

Low Noise Amplifier

1-12GHz /1.2dB NF/24dB Gain/15 dBm P1dB

Model: TLLA1G12G-24-12-LC

TLLA1G12G-24-12-LC is a low noise amplifier with small signal gain of 24 dB and noise figure of 1.2 dB across the frequency range of 1 to 12 GHz. The DC power requirement for the amplifier is +12 V DC/35 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Ultra Wide Band:1-12GHz
- Gain: 24dB Typ
- Noise Figure: 1.2 dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1		12	GHz
Gain		24		dB
Gain Flatness		±1.5		dB
Noise Figure		1.2		dB
Output P-1 dB		15		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12	+15	V DC
DC Supply Current		35		mA
Impedance	50			Ohms

Mechanical Specifications:

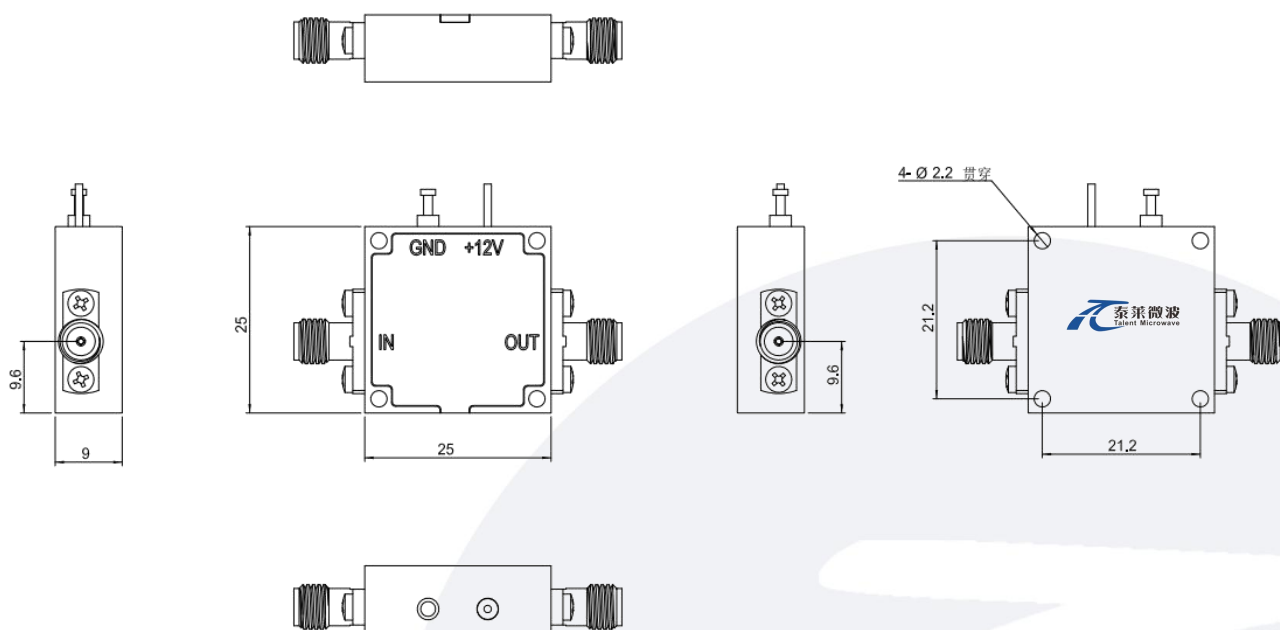
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	25×25×9	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+17 dBm
EESD 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
TLLA1G12G-24-12-LC	Low Noise Amplifier, 1-12GHz, Noise Figure:1.2dB, Gain:24 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.0