

**Model: TLLA50K43G-30-50**
**Low Noise Amplifier**  
**50KHz-43GHz, NF:5.0dB, Gain:30dB**
**Feature:**

- Ultra Wide Band: 50KHz-43GHz
- Gain: 30dB 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	50KHz-43GHz			GHz
Gain	23	30		dB
Noise Figure		5		dB
Output P1dB		16		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12		V DC
DC Supply Current		350		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	2.92 Female/2.92 Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	/	g

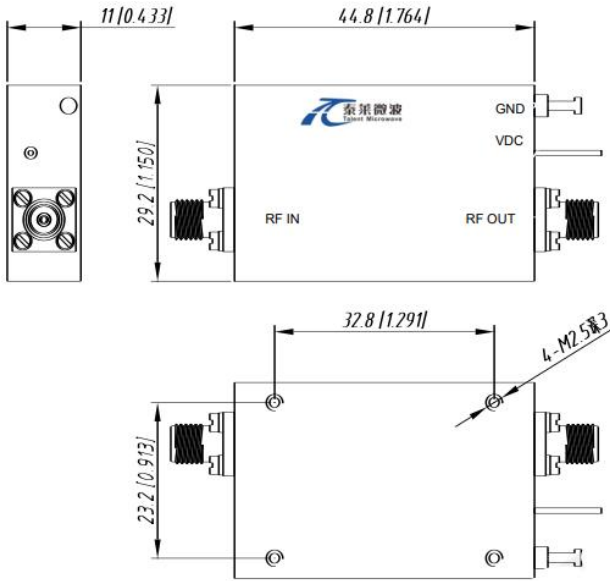
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	10 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:**

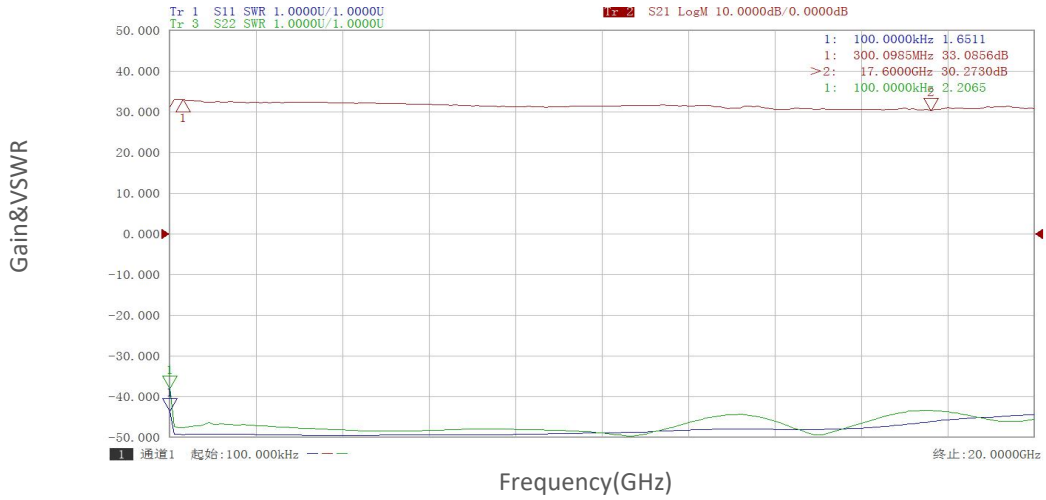
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

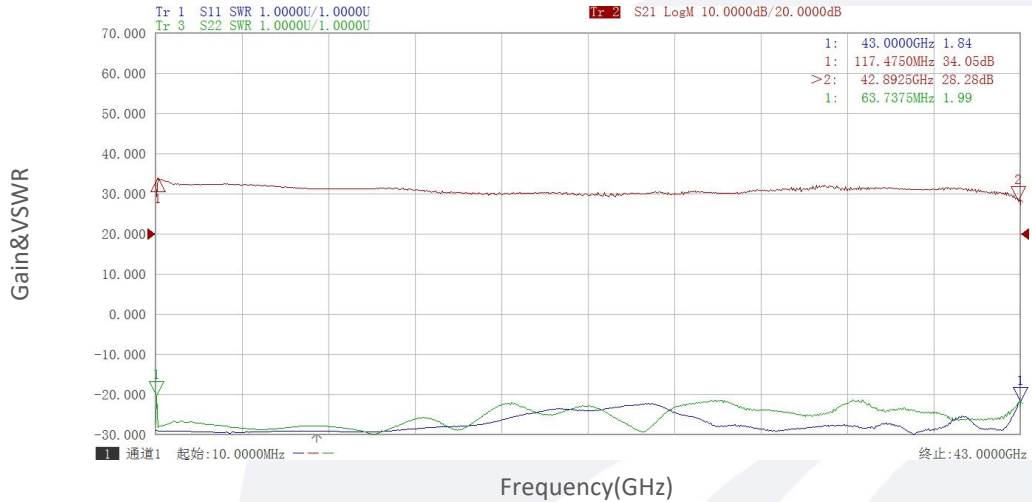
Part Number	Description	Revision
TLLA50K43G-30-50	Low Noise Amplifier, 50KHz-43GHz, Noise Figure:5.0dB, Gain:30 dB,+12V DC,Without Heatsink	Rev.1.1
TLLA50K43G-30-50-HS	Low Noise Amplifier, 50KHz-43GHz, Noise Figure:5.0dB, Gain:30 dB,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

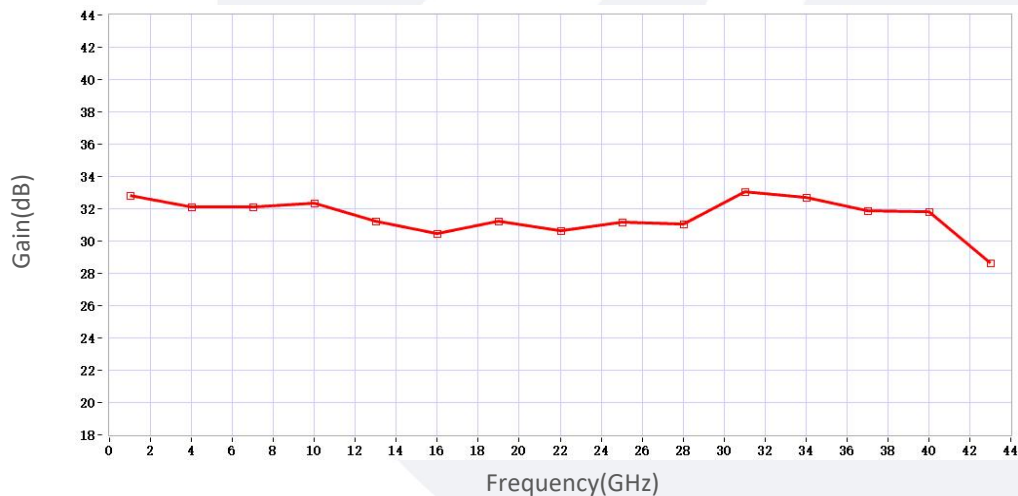
Gain&VSWR vs Frequency



Gain&VSWR vs Frequency

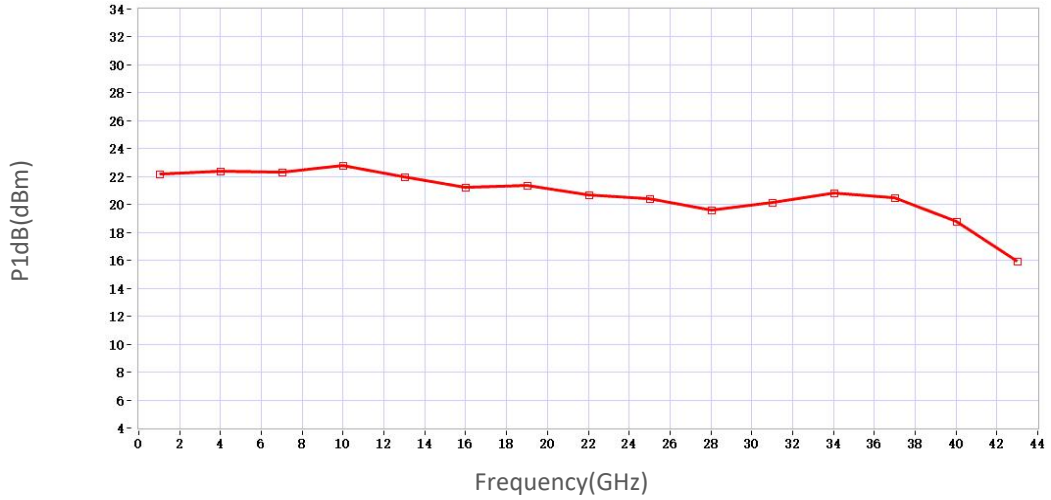


Gain vs Frequency



Typical Performance Data:

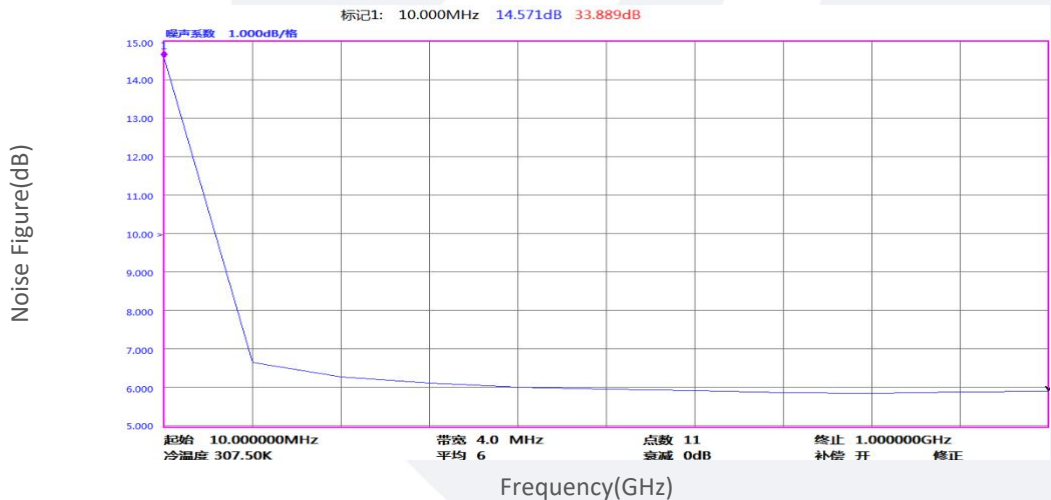
P1dB vs Frequency



P3dB vs Frequency



Noise Figure vs Frequency



Typical Performance Data:

Noise Figure vs Frequency

