

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 +12 V DC/63 mA. The input and output port configuration offers coax adapter structure with SMA Female.

Features:

- Ultra Wide Band: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
Gain		34		dB
Gain Flatness		±2		dB
Noise Figure		1.9		dB
Output P-1 dB		10		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12	+15	V DC
DC Supply Current		63		mA
Impedance	50			Ohms

Mechanical Specifications:

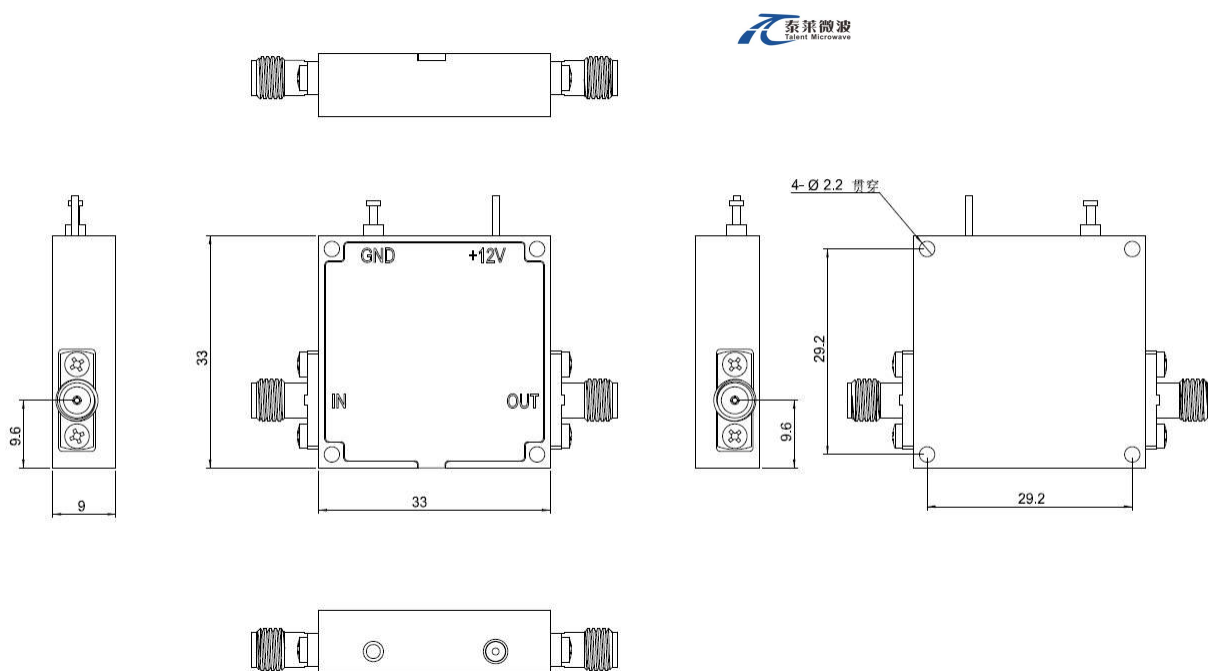
Parameter	Value	单Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	33×33×9	mm
Weight		g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+7 V
RF Input Power	+17 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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	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			

Ordering Information:

Base Number	Description	Revision
TLLA1G18G-34-19-LC	Low Noise Amplifier, 1-18GHz, Noise Figure:1.9dB, Gain:34 dB,P1dB:10dBm,+12V DC,With Heatsink	Rev.1.0