

**Model: TLLA50K67G-25-50**
**Low Noise Amplifier**
**50KHz-67GHz, NF:5.0dB, Gain:25dB, P1dB:15dBm**
**Feature:**

- Ultra Wide Band: 50KHz-67GHz
- Gain: 25dB 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-67GHZ			GHz
Gain		25		dB
Gain Flatness		±2.0		dB
Noise Figure		5		dB
Output P1dB		15		dBm
Output IP3		20		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12		V DC
DC Supply Current		300		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	/	g

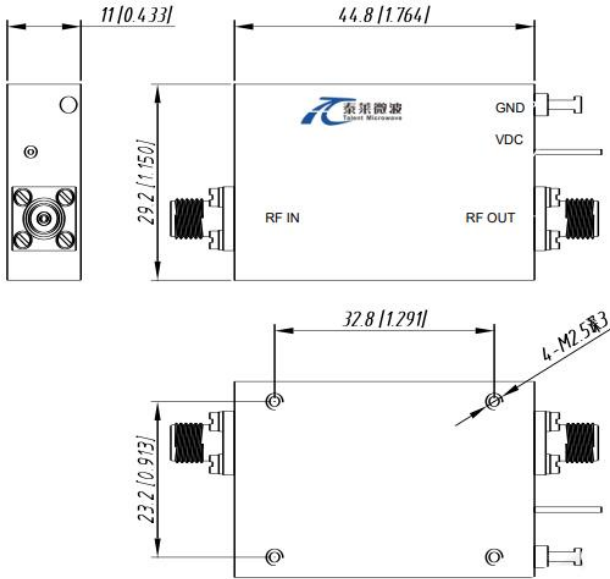
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	TBD
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:**

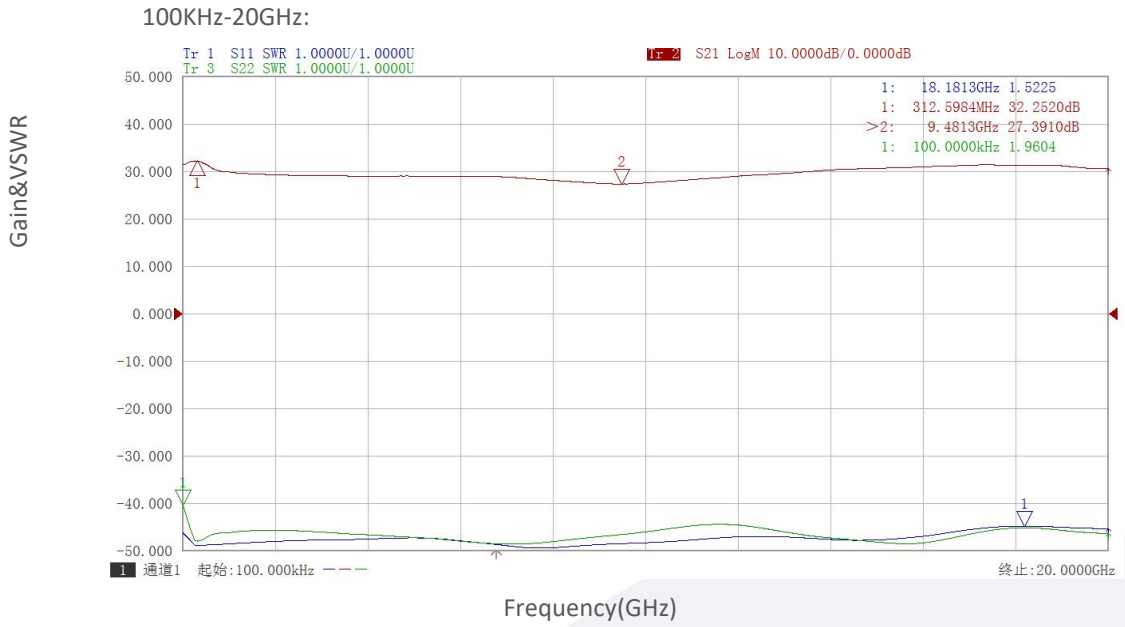
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	°C
Non-operating Temperature	-55		+85	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

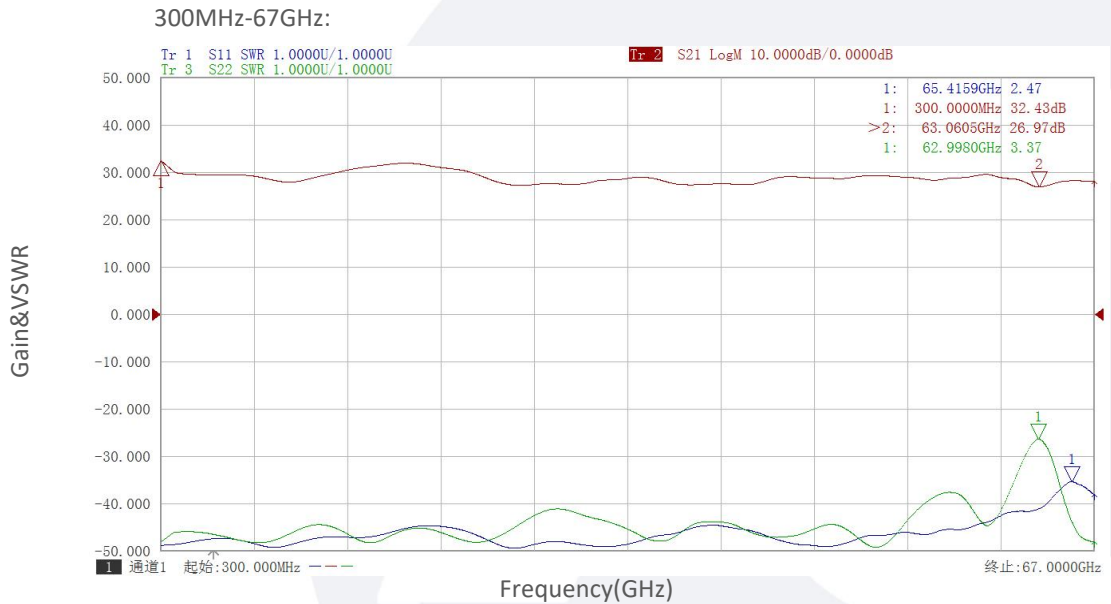
Part Number	Description	Revision
TLLA50K67G-25-50	Low Noise Amplifier, 50K-67GHz, Noise Figure:5.0dB, Gain:25 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA50K67G-25-50-HS	Low Noise Amplifier, 50K-67GHz, Noise Figure:5.0dB, Gain:25 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

Gain&VSWR vs Frequency



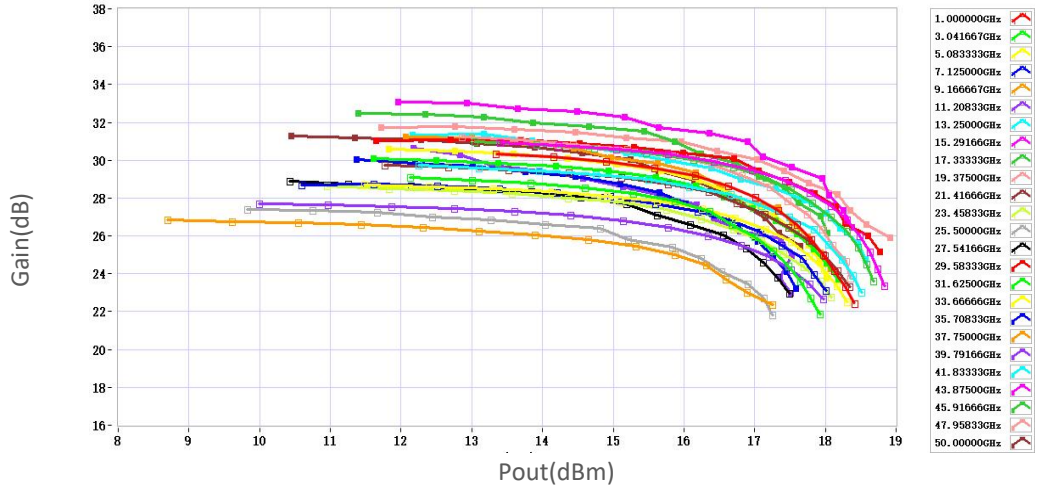
Gain&VSWR vs Frequency



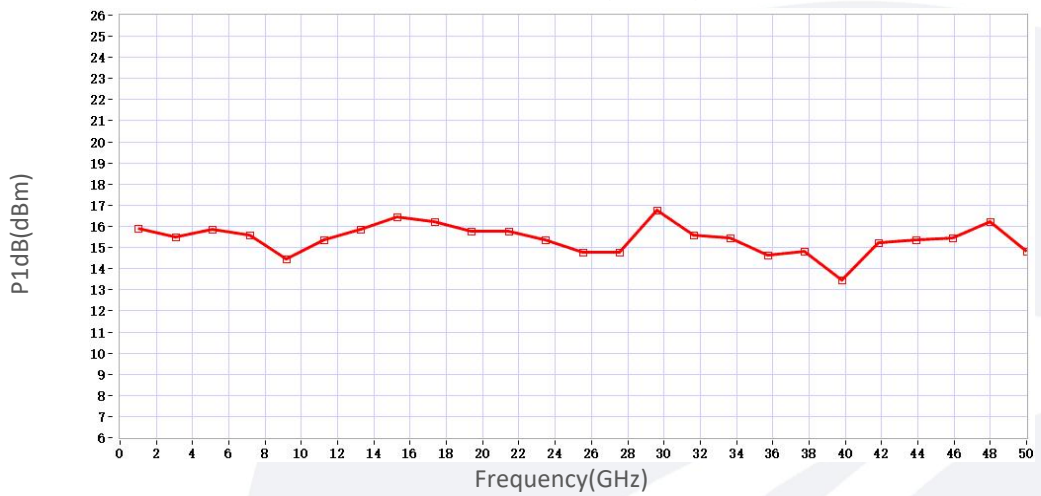
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

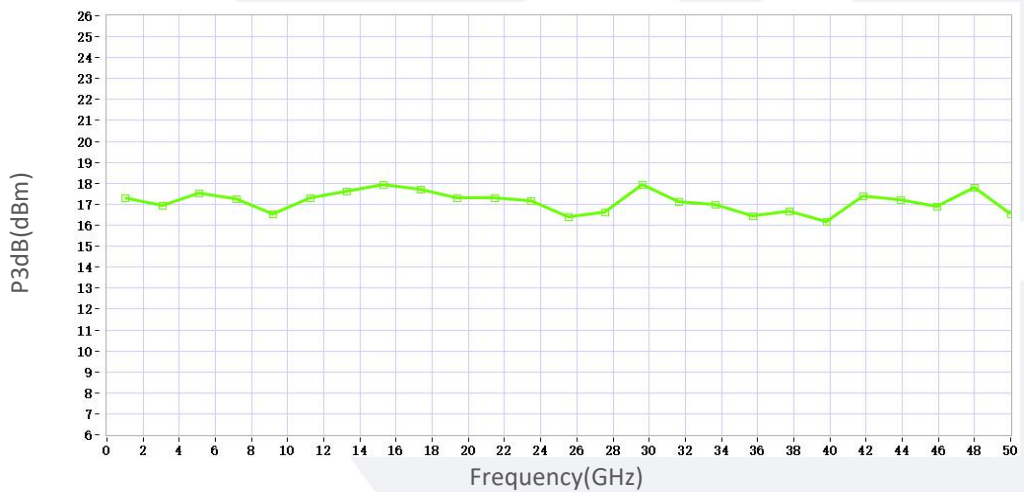
Gain vs Output Power



P1dB vs Frequency



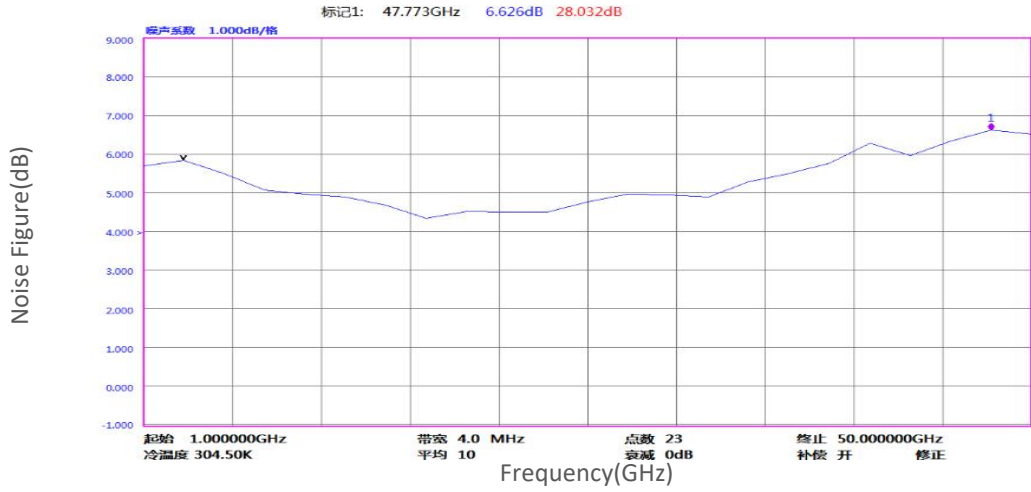
P3dB vs Frequency



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典型曲线 Typical Performance Data:

Noise Figure vs Frequency



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