

Model: TLLA1G40G-40-45
Low Noise Amplifier
1-40GHz, NF:4.5dB, Gain:43dB, P1dB:20dBm
Feature:

- Ultra Wide Band: 1-40GHz
- Gain: 43dB Typ
- Noise Figure: 4.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-40			GHz
Gain	40	43		dB
Gain Flatness		±3.0		dB
Noise Figure		4.5	5.2	dB
Output P1dB	17	20		dBm
Output Psat		21		dBm
Spurious		-60		dBc
Output IP3		28		dBm
Input VSWR		1.8	2	:1
Output VSWR		1.8	2	:1
DC Voltage		12		V DC
DC Supply Current		550		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	40.3*35.3*12	mm
Weight	/	g

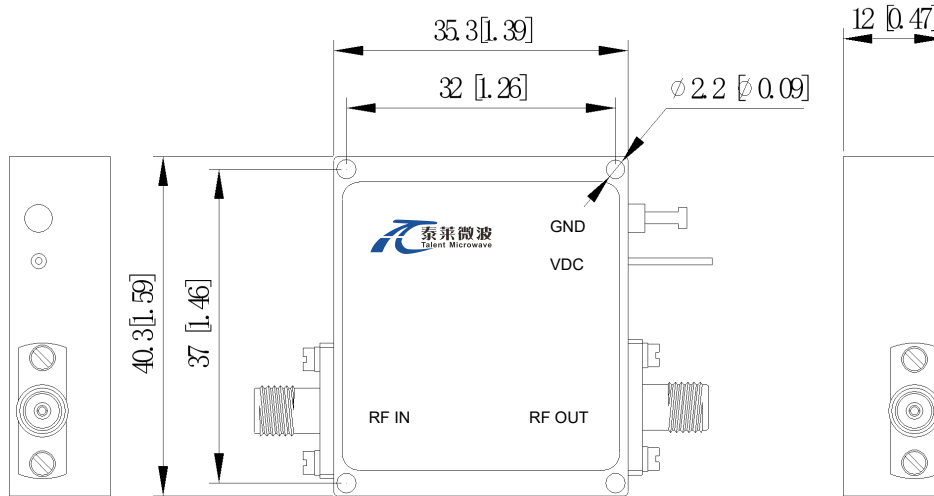
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	-16 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:

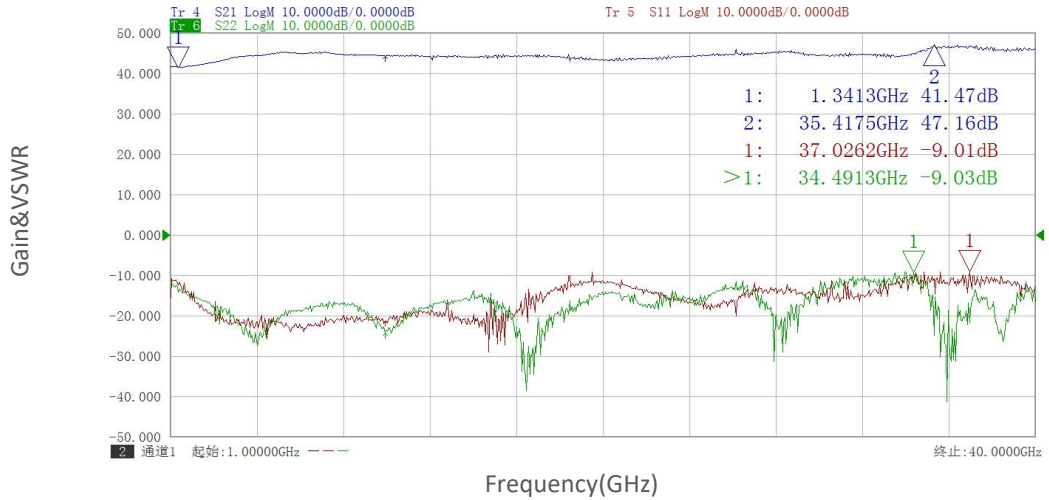
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

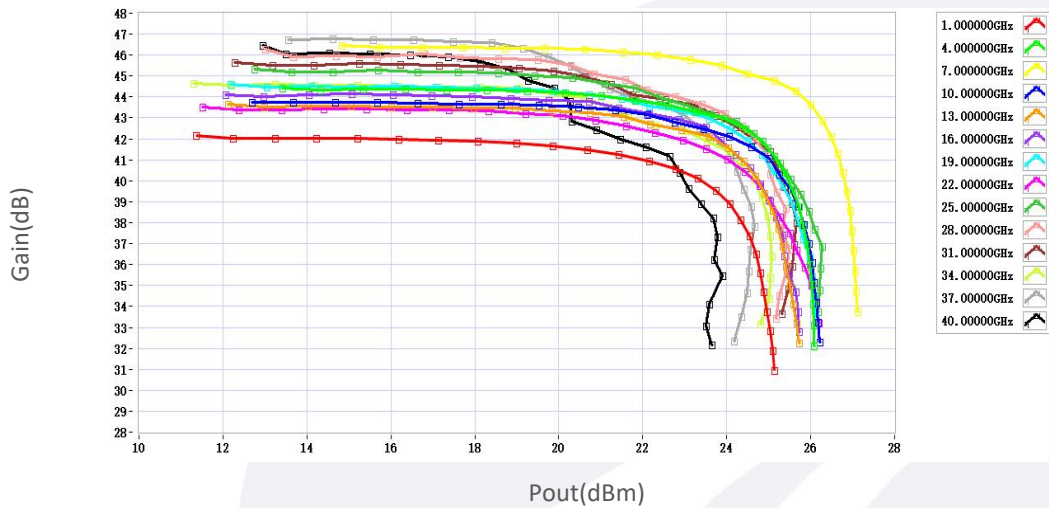
Part Number	Description	Revision
TLLA1G40G-40-45	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43 dB,P1dB:20dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA1G40G-40-45-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43 dB,P1dB:20dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

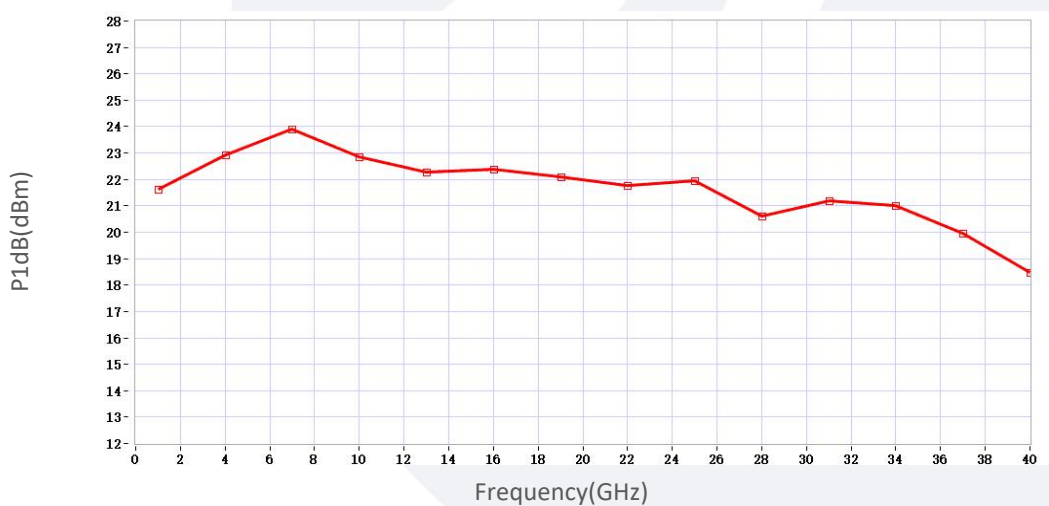
Gain&VSWR vs Frequency



Gain vs Output Power



P1dB vs Frequency



Typical Performance Data:

Psat vs Frequency

