

FEATURES:

- 1 MHz ~ 600 MHz;
- 37.0 dB Gain;
- 1.2 dB Noise Figure;
- 30.0 dBm P_{1dB};
- 40.0dB Output IP₃;
- 1.5:1 VSWR;
- Unconditional Stable;
- RoHS Compliant.

APPLICATIONS:

- Mobile Infrastructure;
- GPS;
- CATV/DBS;
- Security System;
- Fixed Wireless;
- Measurement.



LPA00010600B, 1 MHz ~ 600 MHz WIDE BAND POWER AMPLIFIER

ELECTRICAL SPECIFICATIONS @ 21 °C

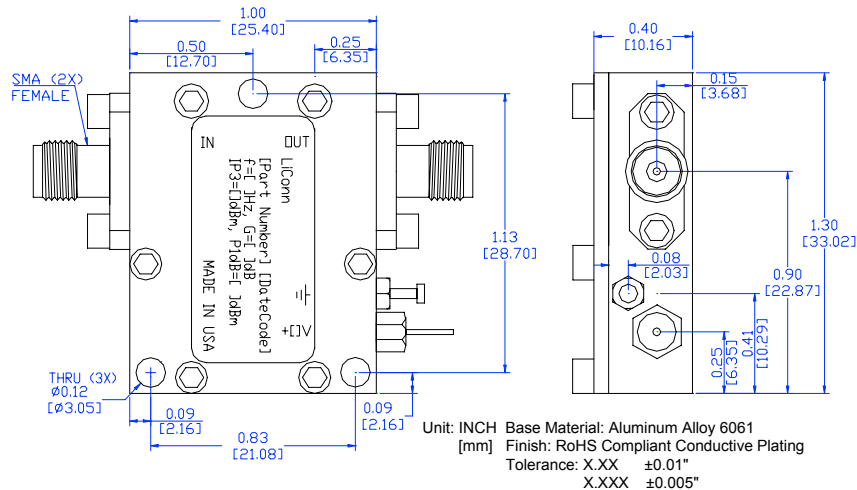
Symbol	Parameters/Conditions	Unit	Min	Typical	Max
G	Gain	dB		37	
ΔG	Gain Flatness	dB		±0.5	±0.75
VSWR ₁	Input VSWR	Ratio		1.35:1	1.5:1
VSWR ₂	Output VSWR	Ratio		1.35:1	1.8:1
S ₁₂	Reverse Isolation	dB		45	
NF	Noise Figure	dB		1.2	1.5
OIP ₃	Output 3 rd Order Intercept	dBm	38	40	
P _{1dB}	Output 1dB Gain Compression	dBm	28	30	
I _{dd}	Device Current (V _{dd} =+12V)	mA		270	
V _{dd}	Positive Power Supply Voltage	V	+11.5	+12.0	+12.5
Z ₀	Impedance	Ohm		50	

ABSOLUTE MAXIMUM RATINGS¹

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	150
CW RF Input Power	dBm	10
DC Supply Voltage	V	13
Drain Current	mA	300
Thermal Resistance	°C/W	30
Total Power Dissipation	W	6
Operating Temperature	°C	-40 ~ +85
Storage Temperature	°C	-55 ~ +125

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

MECHANICAL OUTLINE



Preliminary

ORDERING INFORMATION

Model Number	Input	Output
LPA00010600B-1	SMA Female	SMA Female
LPA00010600B-2	SMA Female	SMA Male
LPA00010600B-3	SMA Male	SMA Female
LPA00010600B-4	SMA Male	SMA Male

Additional Heat Sink Required!