

Model: TLLA2G40G-30-45
Low Noise Amplifier
2-40GHz, NF:5.5dB, Gain:30dB, P1dB:19dBm
Feature:

- Ultra Wide Band: 2-40GHz
- Gain: 30dB Min
- Noise Figure: 5.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	2-40			GHz
Gain	30	33		dB
Gain Flatness		±2.5	±5.5	dB
Noise Figure		5.5	6	dB
Output P1dB	15	19		dBm
Output Psat		20		dBm
Spurious		-60		dBc
Input VSWR		1.8	2.2	:1
Output VSWR		1.8	2.5	:1
DC Voltage		12		V DC
DC Supply Current		450		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	35*40*12	mm
Weight	/	g

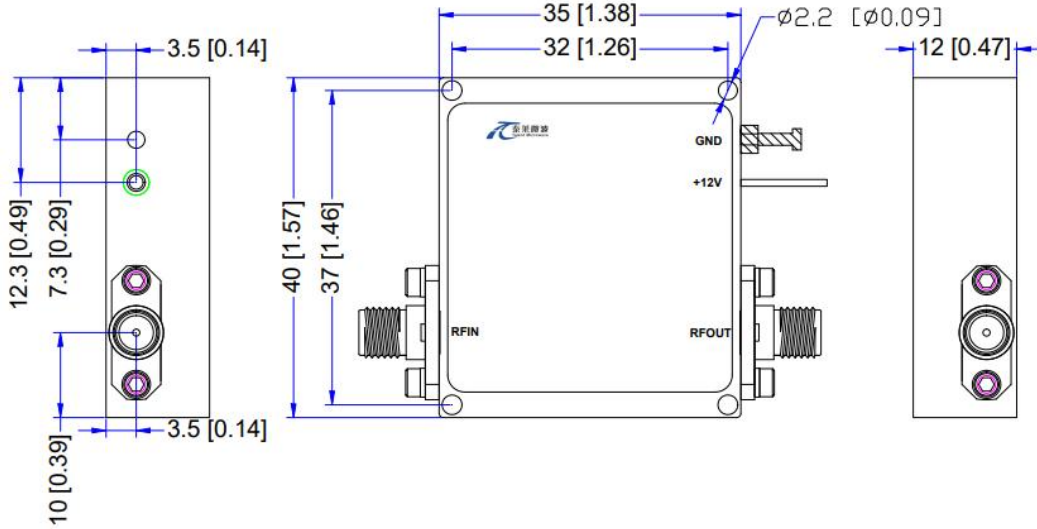
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
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:

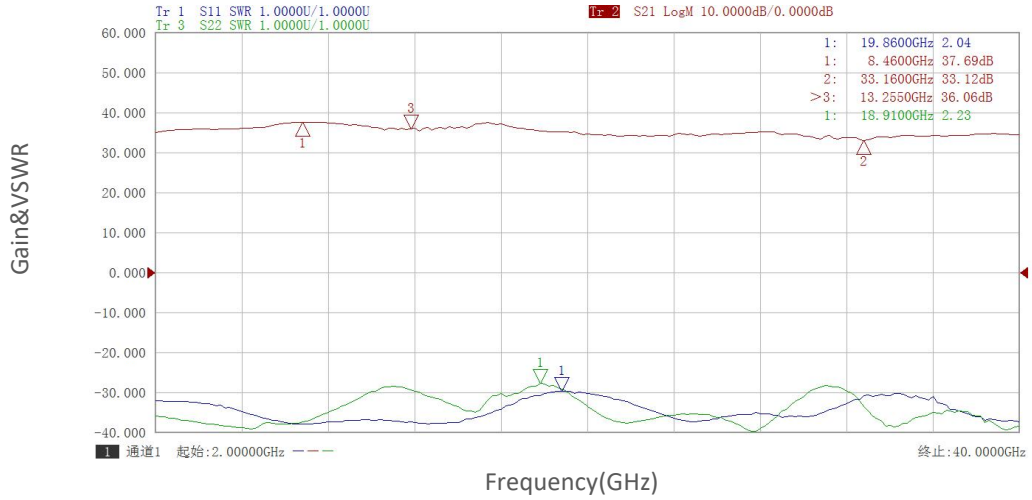
Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude		50,000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

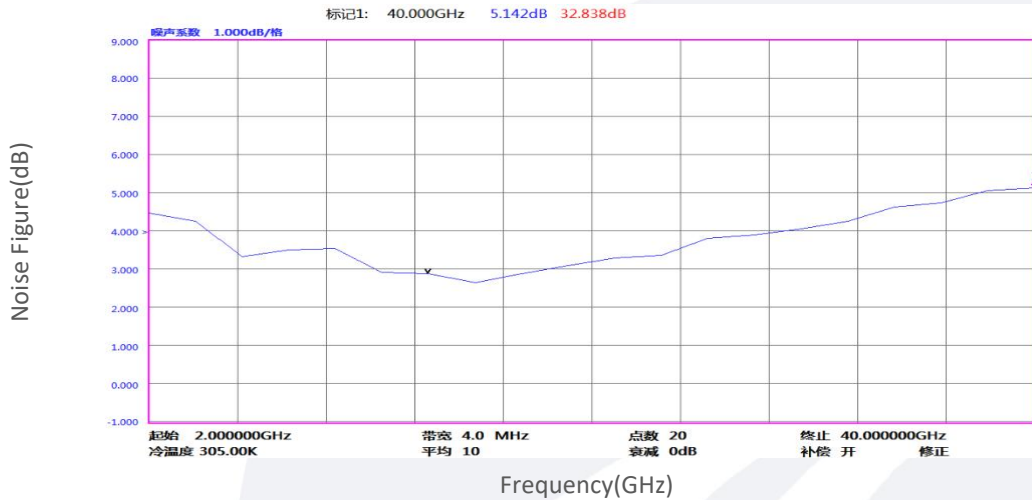
Part Number	Description	Revision
TLLA2G40G-30-45	Low Noise Amplifier, 2-40GHz, Noise Figure:5.5dB, Gain:30 dB,P1dB:19dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA2G40G-30-45-HS	Low Noise Amplifier, 2-40GHz, Noise Figure:5.5dB, Gain:30 dB,P1dB:19dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

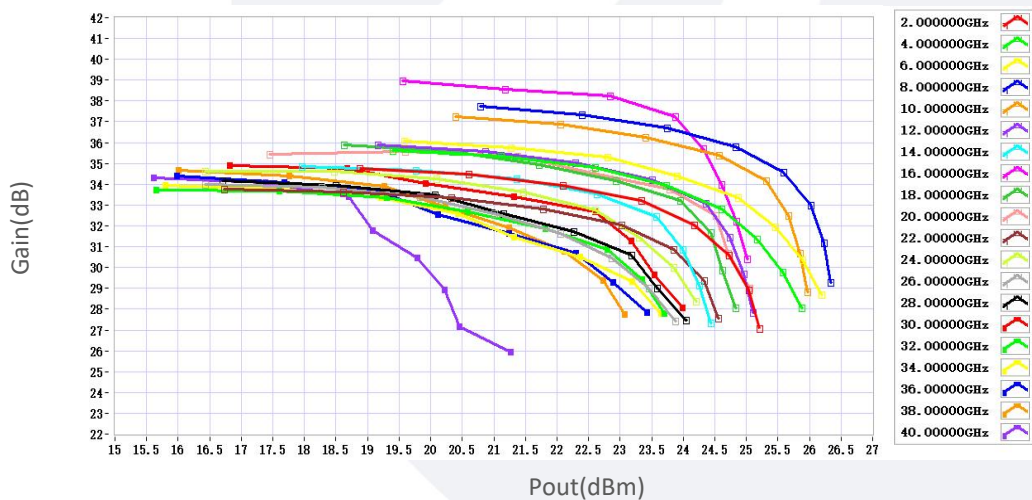
Gain&VSWR vs Frequency



Noise Figure vs Frequency

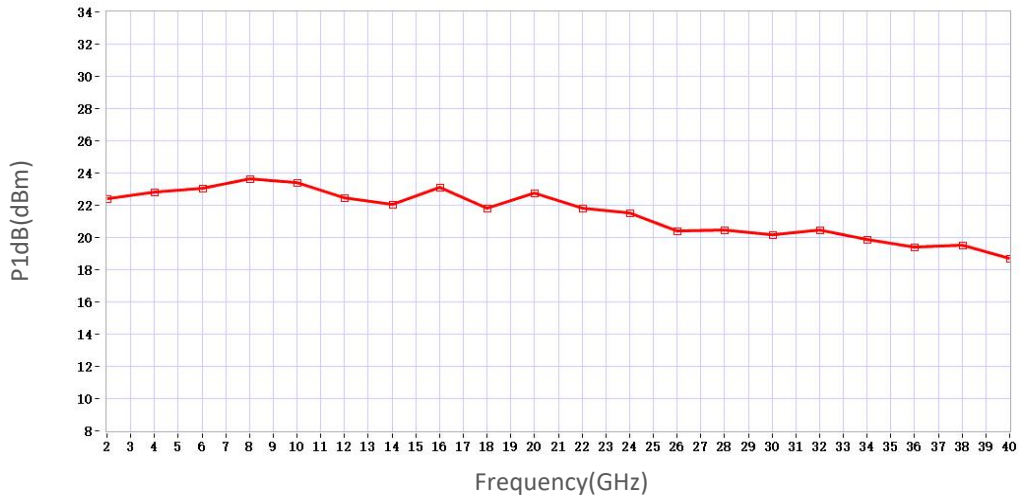


Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

