

**Model: TLLA18G40G-25-30**
**Low Noise Amplifier**
**18-40GHz, NF:3.0dB, Gain:25dB, P1dB:15dBm**
**Feature:**

- Ultra Wide Band: 18-40GHz
- Gain: 25dB Typ
- Noise Figure: 3dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain		25		dB
Gain Flatness			±2.5	dB
Noise Figure			3.0	dB
Output P1dB		15		dBm
Spurious		-60		dBc
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage	+8	+12	+20	V DC
DC Supply Current		80		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	2.92 Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	55	g

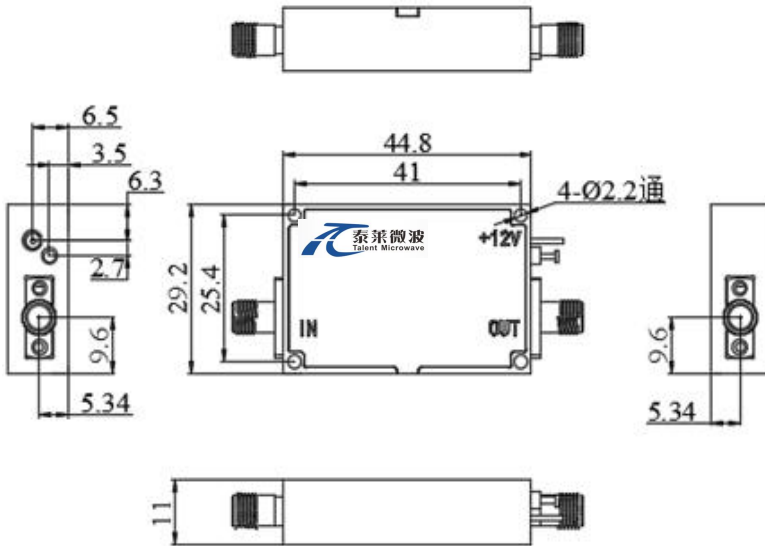

 Available 220V System  
 Benchtop Amplifier

**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	+20V
RF INPUT POWER	15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

**Outline Drawing:**

Unit: mm(inches)



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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

**Environmental Conditions:**

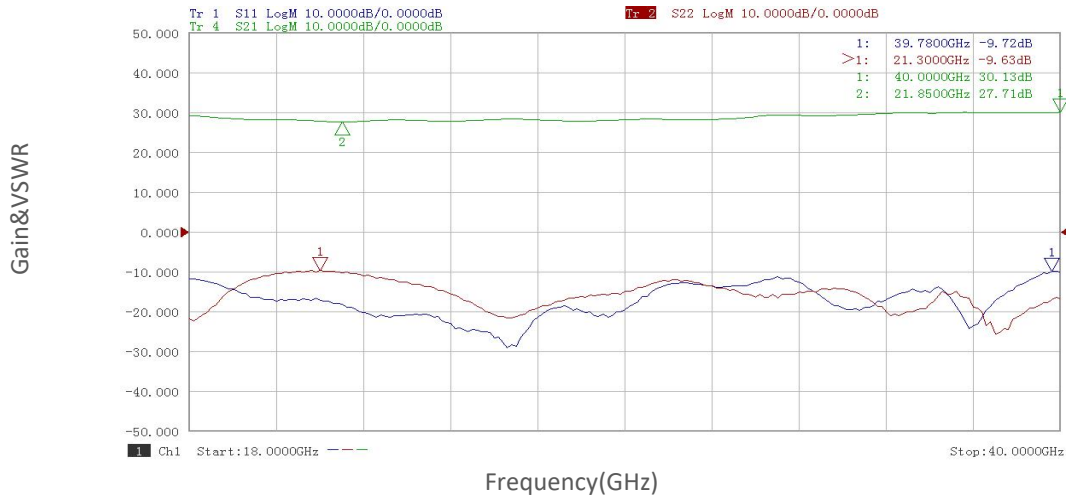
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

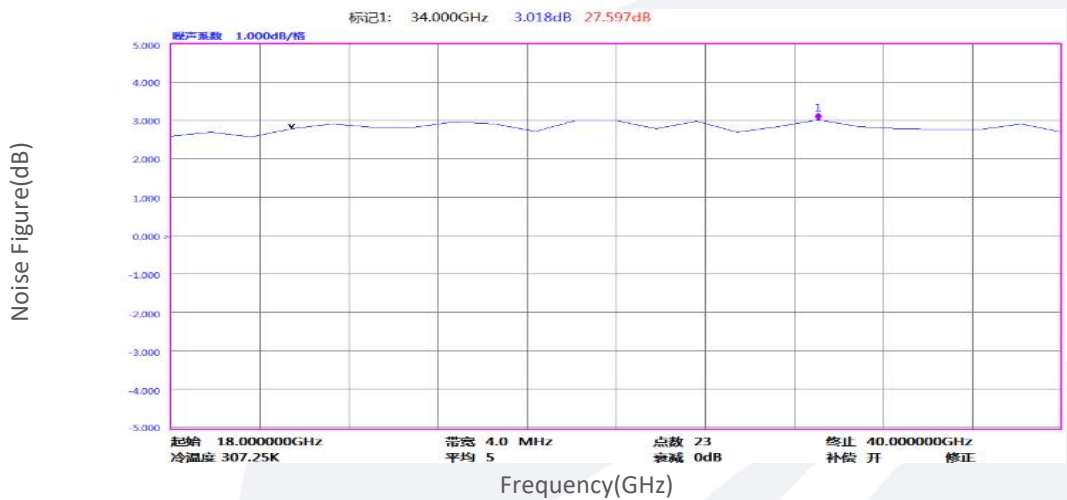
Part Number	Description	Revision
TLLA18G40G-25-30	Low Noise Amplifier, 18-40GHz, Noise Figure:3dB, Gain:25 dB,P1dB:15dBm,20V DC,Without Heatsink	Rev.1.1
TLLA18G40G-25-30-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:3dB, Gain:25 dB,P1dB:15dBm,20V DC,With Heatsink	Rev.1.1

Typical Performance Data:

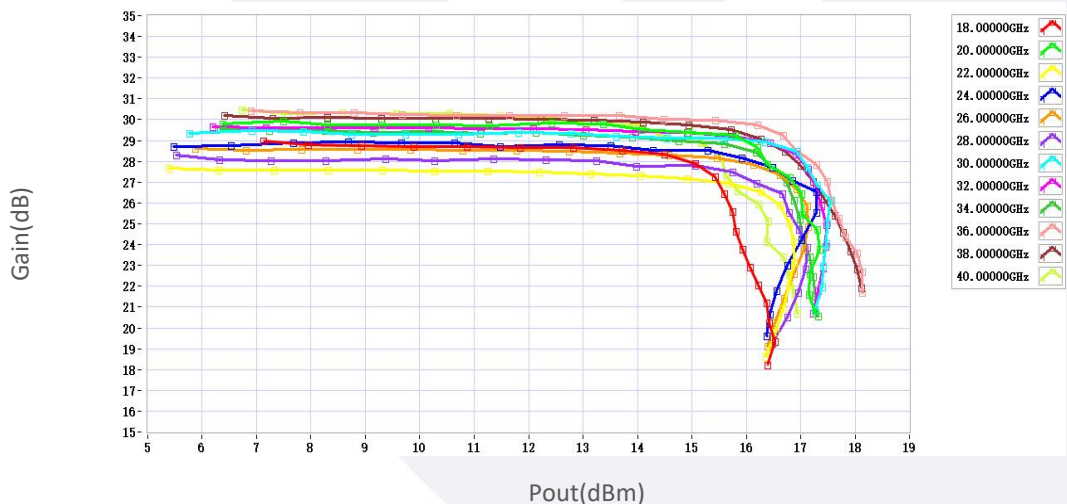
Gain&VSWR vs Frequency



Noise Figure vs Frequency

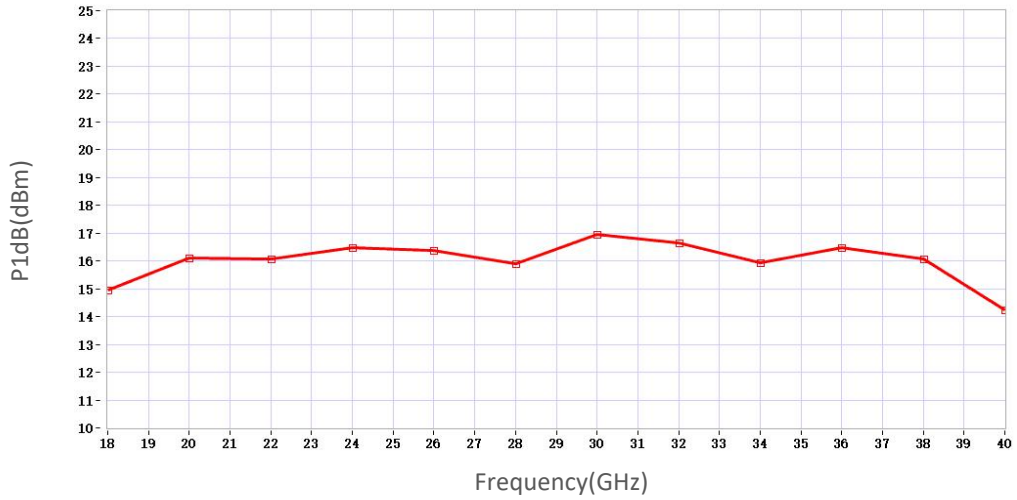


Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

