Suzhou Talent Microwave,Inc
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Low Noise Amplifier

1-18GHz /1.9dB NF/34dB Gain/10 dBm P1dB Model: TLLA1G18G-34-19-LC

TLLA1G18G-34-19-LC is a low noise amplifier with small signal gain of 34 dB and noise figure of 1.9 dB across the frequency range of 1 to 18 GHz. The DC power requirement for the amplifier is +5 V DC/100 mA. The input and output port configuration offers coax adapter structure with SMA Female.

Features:

- Frequency range:1-18GHz
- Gain: 34dB Typ
- Noise Figure: 1.9dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1		18	GHz
Small Signal Gain		34		dB
Gain Flatness		±1.5		dB
Noise Figure		1.9		dB
Output P1 dB		10		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+5		V DC
DC Supply Current		100		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	33*33*9	mm

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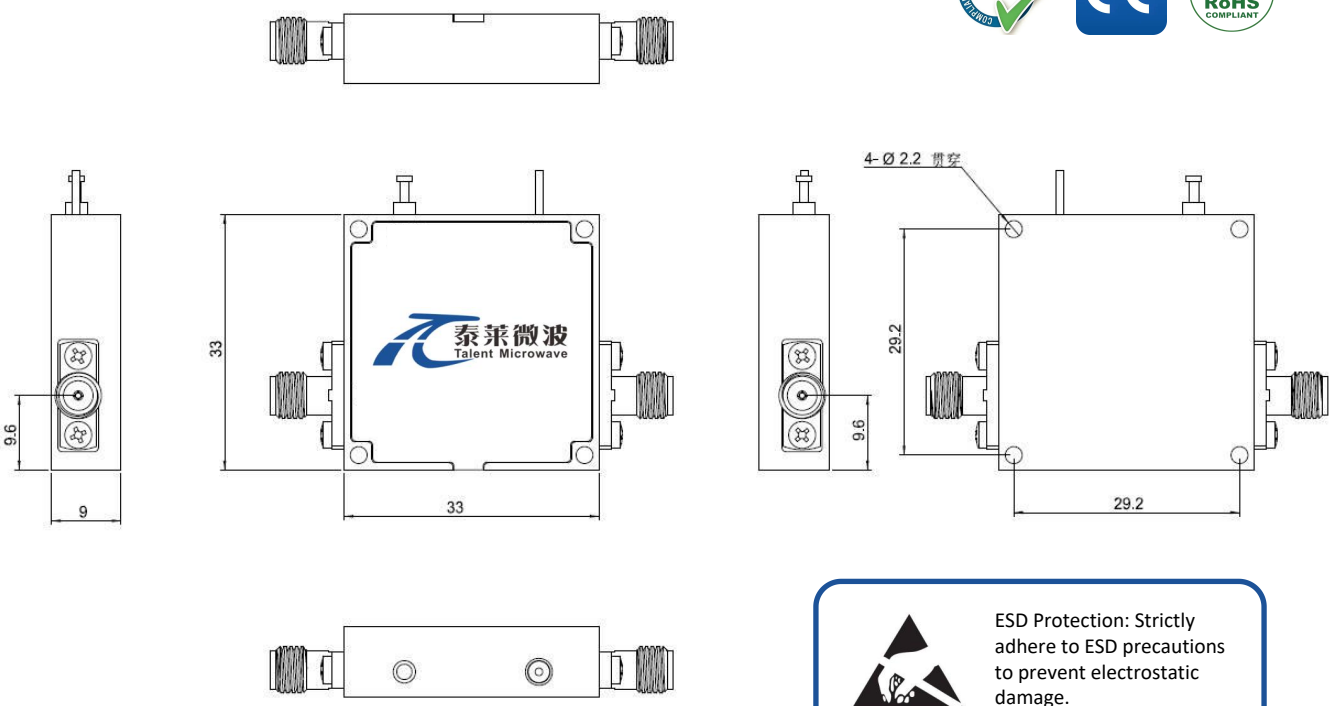
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+5.5 V
RF Input Power	+17 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	℃
Non-operating Temperature	-55		+125	℃
Relative humidity		95		%
Altitude	10,000			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			

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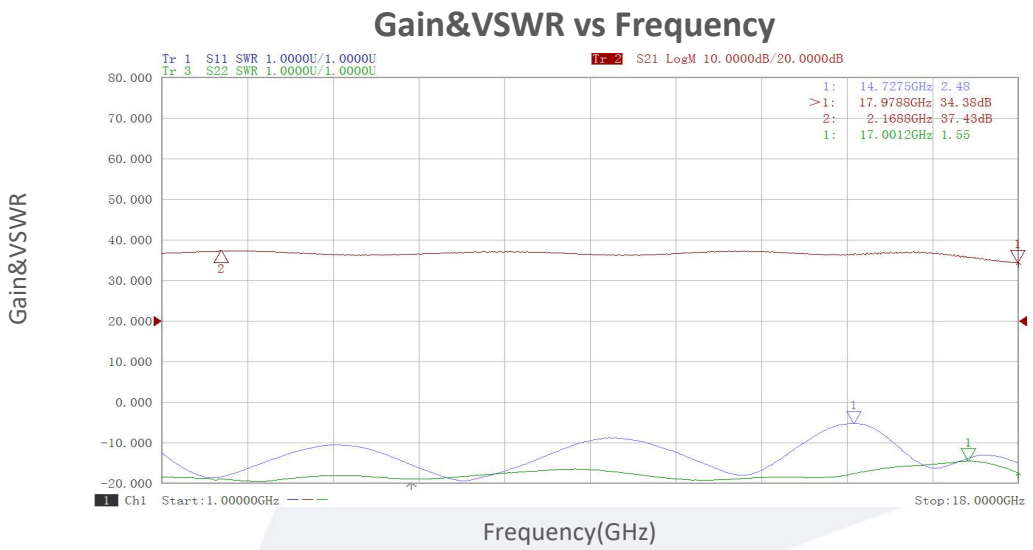
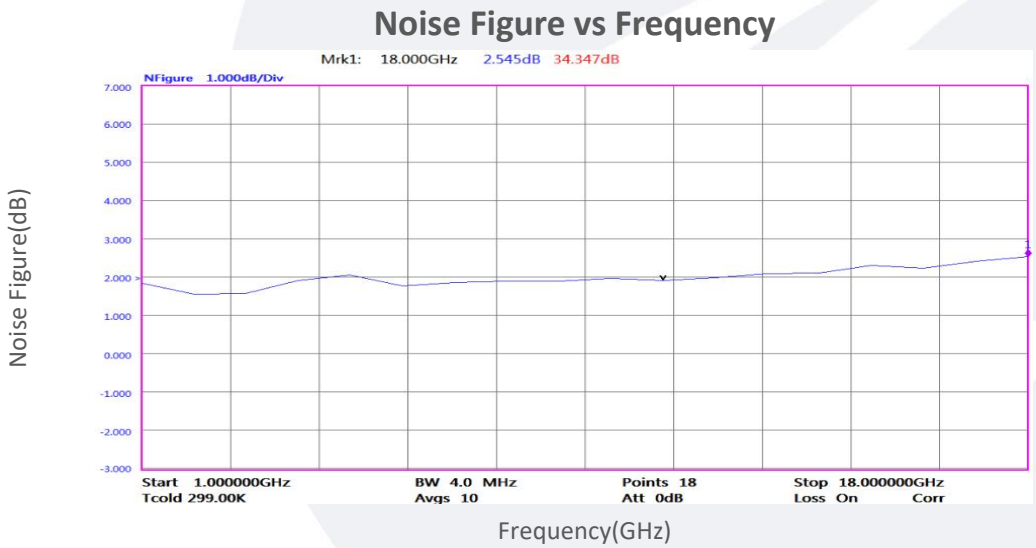
Ordering Information:

Base Number	Description	Revision
TLLA1G18G-34-19-LC	Low Noise Amplifier, 1-18GHz, Noise Figure:1.9dB, Gain:34 dB,P1dB:10dBm,+5V DC,With Heatsink	Rev.1.0

Typical Performance Data:





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.

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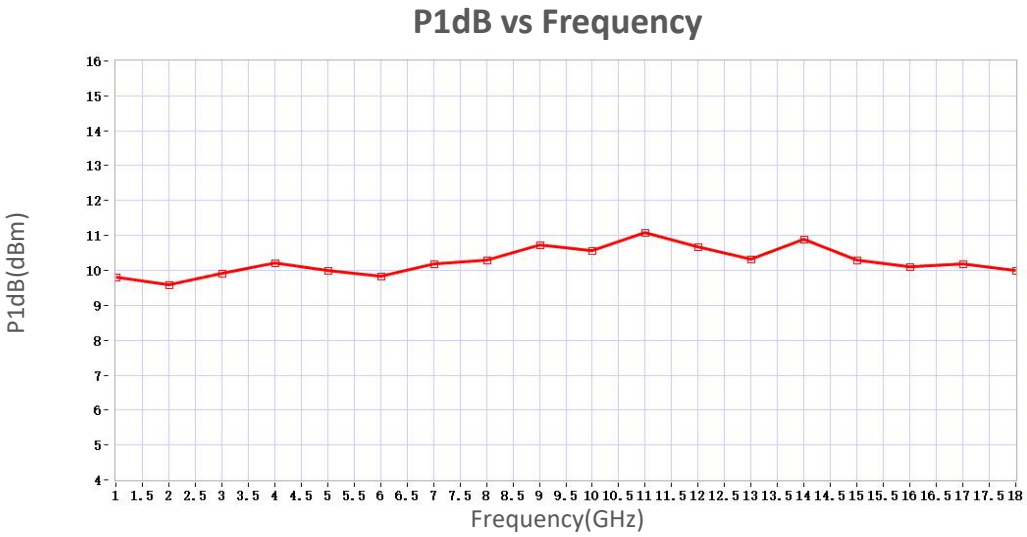

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