

Low Noise Amplifier

4-10GHz/1.9dB NF/34dB Gain/10dBm P1dB

Model: TLLA4G10G-34-19

TLLA4G10G-34-19 is a low noise amplifier with a typical small signal gain of 34 dB and noise figure of 1.9dB across the frequency range of 4 to 10 GHz. The DC power requirement for the amplifier is +12 V DC/70 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 4-10GHz
- Gain: 34dB Typ
- Noise Figure: 1.9dB Typ
- 50 Ohm Matched Input / Output

Applications:

- Communication systems
- Test and Measurement

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	4		10	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		+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	33*33*9	mm

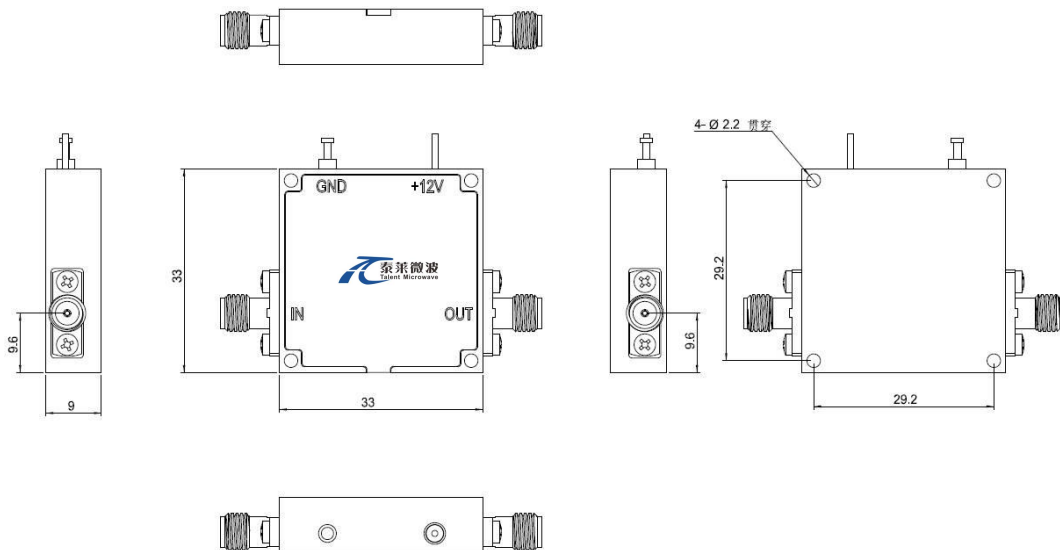
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+17 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



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

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
TLLA4G10G-34-19	Low Noise Amplifier, 4-10GHz, Noise Figure:1.9dB, Gain:34dB,P1dB:10dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA4G10G-34-19-HS	Low Noise Amplifier,4-10GHz, Noise Figure:1.9dB, Gain:34dB,P1dB:10dBm,+12V DC,With Heatsink	Rev.1.1