

Low Noise Amplifier

2-8GHz/0.8dB NF/35dB Gain/15dBm P1dB

Model: TLLA2G8G-32-11

TLLA2G8G-32-11 is a low noise amplifier with a typical small signal gain of 35 dB and a nominal noise figure of 0.8 dB across the frequency range of 2 to 8 GHz. The DC power requirement for the amplifier is +12 V DC/100 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-8GHz
- Gain: 35dB Typ
- Noise Figure: 0.8dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	2		8	GHz
Small Signal Gain	32	35		dB
Gain Flatness		±0.5	±1.3	dB
Noise Figure		0.8	1.1	dB
Output P1dB	13	15		dBm
Output Psat		16		dBm
Output IP3		25		dBm
VSWR		1.6	2	:1
DC Voltage		+12		V DC
DC Supply Current		100	130	mA
Impedance	50			Ohms

Mechanical Specifications:

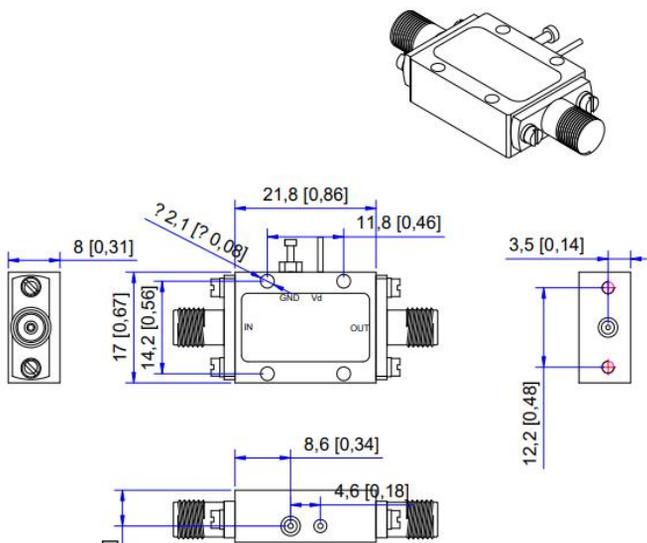
Parameter	指标 Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	21.8*17*8	mm
Weight	55	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+14 V
RF Input Power	-5 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	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:

Base Number	Description	Revision
TLLA2G8G-32-11	Low Noise Amplifier, 2-8GHz, Noise Figure:0.8dB, Gain:35 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA2G8G-32-11-HS	Low Noise Amplifier, 2-8GHz, Noise Figure:0.8dB, Gain:35 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1