

Model:TLA18G50G-42-50

Low Noise Amplifier

18-50GHz, NF:5.0dB, Gain:42dB,P1dB:13dBm

Feature:

- Ultra Wide Band: 18-50GHz
- Gain: 42dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	18-50			GHz
Gain	40	42		dB
Gain Flatness		±2.5		dB
Noise Figure		5		dB
Output P1dB	13	14		dBm
Output Psat		15		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		5	6	V DC
DC Supply Current		280		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	50	g

Absolute Maximum Ratings:

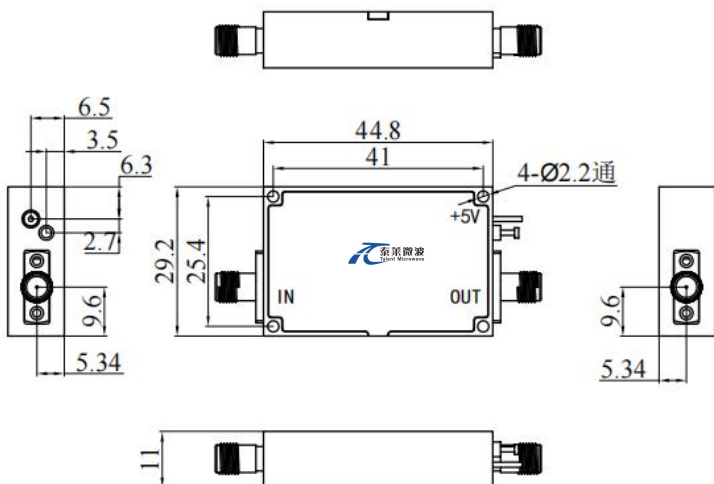
Parameter	Value
Supply Bias Voltage	+6V
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm(inches)



***Heat Sink Required During Operation



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

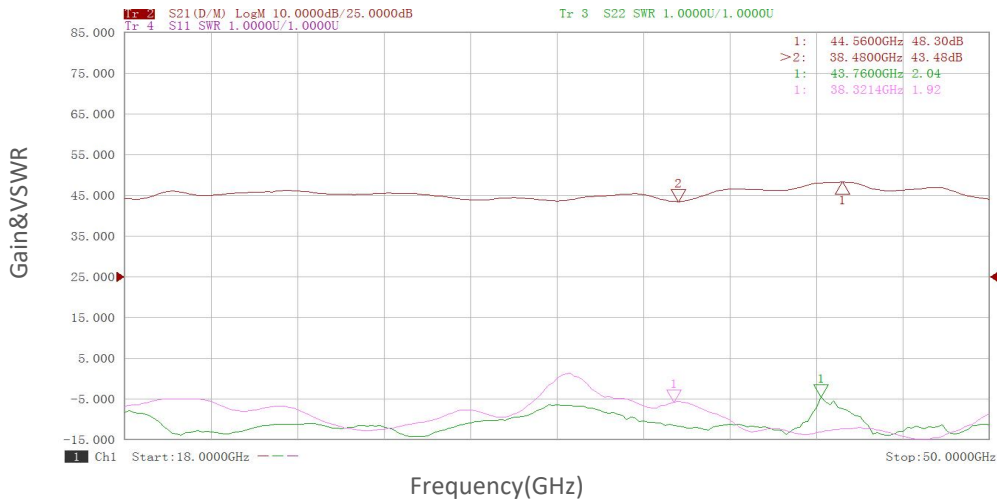
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

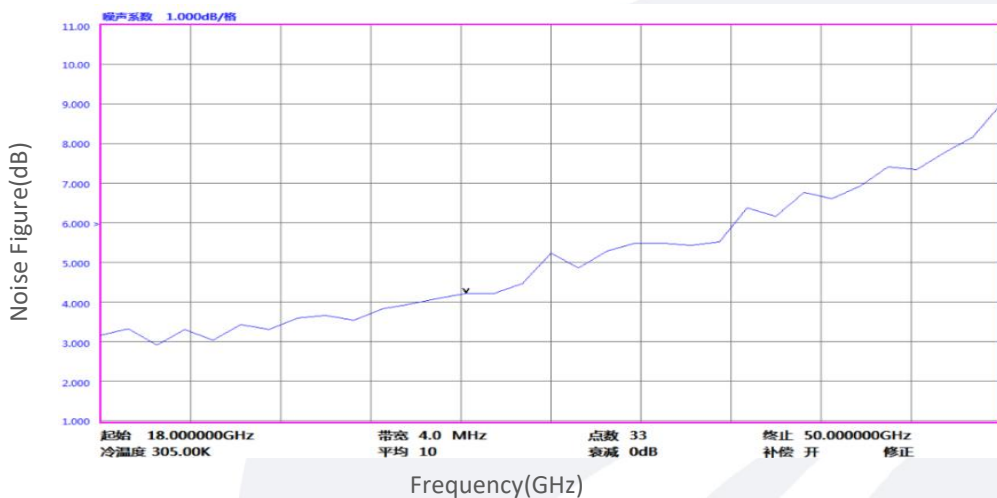
Part Number	Description	Revision
TLLA18G50G-42-50	Low Noise Amplifier, 18-50GHz, Noise Figure:5.0dB, Gain:42 dB,P1dB:13dBm,+5V DC,Without Heatsink	Rev.1.1
TLLA18G50G-42-50-HS	Low Noise Amplifier, 18-50GHz, Noise Figure:5.0dB, Gain:42 dB,P1dB:13dBm,+5V DC,With Heatsink	Rev.1.1

Typical Performance Data:

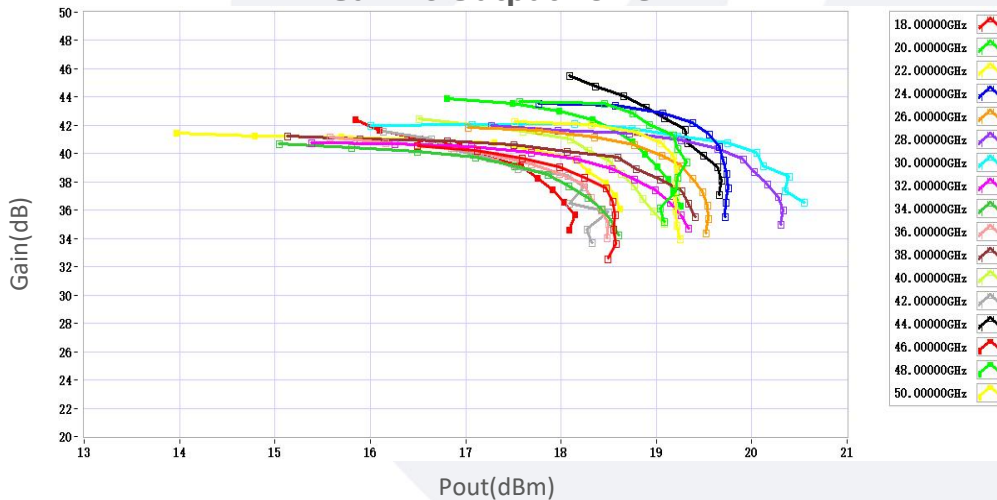
Gain&VSWR vs Frequency



Noise Figure vs Frequency

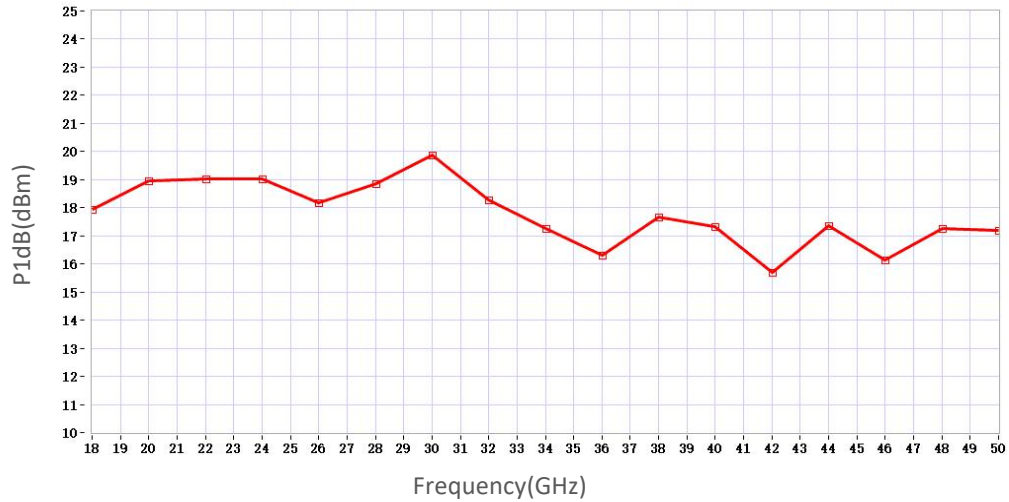


Gain vs Output Power

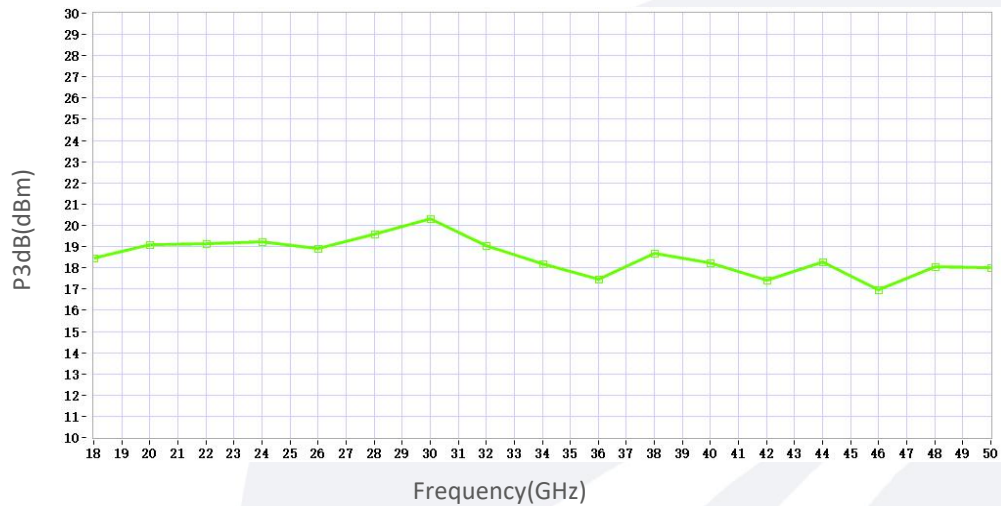


Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

