

## FEATURES:

- 0.1 MHz ~ 150 MHz;
- 17.0 dB Gain;
- 3.0dB Noise Figure;
- 30.0 dBm P<sub>1dB</sub>;
- 45.0 dBm IP<sub>3</sub>;
- RoHS Compliant.

## APPLICATIONS:

- SW;
- FM;
- VHF.



# LPA00010150B, 0.1 MHz ~ 150 MHz WIDE BAND POWER AMPLIFIER

## ELECTRICAL SPECIFICATIONS @ 21 °C

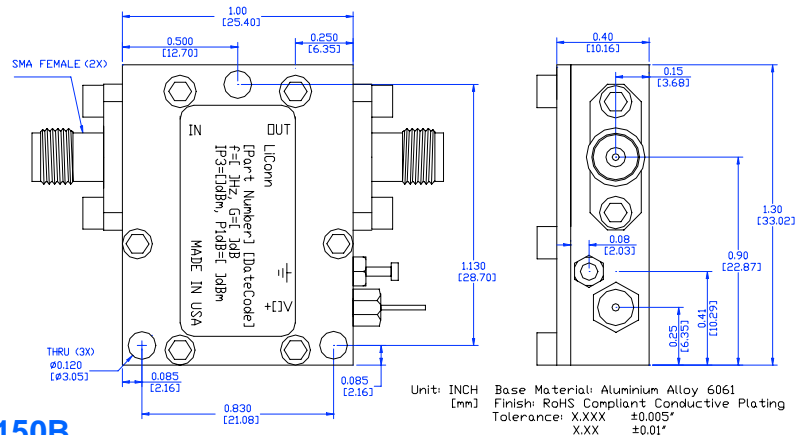
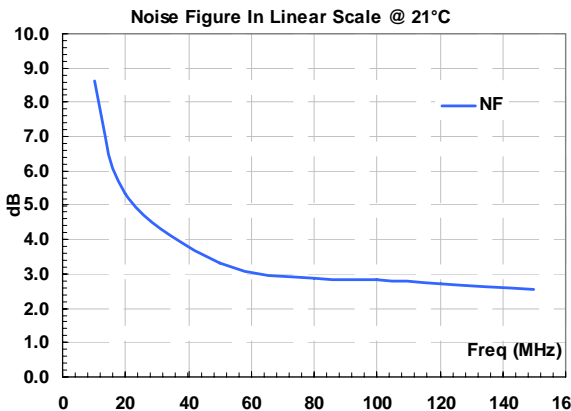
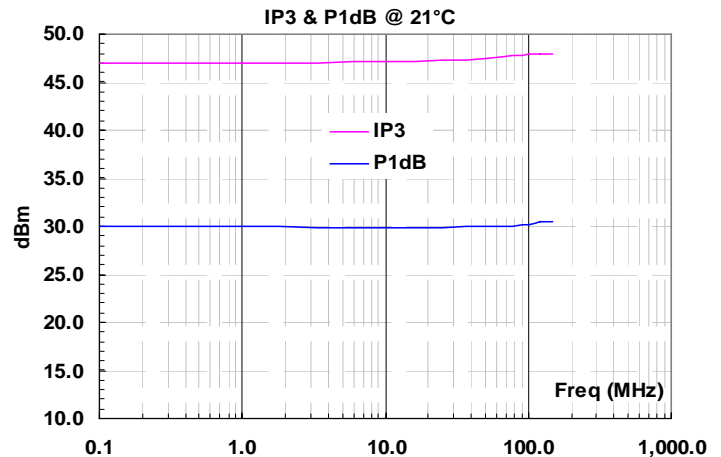
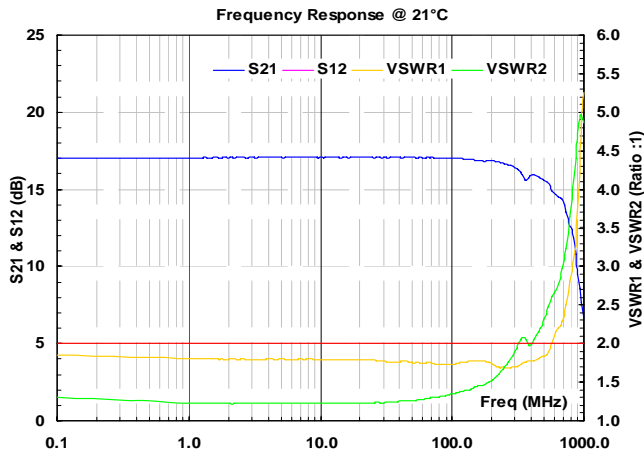
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
G	Gain	dB	16	17.0	18
ΔG	Gain Flatness	dB		±0.2	
VSWR <sub>1</sub>	Input VSWR	Ratio			2.0:1
VSWR <sub>2</sub>	Output VSWR	Ratio		1.5:1	2.0:1
S <sub>12</sub>	Reverse Isolation	dB		28	
NF	Noise Figure	dB		3.0	
OIP <sub>3</sub>	Output 3 <sup>rd</sup> Order Intercept	dBm	43	45	
P <sub>1dB</sub>	Output 1dB Gain Compression	dBm	29	30.0	
I <sub>dd</sub>	Device Current (V <sub>dd</sub> =+12V)	mA		200	
V <sub>dd</sub>	Positive Power Supply Voltage	V	+11.5	+12.0	+15.0
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	20
DC Supply Voltage	V	16
Drain Current	mA	250
Thermal Resistance	°C/W	32
Total Power Dissipation	W	3.0
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: LPA00010150B