

Model: TLLA1G40G-36-50
Low Noise Amplifier
1-40GHz, NF:5.0dB, Gain:36dB, P1dB:15dBm
Feature:

- Ultra Wide Band: 1-40GHz
- Gain: 36dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-40			GHz
Gain	33	36	39	dB
Gain Flatness		±3.0		dB
Noise Figure		5		dB
Output P1dB	12	15		dBm
Output Psat	13	17		dBm
Input VSWR		2.3		:1
Output VSWR		2.3		:1
Spurious		-60		dBc
DC Voltage		5	12	V DC
DC Supply Current		400		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	44*36*12	mm
Weight	30	g

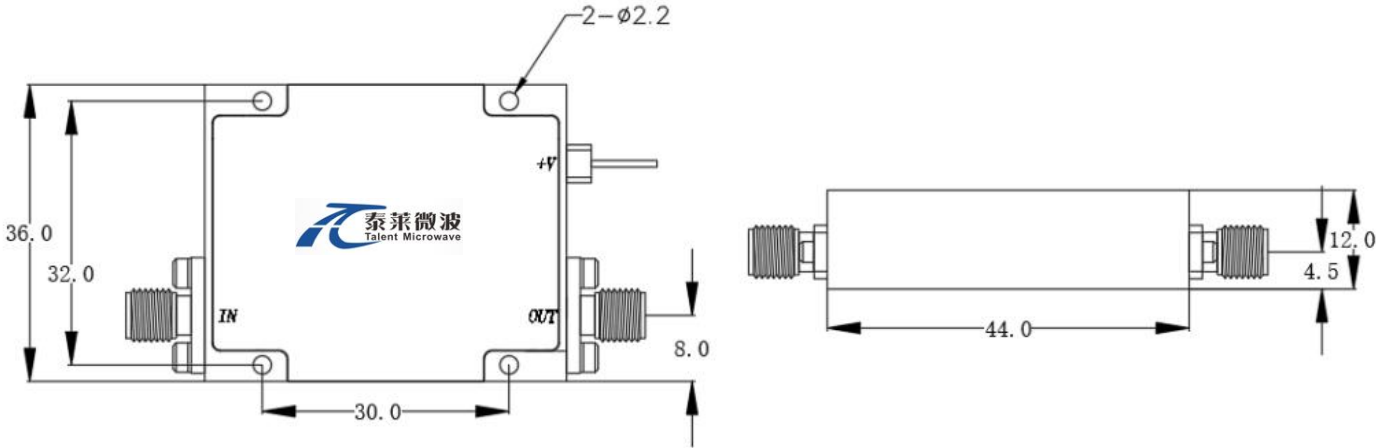
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
RF Input Power	10 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:

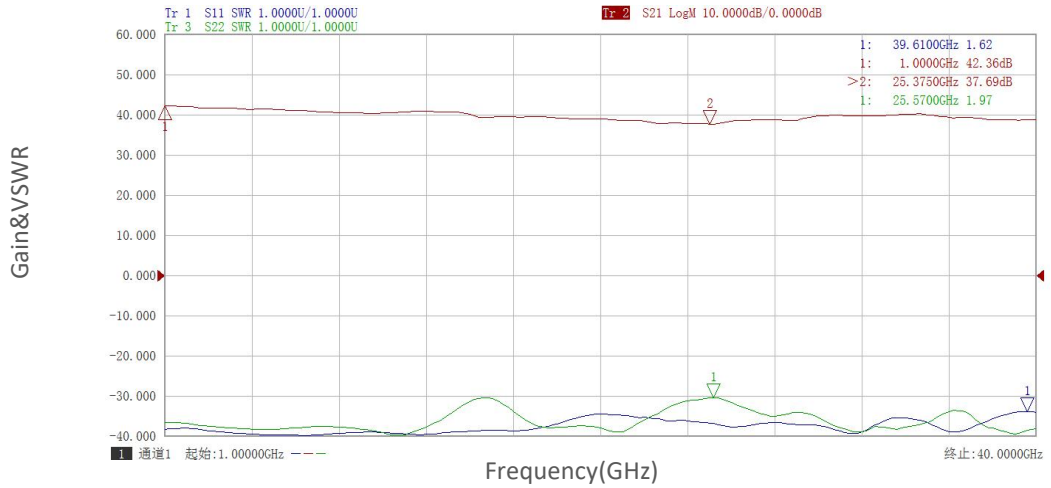
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

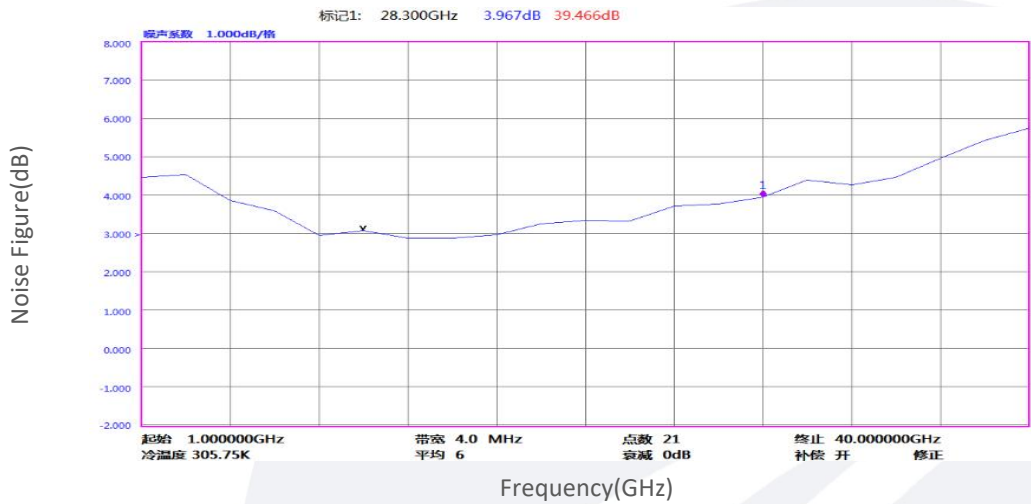
Part Number	Description	Revision
TLLA1G40G-36-50	Low Noise Amplifier, 1-40GHz, Noise Figure:5.0dB, Gain:36 dB,P1dB:15dBm,+5V DC,Without Heatsink	Rev.1.1
TLLA1G40G-36-50-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:5.0dB, Gain:36 dB,P1dB:15dBm,+5V DC,With Heatsink	Rev.1.1

Typical Performance Data:

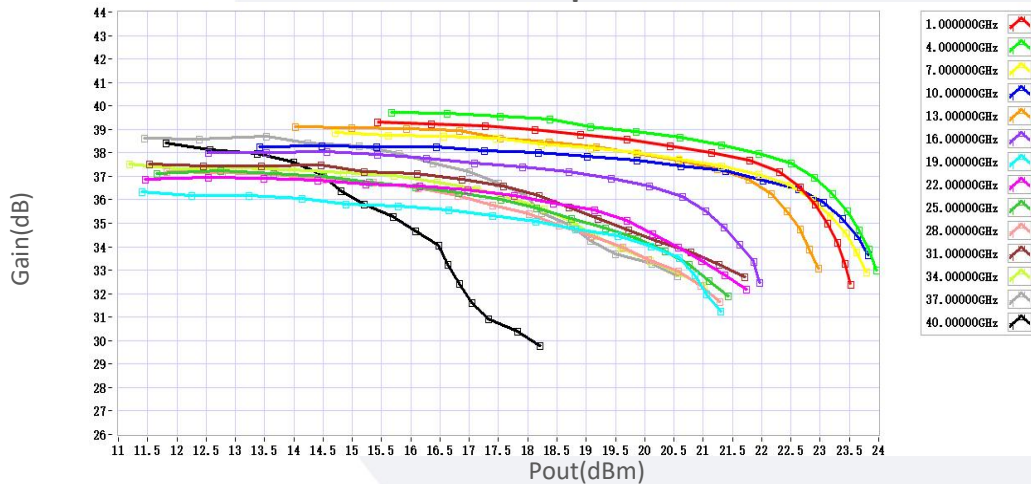
Gain&VSWR vs Frequency



Noise Figure vs Frequency



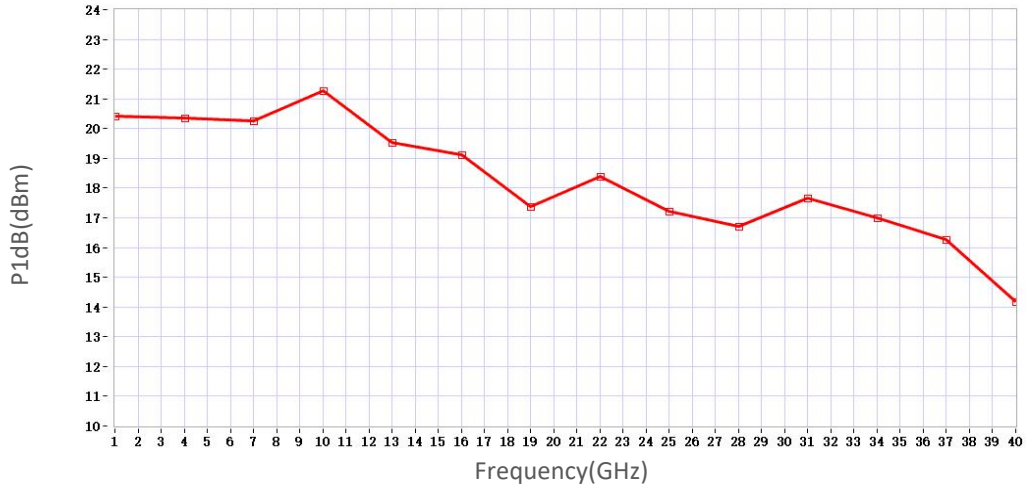
Gain vs Output Power



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.