

Model:TLLA18G40G-53-30

Low Noise Amplifier

18-40GHz, NF:2.5dB, Gain:53dB,P1dB:16dBm

Feature:

- Ultra Wide Band: 18-40GHz
- Gain: 53dB Typ
- Noise Figure: 2.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain	50	53		dB
Gain Flatness		±3		dB
Noise Figure		2.5	3.5	dB
Output P1dB		16		dBm
Input VSWR		2.5		:1
Output VSWR		2		:1
DC Voltage		12	15	V DC
DC Supply Current		180		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	50*30*11	mm
Weight	55	g

Absolute Maximum Ratings:

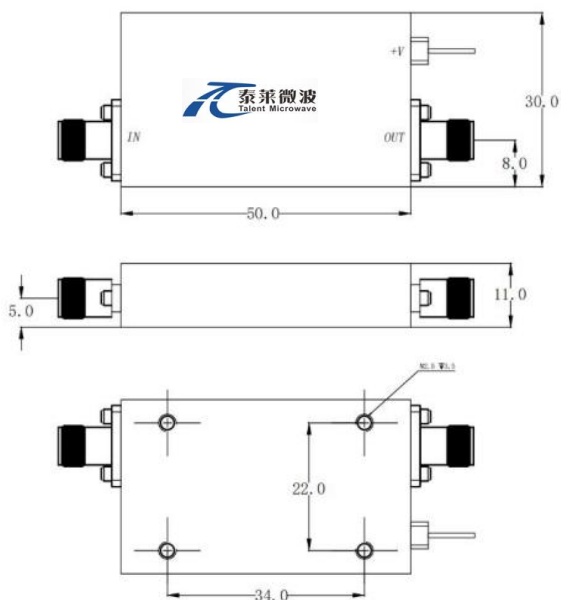
Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm(inches)



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

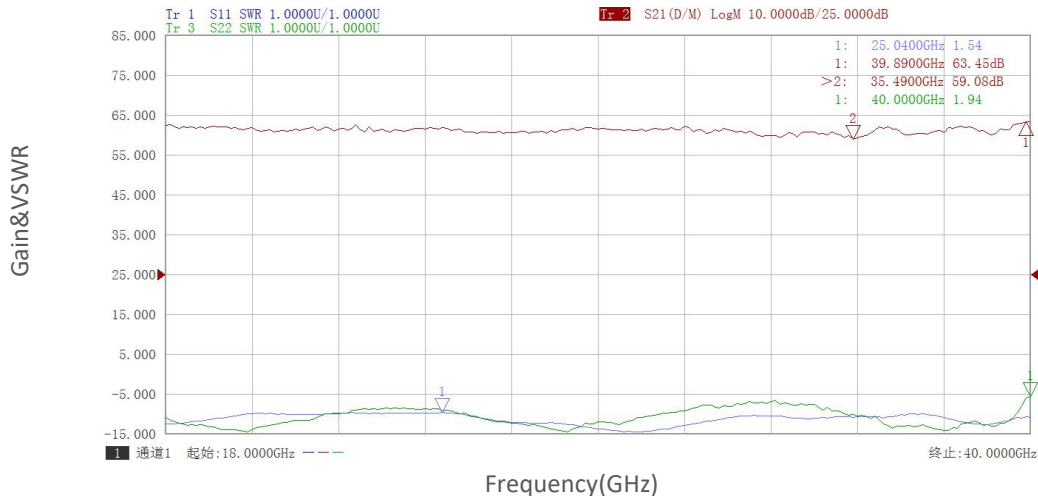
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

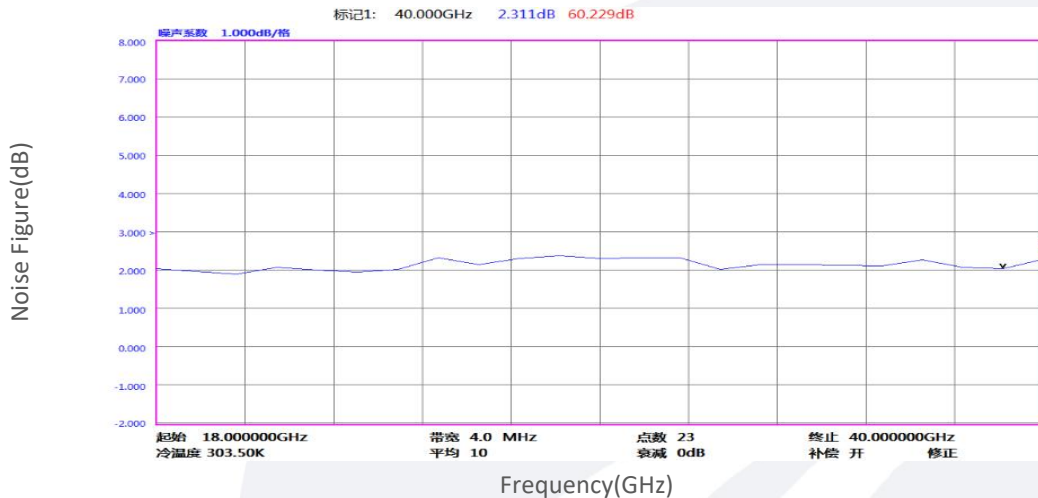
Part Number	Description	Revision
TLLA18G40G-53-30	Low Noise Amplifier, 18-40GHz, Noise Figure:2.5dB, Gain:53 dB,P1dB:16dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA18G40G-53-30-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:2.5dB, Gain:53 dB,P1dB:16dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

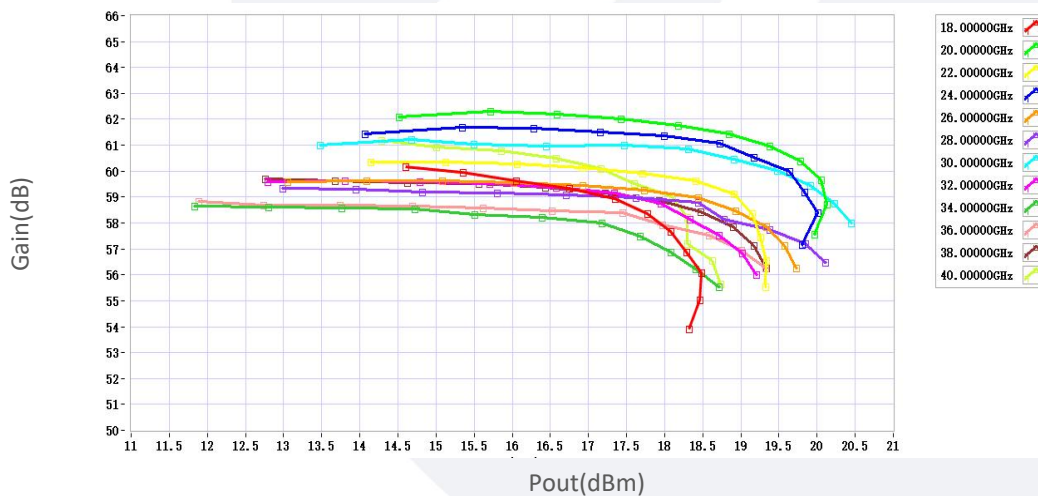
Gain&VSWR vs Frequency



Noise Figure vs Frequency



Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency

