

Model: TLLA2G18G-35-40
Low Noise Amplifier
2-18GHz, NF:2.5dB, Gain:35dB, P1dB:20dBm
Feature:

- Ultra Wide Band: 2-18GHz
- Gain: 35dB Min
- Noise Figure: 2.5dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	2-18			GHz
Gain	35	40		dB
Gain Flatness		±2.0		dB
Noise Figure		1.5	2.5	dB
Output P1dB	18	20		dBm
Input VSWR			2	:1
Output VSWR			2	:1
DC Voltage		12		V DC
DC Supply Current		180		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44*36*11	mm
Weight	42	g

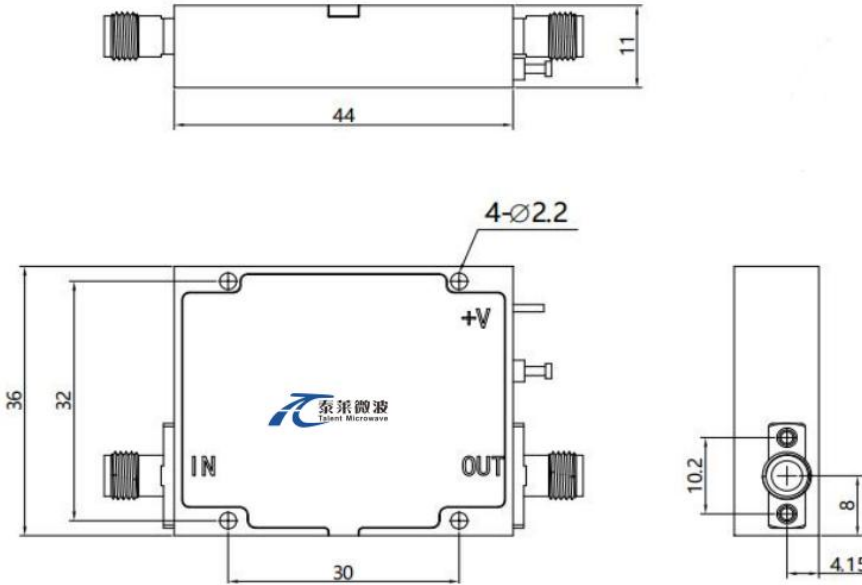
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V


**Available 220V System
 Benchtop Amplifier**

Outline Drawing:

Unit: mm(inches)



*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

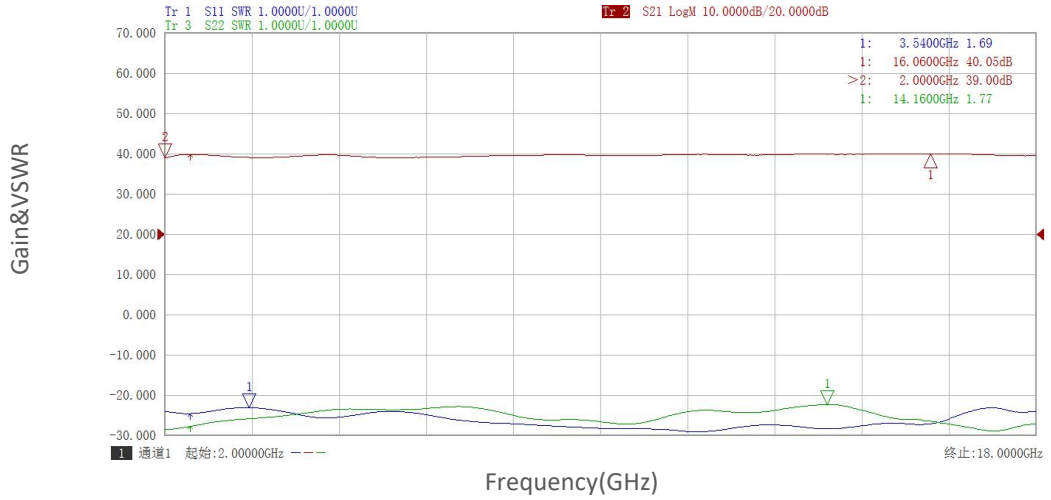
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

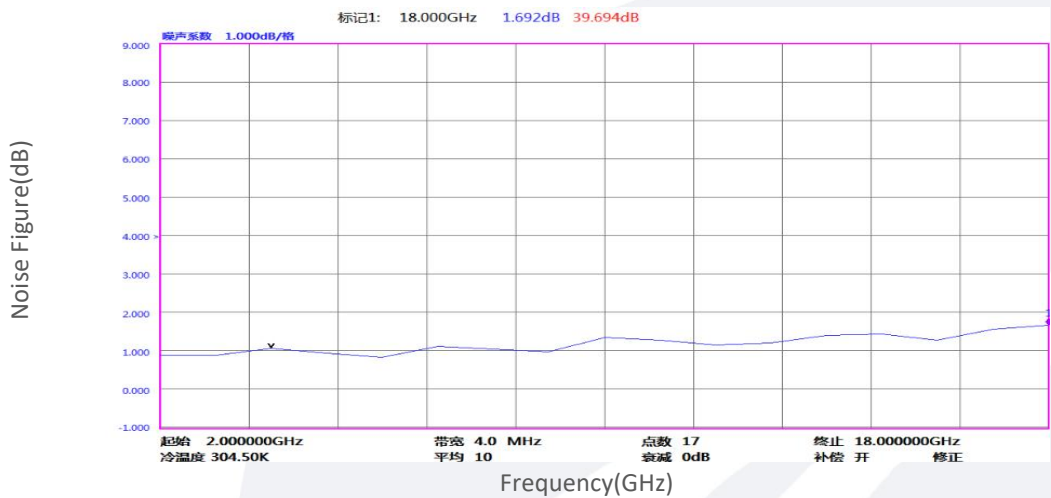
Part Number	Description	Revision
TLLA2G18G-35-40	Low Noise Amplifier, 2-18GHz, Noise Figure:2.5dB, Gain:35 dB,P1dB:20dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA2G18G-35-40-HS	Low Noise Amplifier, 2-18GHz, Noise Figure:2.5dB, Gain:35 dB,P1dB:20dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

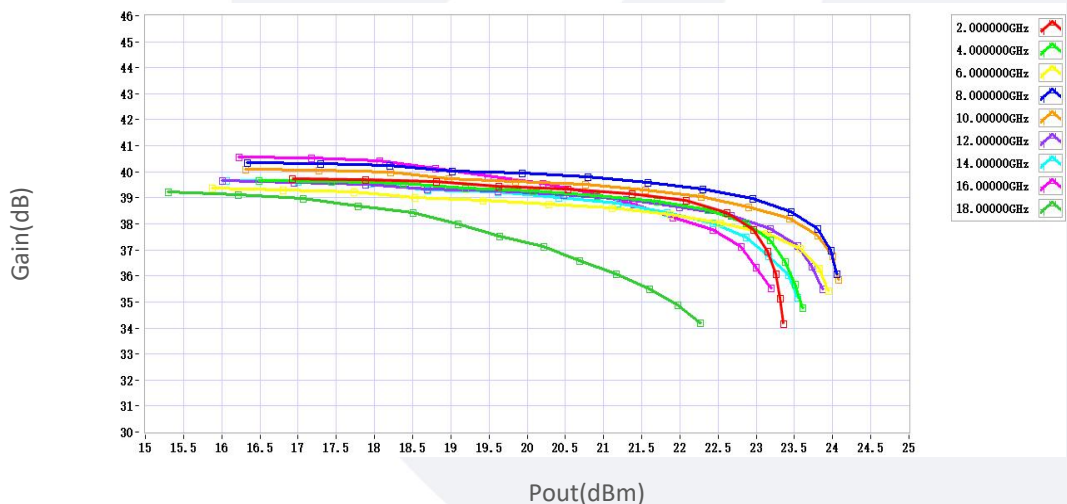
Gain&VSWR vs Frequency



Noise Figure vs Frequency

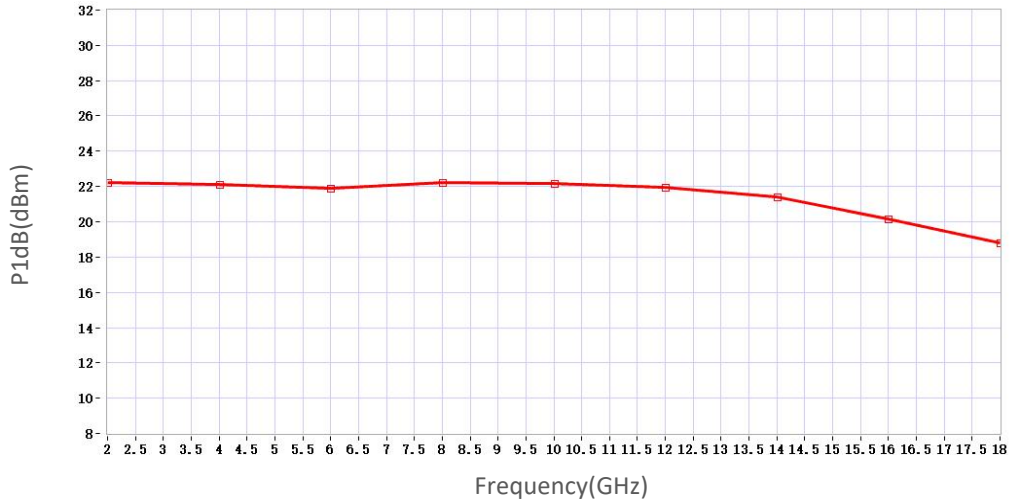


Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

