



## FEATURES:

- 2.3 GHz ~ 2.5 GHz;
- 25 dB Gain;
- 1.0 dB Noise Figure;
- 20.0 dBm Input P<sub>1dB</sub>;
- 16.0 dBm IP<sub>3</sub>;
- Precision machined housing;
- RoHS Compliant.

## APPLICATIONS:

- Base Station;
- Wireless Data Communication;
- Measurement.



# LNA23002500C, 2.3 GHz ~ 2.5 GHz WIDE BAND LOW NOISE AMPLIFIER

## ELECTRICAL SPECIFICATIONS @ 21 °C

Symbol	Parameters/Conditions	Unit	Min	Typical	Max
G	Gain	dB	25	27	29
ΔG	Gain Flatness	dB		±0.5	±0.75
VSWR <sub>1</sub>	Input VSWR	Ratio		1.5:1	1.6:1
VSWR <sub>2</sub>	Output VSWR	Ratio		1.5:1	1.6:1
S <sub>12</sub>	Reverse Isolation	dB	40	43	
NF	Noise Figure	dB		1.0	1.2
OIP <sub>3</sub>	Output 3 <sup>rd</sup> Order Intercept	dBm	14	16	
P <sub>1dB, IN</sub>	Input 1dB Gain Compression	dBm		-20	
P <sub>1dB</sub>	Output 1dB Gain Compression	dBm	6	7	
I <sub>dd</sub>	Device Current (V <sub>dd</sub> =+3V)	mA	22	25	30
V <sub>dd</sub>	DC Power Supply Voltage	V	2.5	3.0	3.5
Z <sub>0</sub>	Impedance	Ohm		50	

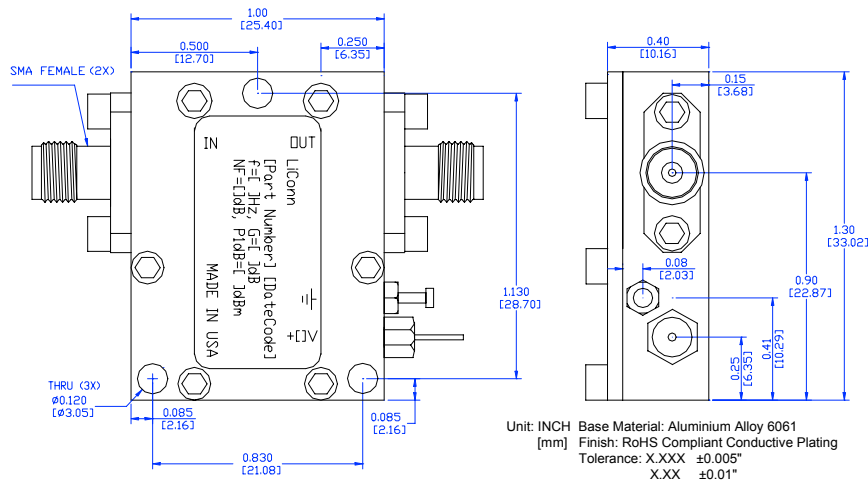
## ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
CW RF Input Power	dBm	+10
DC Supply Voltage	V	3.5
Drain Current	mA	50
Thermal Resistance	°C/W	220
Total Power Dissipation	mW	350
Operating Temperature	°C	-40 ~ +85
Storage Temperature	°C	-55 ~ +125

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

Preliminary

## MECHANICAL OUTLINE



## ORDERING INFORMATION: LNA23002500C