

Model: TLLA40G50G-40-28
Low Noise Amplifier
40-50GHz, NF:2.8dB, Gain:40dB, P1dB:20dBm
Feature:

- Ultra Wide Band:40-50GHz
- Gain: 40dB Typ
- Noise Figure: 2.8dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	40-50			GHz
Gain		40		dB
Gain Flatness		±2.0		dB
Noise Figure		2.8	3	dB
Output P1dB	17	20		dBm
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage	8	12	20	V DC
DC Supply Current		110		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	50*30*11	mm
Weight	55	g

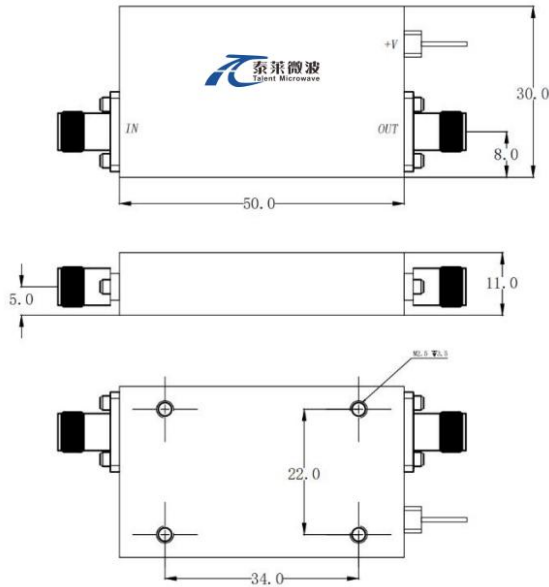
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+20V
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:

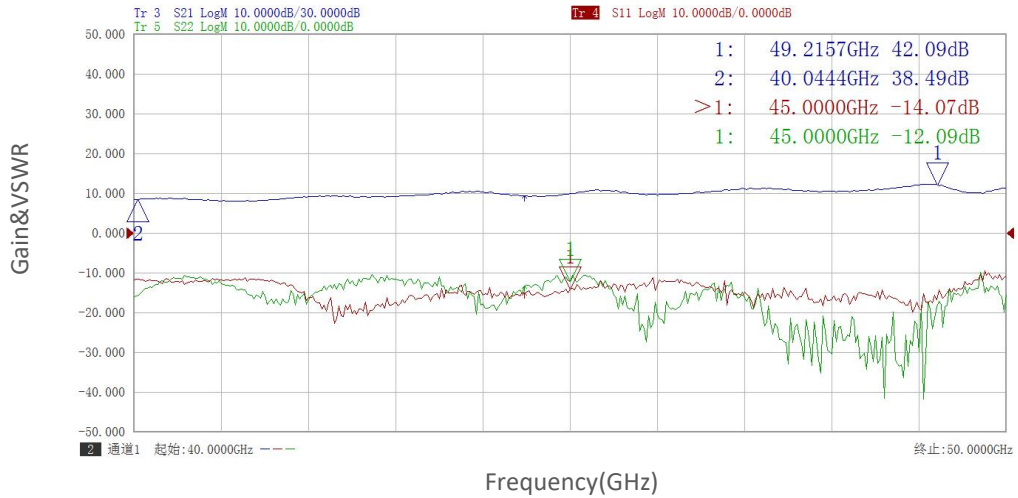
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

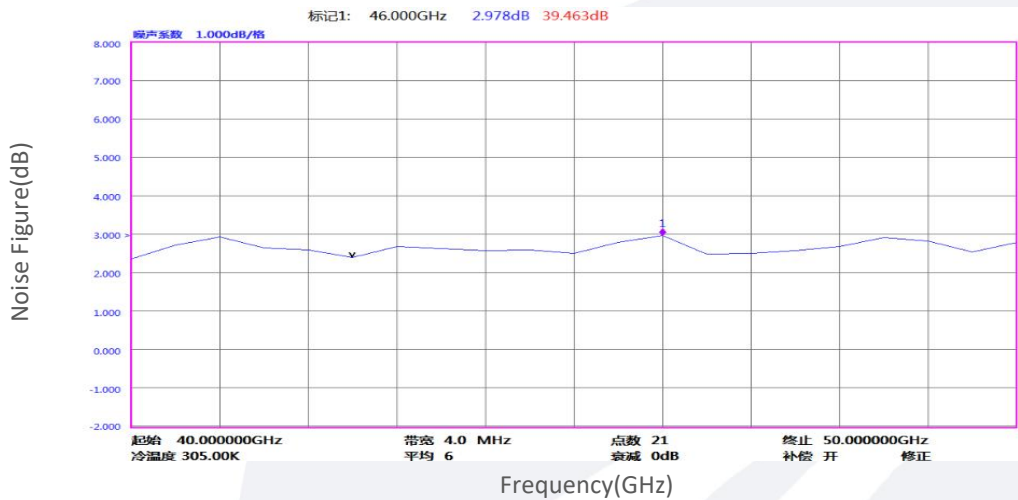
Part Number	Description	Revision
TLLA40G50G-40-28	Low Noise Amplifier, 40-50GHz, Noise Figure:2.8dB, Gain:40 dB,P1dB:20dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA40G50G-40-28-HS	Low Noise Amplifier, 40-50GHz, Noise Figure:2.8dB, Gain:40 dB,P1dB:20dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

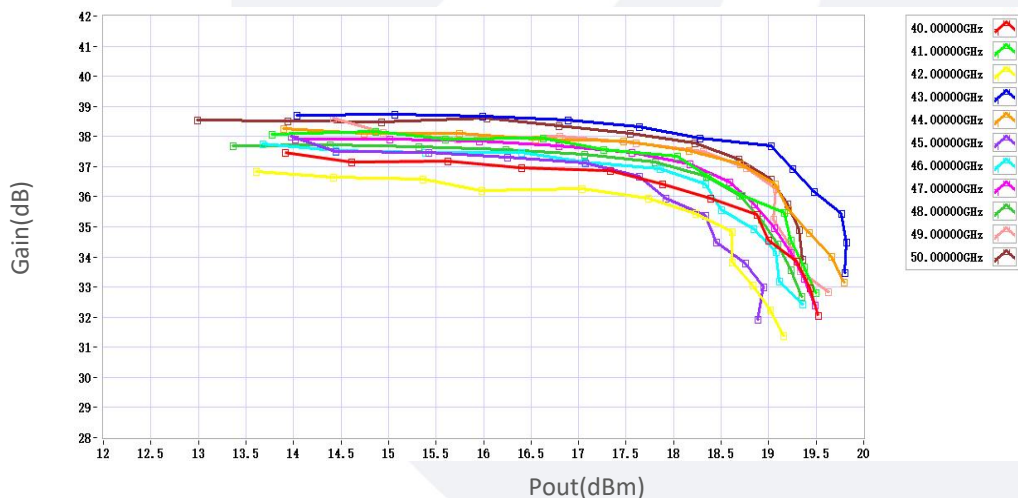
Gain&VSWR vs Frequency



Noise Figure vs Frequency



Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency

