

**Model:TLLA0.1G3G-28-10**
**Low Noise Amplifier**
**0.1-3GHz, NF:1.0dB, Gain:28dB,P1dB:17dBm**
**Feature:**

- Ultra Wide Band: 0.1-3GHz
- Gain: 28dB Min
- Noise Figure: 1.0dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	0.1-3			GHz
Gain	28	29		dB
Noise Figure		0.8	1	dB
Output P1dB	14	17		dBm
Output Psat		18		dBm
Input VSWR		1.8		:1
Output VSWR		1.4		:1
DC Voltage	8	12	15	V DC
DC Supply Current		70		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	20*28*10	mm
Weight	/	g

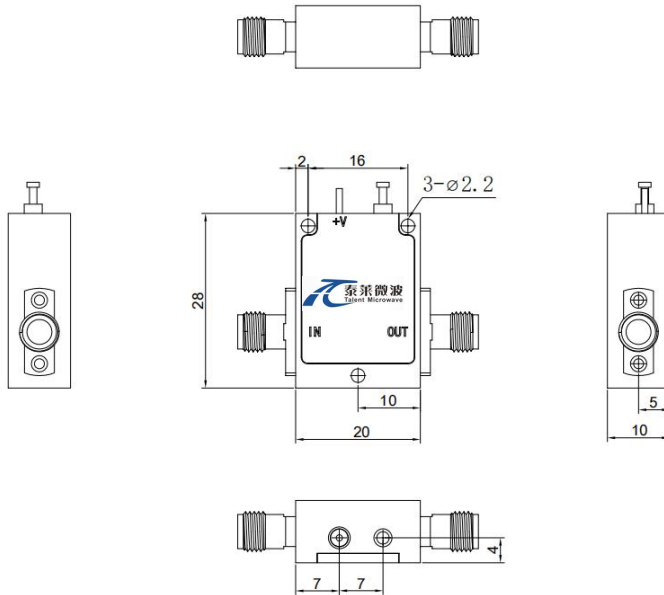
**Absolute Maximum Ratings:**

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

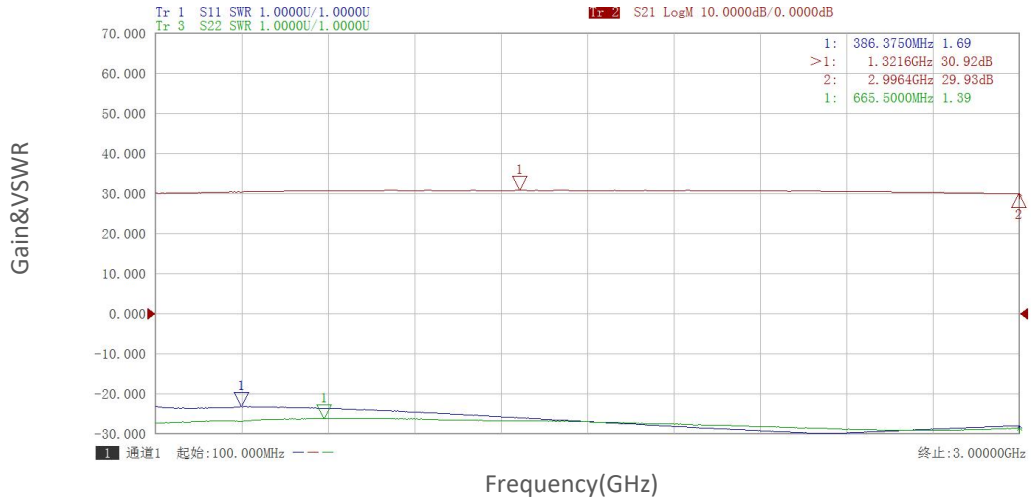
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

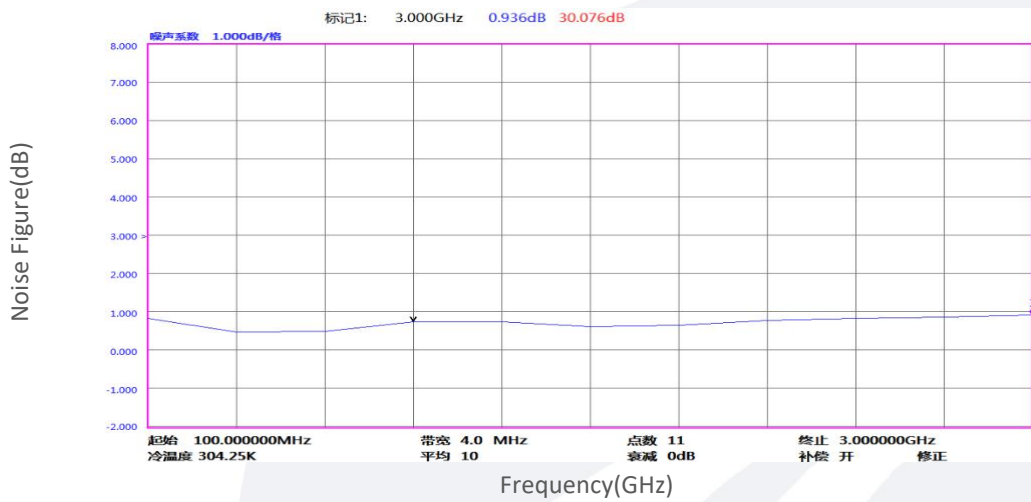
Part Number	Description	Revision
TLLA0.1G3G-28-10	Low Noise Amplifier, 0.1-3GHz, Noise Figure:1.0dB, Gain:28 dB,P1dB:17dBm,+12V DC,Without Heatsink	Rev.1.1

Typical Performance Data:

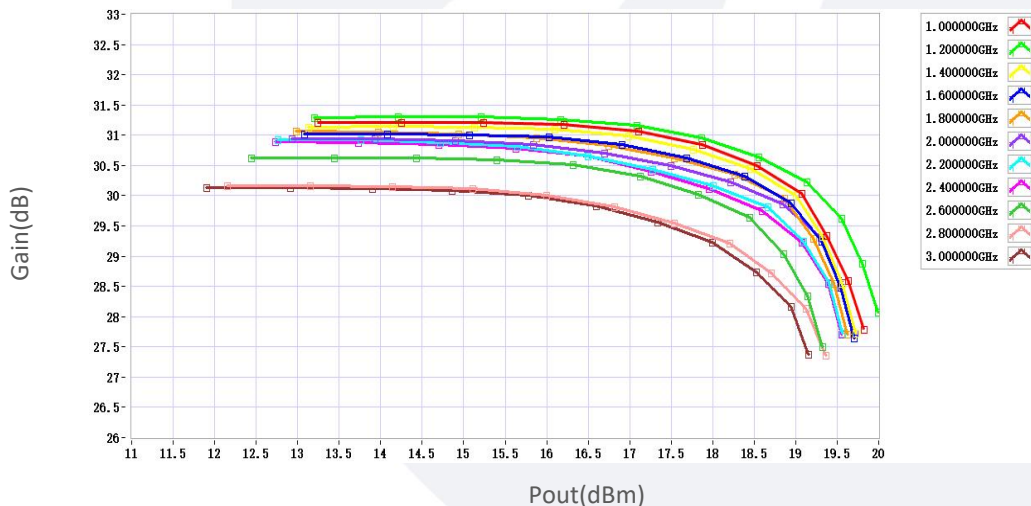
Gain&VSWR vs Frequency



Noise Figure vs Frequency

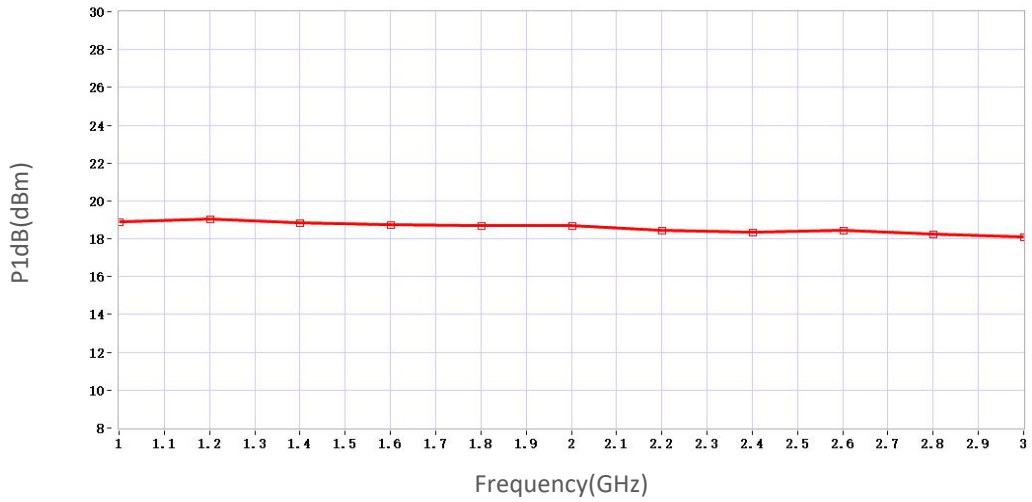


Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

