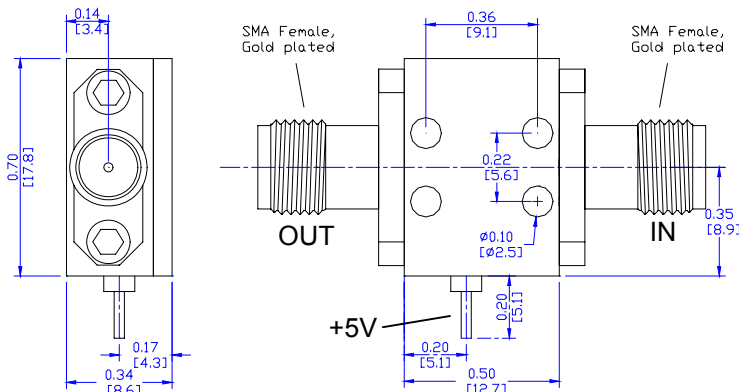
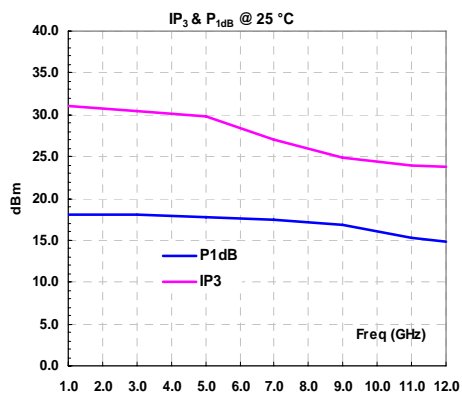
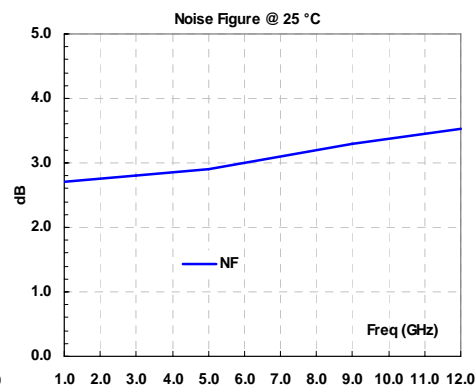
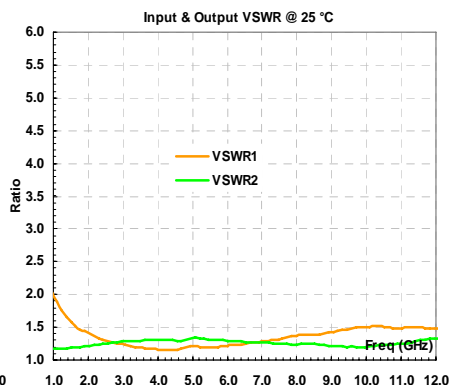
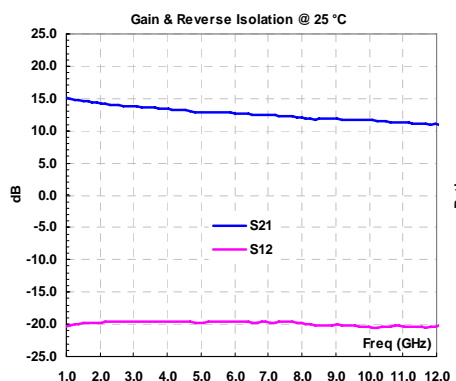
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
I _d	Device Current	mA		65	88
G	Gain	dB	11	13	
ΔG	Gain Flatness	dB		±2	
Z ₀	Impedance	Ohm		50	
OIP3	Output 3 rd Order Intercept	dBm		27	
NF	Noise Figure	dB		3.3	4.0
P _{1dB}	Output 1dB Gain Compression	dBm		17	
S ₁₂	Reverse Isolation	dB		-20	
V _{dd}	DC Power Supply Voltage	V	4.5	5.0	6.0
VSWR ₁	VSWR – Input	Ratio		1.35	2.00
VSWR ₂	VSWR – Output	Ratio		1.25	1.35

ABSOLUTE MAXIMUM RATINGS¹

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
Drain Current	mA	100
Operating Temperature	°C	+85
RF Input Power	dBm	+20
RF Output Supply Voltage	V	8
Storage Temperature	°C	+150
Thermal Resistance	°C/W	140
Total Power Dissipation	mW	350

[1] Operation beyond these limits may cause permanent damage.

ELECTRICAL PERFORMANCE/MECHANICAL OUTLINE



ORDERING INFORMATION: LNA100012000A