

FEATURES:

- 5.0 – 7.0 GHz;
- 22 dB Gain;
- 0.9 dB Noise Figure;
- 10.0 dBm P_{1dB};
- 21.0 dBm IP₃;
- RoHS Compliant

APPLICATIONS:

- ISM;
- Satellite Communication;
- Test & Measurement;
- Mobile Communication



LNA50007000A, 5.0 – 7.0 GHz WIDE BAND LOW NOISE AMPLIFIER

ELECTRICAL SPECIFICATIONS @ 25 °C

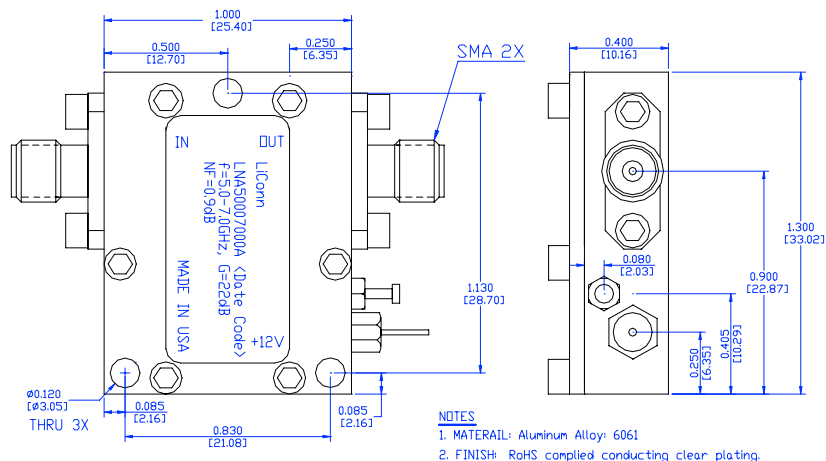
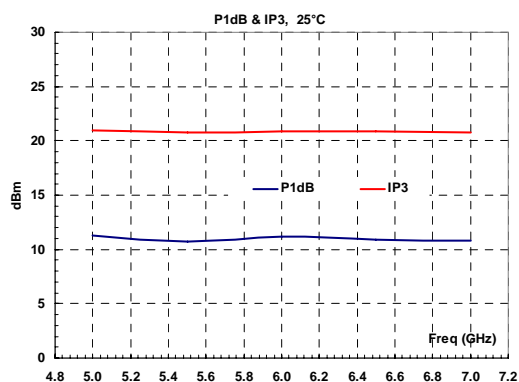
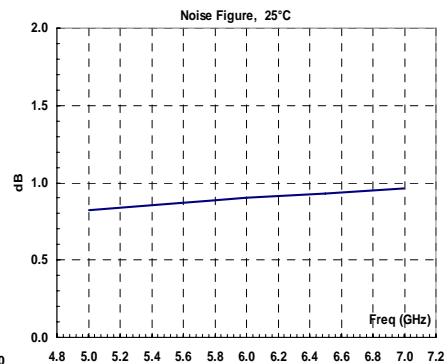
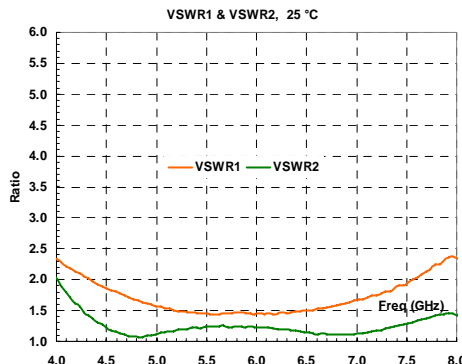
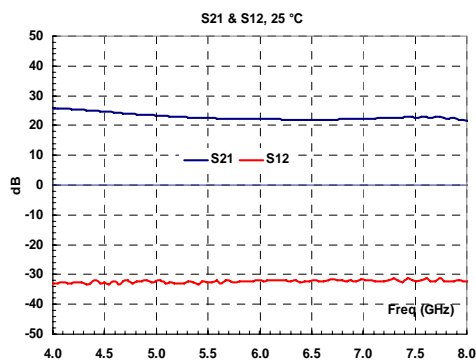
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
I _d	Device Current	mA		40	
G	Gain	dB		22	
ΔG	Gain Flatness	dB		±1.0	
Z ₀	Impedance	Ohm		50	
NF	Noise Figure	dB		0.90	1.1
OIP3	Output 3 rd Order Intercept	dBm		21	
P _{1dB}	Output 1dB Gain Compression	dBm		10	
S ₁₂	Reverse Isolation	dB		30	
V _{dd}	DC Power Supply Voltage	V	7	12	30
SWR ₁	Input VSWR	Ratio		1.5:1	1.8:1
SWR ₂	Output VSWR	Ratio		1.3:1	1.5:1

ABSOLUTE MAXIMUM RATINGS¹

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
Drain Current	mA	150
Operating Temperature	°C	-40 - +85
RF Input Power	dBm	+10
DC Supply Voltage	V	30
Storage Temperature	°C	+150
Thermal Resistance	°C/W	220
Total Power Dissipation	mW	600

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

ELECTRICAL PERFORMANCE/MECHANICAL OUTLINE



ORDERING INFORMATION: LNA50007000A