

## FEATURES:

- 0.1 – 6.0 GHz;
- 14.0 dB Gain;
- 1.1 dB Noise Figure;
- 15.0 P1dB;
- 27.0 dBm IP3;
- RoHS Compliant

## APPLICATIONS:

- Cellular;
- GPS; PCS; 3G;
- WiMAX;
- C-Band;
- Test & Measurement



# LNA01006000A – 0.1 ~ 6.0 GHz WIDE BAND AMPLIFIER

## ELECTRICAL SPECIFICATIONS @ 25 °C

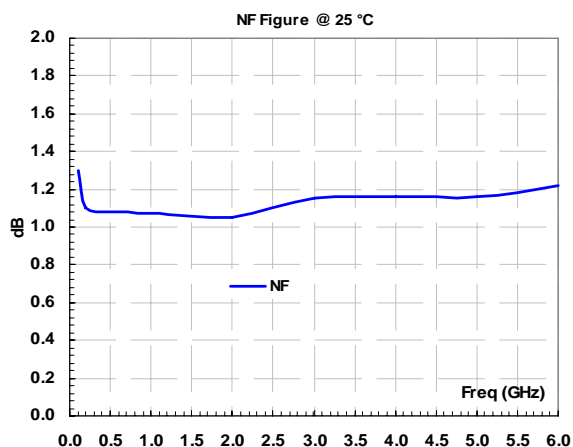
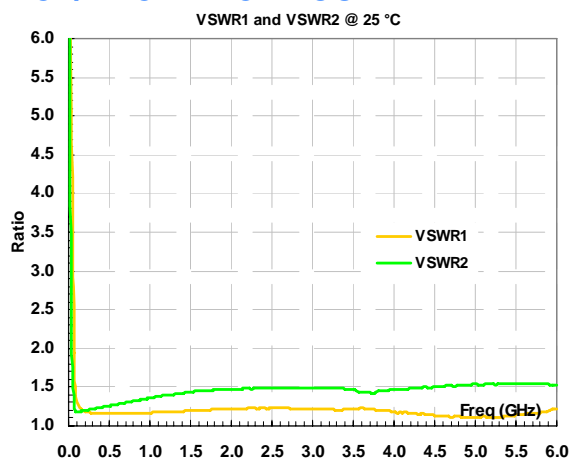
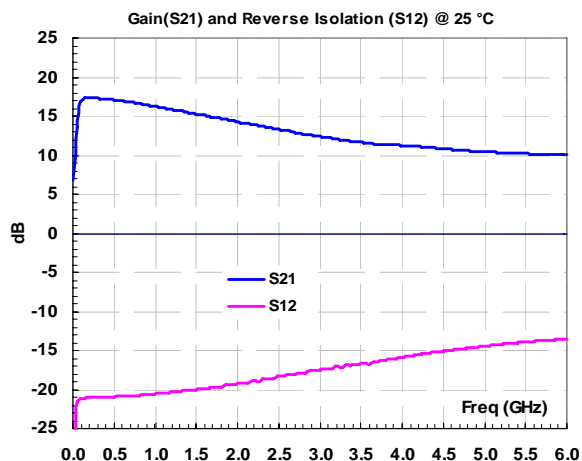
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
F	Operating Frequency	GHz	0.1		6
G	Gain	dB		14	
I <sub>d</sub>	Device Current	mA		30	
Z <sub>0</sub>	Impedance	Ohm		50	
OIP3	Output 3 <sup>rd</sup> Order Intercept	dBm		27	
NF	Noise Figure	dB		1.1	1.5
P <sub>1dB</sub>	Output 1dB Gain Compression	dBm		15	
S <sub>12</sub>	Reverse Isolation	dB		20	
V <sub>dd</sub>	DC Power Supply Voltage	V	4.5	5.0	6.0
VSWR <sub>1</sub>	VSWR – Input	Ratio		1.25:1	
VSWR <sub>2</sub>	VSWR – Output	Ratio		1.5:1	

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

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
Drain Current	mA	70
Operating Temperature	°C	-54 ~ +85
RF Input Power	dBm	+10
RF Output Supply Voltage	V	8
Storage Temperature	°C	-65 ~ +150
Thermal Resistance	°C/W	230

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

## ELECTRICAL PERFORMANCE/MECHANICAL OUTLINE



## ORDERING INFORMATION

Model Number	Input	Output
LNA01006000A-1	SMA Female	SMA Female
LNA01006000A-2	SMA Female	SMA Male
LNA01006000A-3	SMA Male	SMA Male
LNA01006000A-4	SMA Male	SMA Female
LNA01006000AG-1	SMA Female	SMA Female
LNA01006000AG-2	SMA Female	SMA Male
LNA01006000AG-3	SMA Male	SMA Male
LNA01006000AG-4	SMA Male	SMA Female

## Mechanical Outline

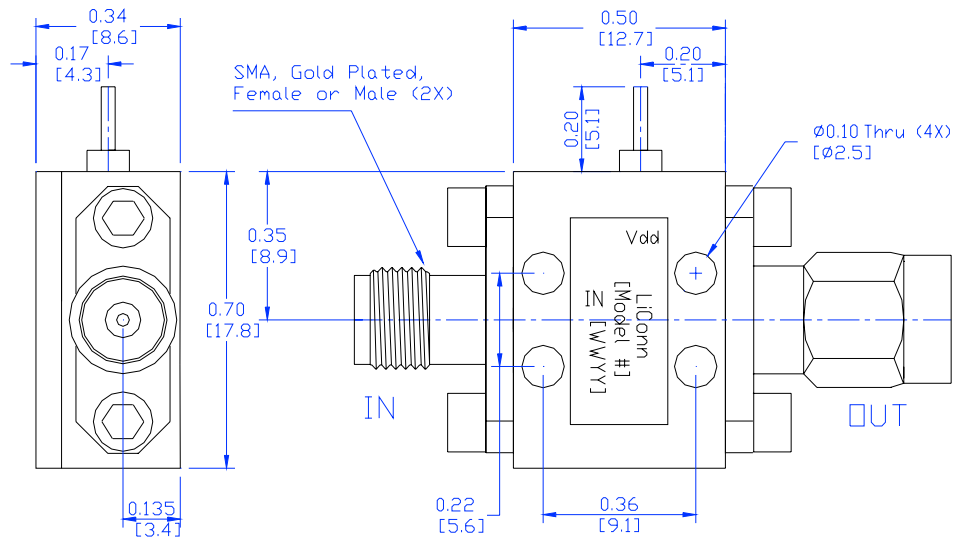
Unit: Inch/mm

Material: Brass

Finish: Gold Plating

Tolerance is Non-Accumulative

### LNA01006000A-:



### LNA01006000AG- (with Ground Turret on Output SMA):

