

**Model: TLLA35G50G-35-35**
**Low Noise Amplifier**
**35-50GHz, NF:3.5dB, Gain:35dB, P1dB:15dBm**
**Feature:**

- Ultra Wide Band: 35-50GHz
- Gain: 35dB Typ
- Noise Figure: 3.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	35-50			GHz
Gain	30	35		dB
Gain Flatness		±1.5		dB
Noise Figure		3.5	4	dB
Output P1dB	10	15		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		130		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	/	g

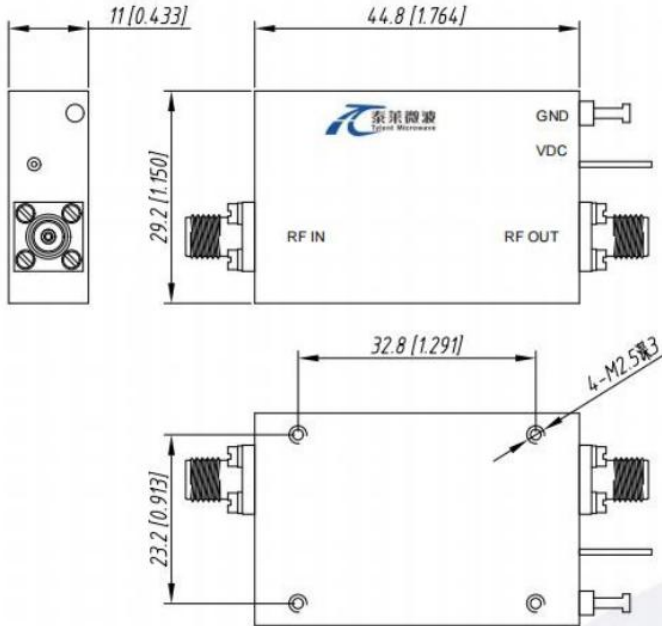
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	TBD
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:**

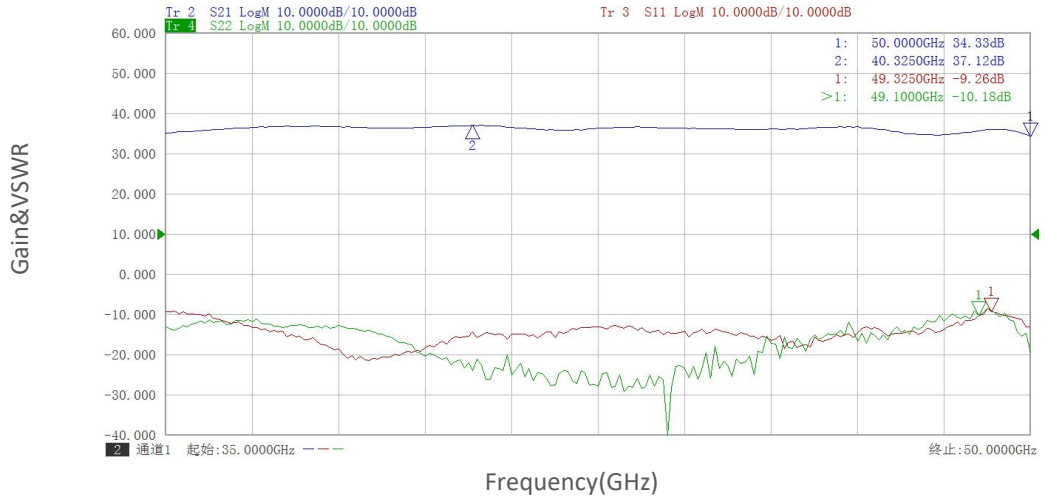
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

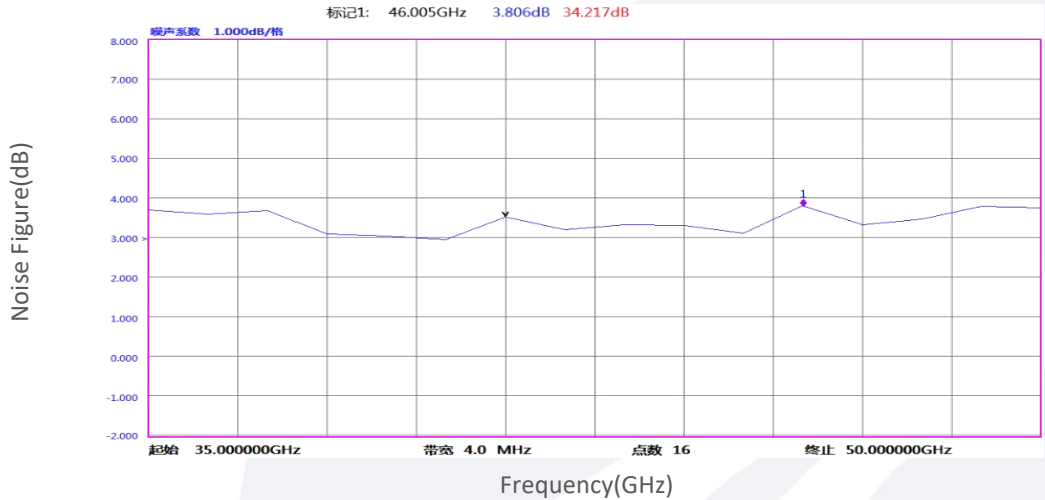
Part Number	Description	Revision
TLLA35G50G-35-35	Low Noise Amplifier, 35-50GHz, Noise Figure:3.5dB, Gain:35 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA35G50G-35-35-HS	Low Noise Amplifier, 35-50GHz, Noise Figure:3.5dB, Gain:35 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

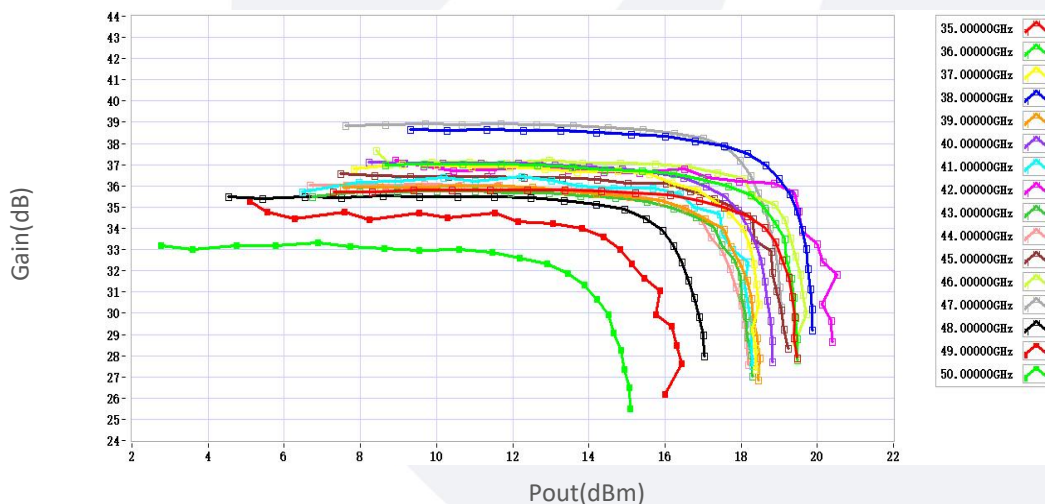
### Gain&VSWR vs Frequency



### Noise Figure vs Frequency



### Gain vs Output Power



Typical Performance Data:

**P1dB vs Frequency**



**P3dB vs Frequency**



**Psat vs Frequency**

