

Model: TLLA35G50G-44-20
Low Noise Amplifier
35-50GHz, NF:2.5dB, Gain:44dB, P1dB:12dBm
Feature:

- Ultra Wide Band: 35-50GHz
- Gain: 44dB 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	35-50			GHz
Gain	40	44		dB
Gain Flatness		±2.0	±3.0	dB
Noise Figure		2.5	3	dB
Output P1dB		12		dBm
Input VSWR		2	3	:1
Output VSWR		2	3	:1
DC Voltage		8	12	V DC
DC Supply Current		25		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	55	g

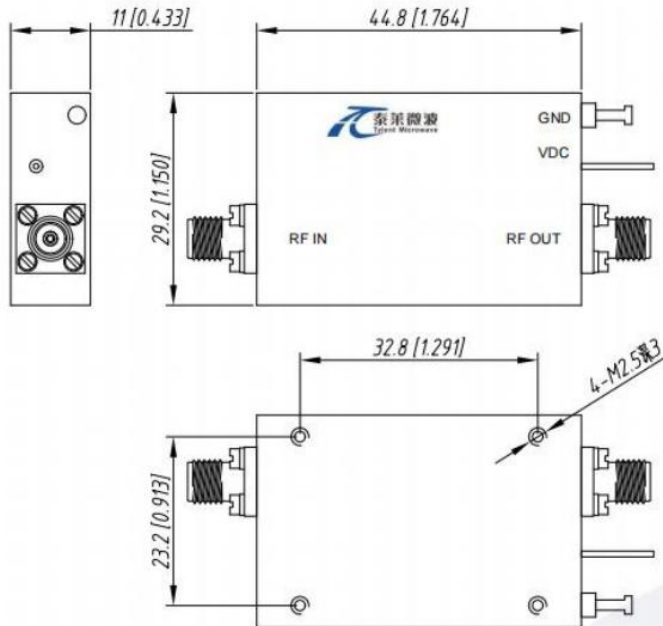
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
RF Input Power	0 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:

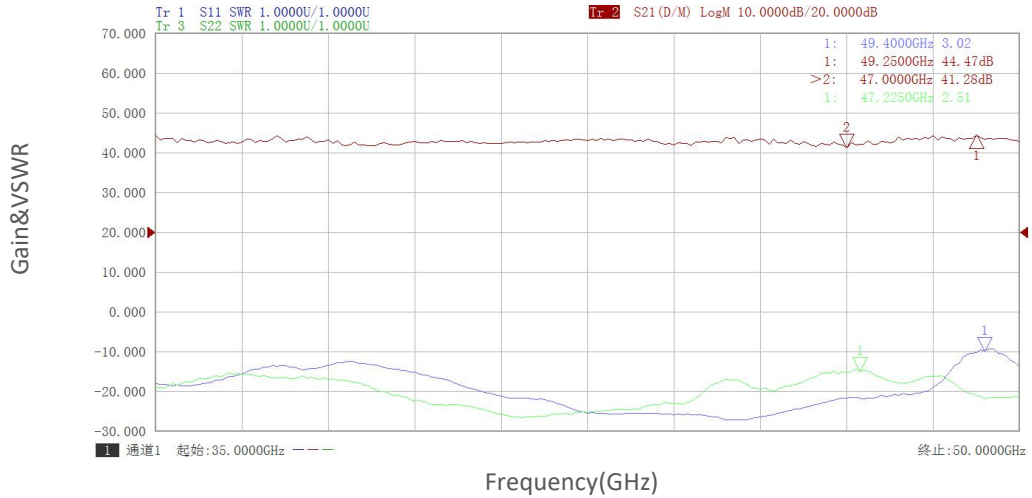
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude		50,000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

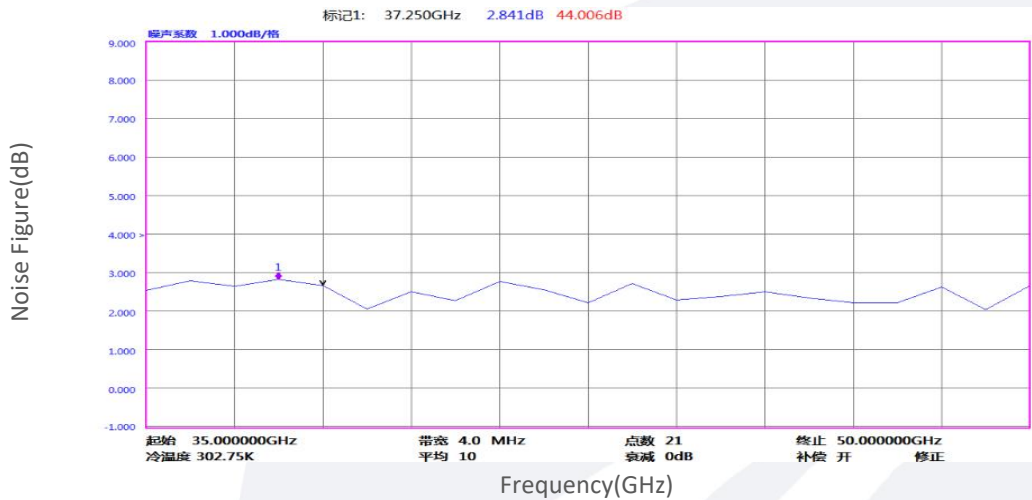
Part Number	Description	Revision
TLLA35G50G-44-20	Low Noise Amplifier, 35-50GHz, Noise Figure:2.5dB, Gain:44 dB,P1dB:12dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA35G50G-44-20-HS	Low Noise Amplifier, 35-50GHz, Noise Figure:2.5dB, Gain:44 dB,P1dB:12dBm,+8V DC,With Heatsink	Rev.1.1

Typical Performance Data:

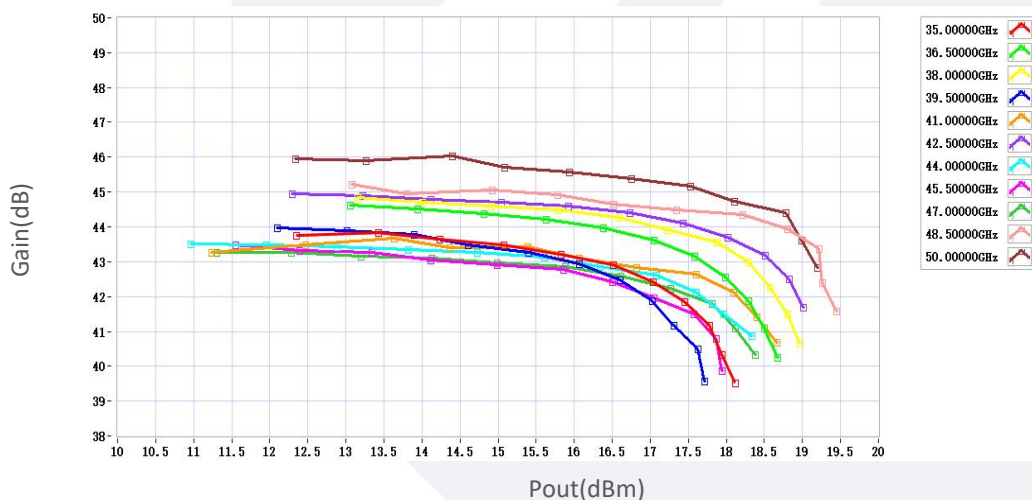
Gain&VSWR vs Frequency



Noise Figure vs Frequency



Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency

