

Model:TLLA0.5G40G-40-50
Low Noise Amplifier
0.5-40GHz, NF:5.0dB, Gain:43dB,P1dB:18dBm
Feature:

- Ultra Wide Band: 0.5-40GHz
- Gain: 43dB 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	0.5-40			GHz
Gain		43		dB
Gain Flatness		±2.5		dB
Noise Figure		5.0		dB
Output P1dB		18		dBm
Output Psat		21		dBm
Spurious		-60		dBc
Input VSWR		2	2.5	:1
Output VSWR		2	2.5	:1
DC Voltage	8	12		V DC
DC Supply Current		350		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

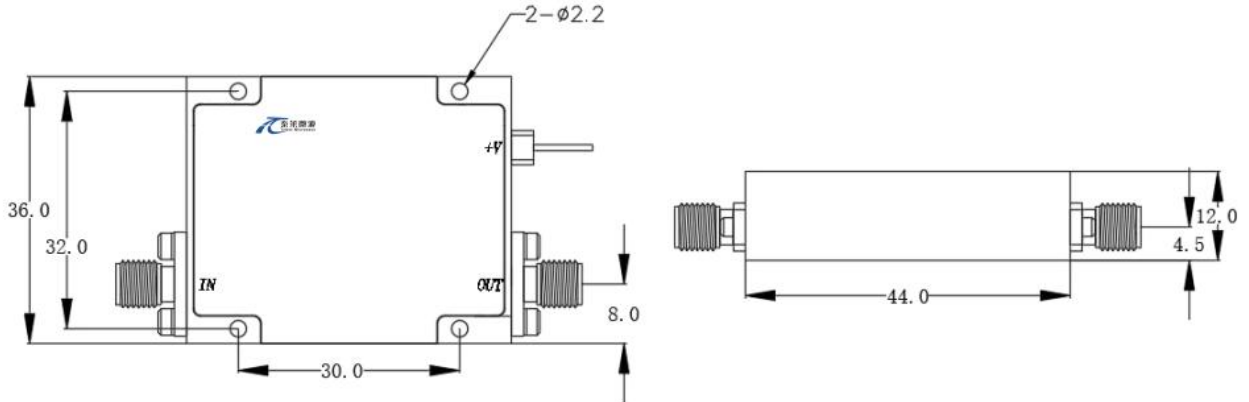
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	15 V
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:

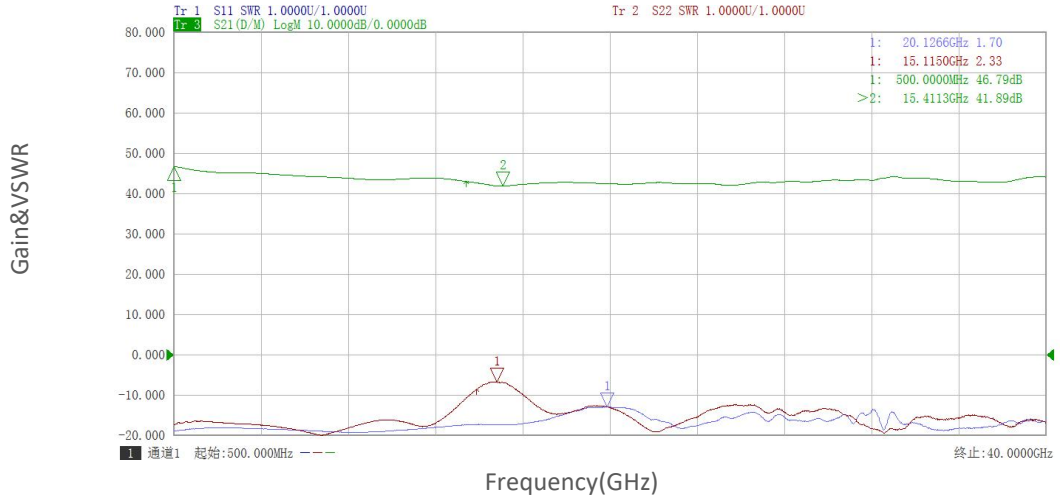
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

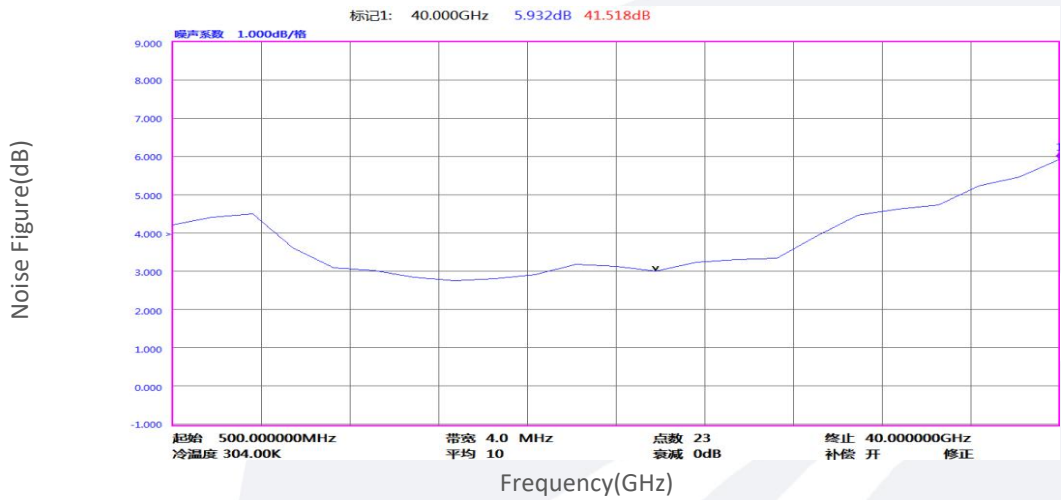
Part Number	Description	Revision
TLLA0.5G40G-40-50	Low Noise Amplifier, 0.5-40GHz, Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA0.5G40G-40-50-HS	Low Noise Amplifier, 0.5-40GHz, Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

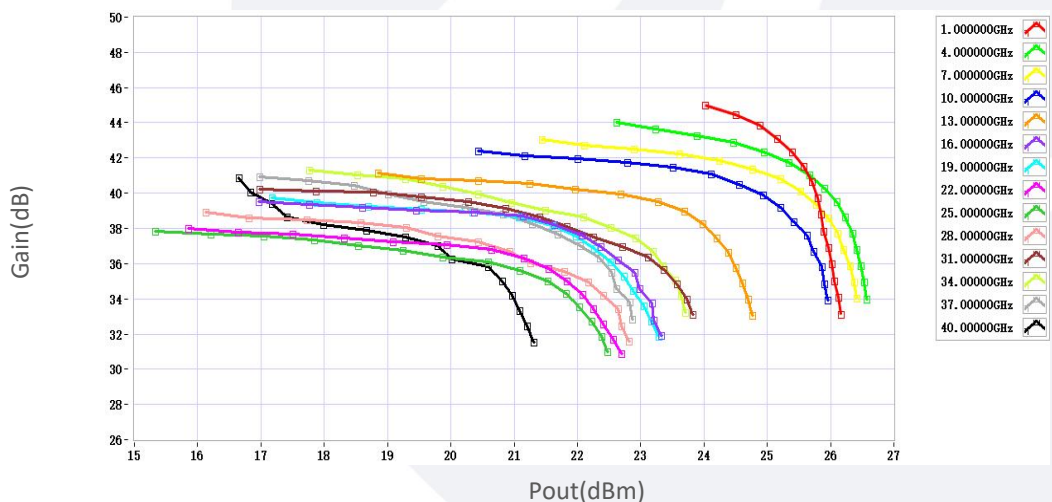
Gain&VSWR vs Frequency



Noise Figure vs Frequency

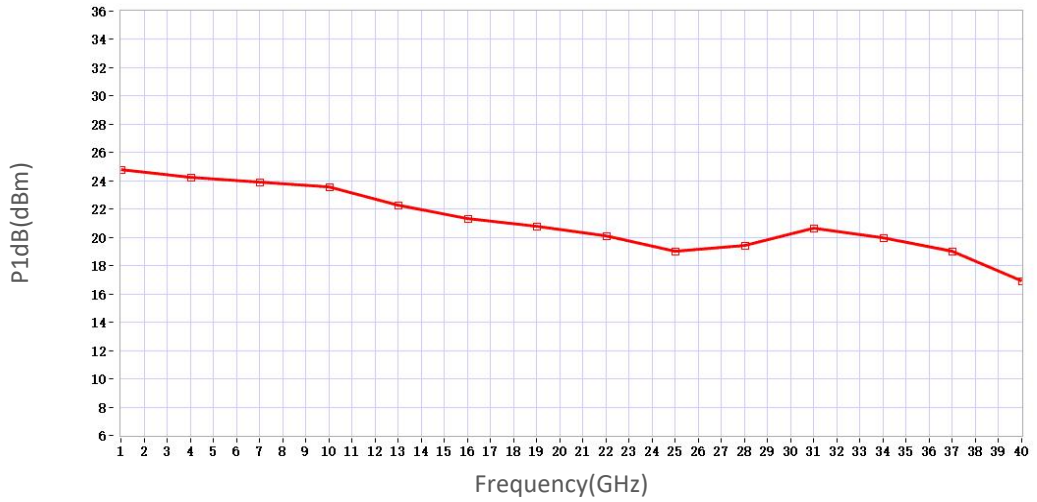


Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

