

## FEATURES:

- 0.5 GHz ~ 4.0 GHz;
- 26 dB Gain;
- 1.2 dB Noise Figure;
- 14.0 dBm P<sub>1dB</sub>;
- 27.0 dBm IP<sub>3</sub>;
- Unconditional Stable;
- RoHS Compliant.

## APPLICATIONS:

- Radar;
- Receiver;
- ECM System;
- WBA System;
- Point to Point;
- Test & Measurement;
- Wide Band PA Driver.



# LNA05004000A, 0.5 GHz ~ 4.0 GHz WIDE BAND LOW NOISE AMPLIFIER

## ELECTRICAL SPECIFICATIONS @ 21 °C

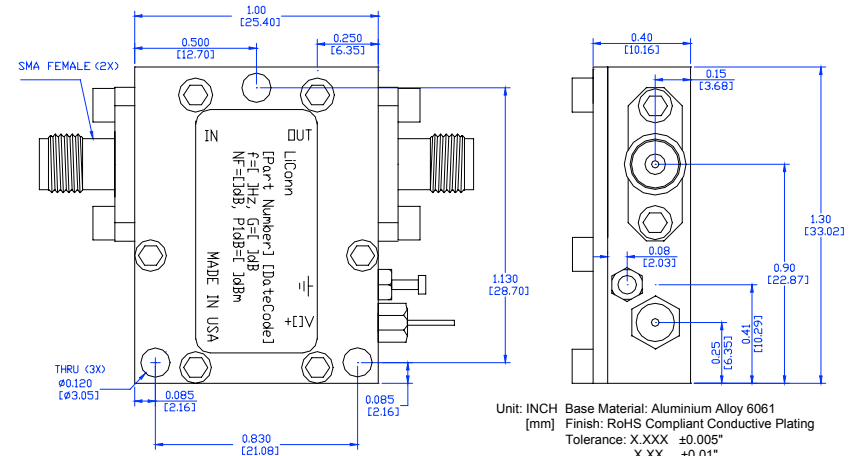
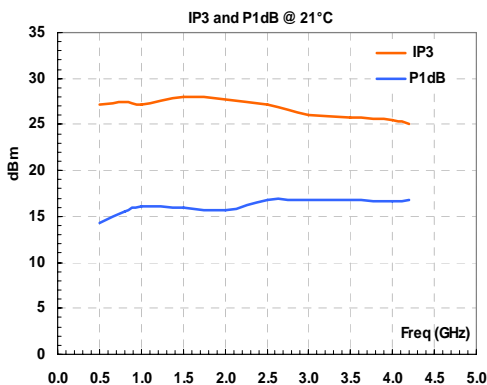
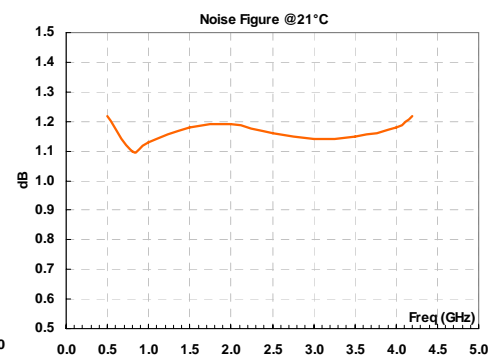
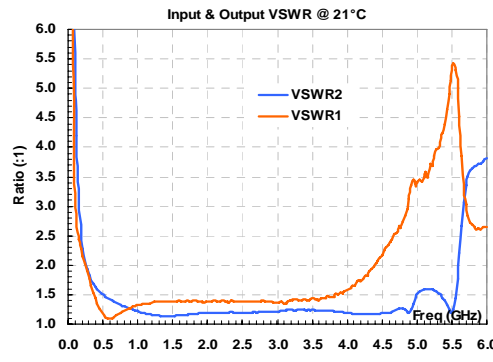
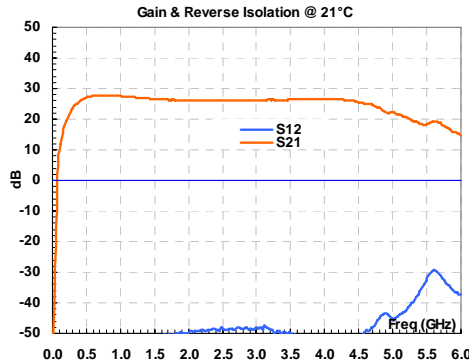
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
G	Gain	dB	24	26	28
$\Delta G$	Gain Flatness	dB		$\pm 1.0$	$\pm 1.3$
VSWR <sub>1</sub>	VSWR – Input	Ratio		1.8:1	2:1
VSWR <sub>2</sub>	VSWR – Output	Ratio		1.5:1	1.8:1
S <sub>12</sub>	Reverse Isolation	dB	45	50	
NF	Noise Figure	dB		1.2	1.4
OIP <sub>3</sub>	Output 3 <sup>rd</sup> Order Intercept	dBm	24	26	
P <sub>1dB</sub>	Output 1dB Gain Compression	dBm	12	14	
I <sub>dd</sub>	Device Current (V <sub>dd</sub> =+5V)	mA		65	
V <sub>dd</sub>	DC Power Supply Voltage	V	+4.7	+5.0	+5.3
Z <sub>0</sub>	Impedance	Ohm		50	

## ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
CW RF Input Power	dBm	+10
DC Supply Voltage	V	+7.0
Drain Current	mA	80
Thermal Resistance	°C/W	215
Total Power Dissipation	mW	400
Operating Temperature	°C	-40 ~ +85
Storage Temperature	°C	-55 ~ +125

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

## ELECTRICAL PERFORMANCE/MECHANICAL OUTLINE



## ORDERING INFORMATION: LNA05004000A