

Low Noise Amplifier

1.5-2.5GHz/1dB NF/35dB Gain/15dBm P1dB

Model: TLLA1.5G2.5G-35-10

TLLA1.5G2.5G-35-10 is a low noise amplifier with a minimum small signal gain of 35 dB and a maximum noise figure of 1.0 dB across the frequency range of 1.5 to 2.5 GHz. The DC power requirement for the amplifier is +12 V DC/150 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 1.5-2.5GHz
- Gain: 35dB Min
- Noise Figure: 1.0dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1.5		2.5	GHz
Small Signal Gain	35			dB
Gain Flatness		±1		dB
Noise Figure			1	dB
Output P1dB	15			dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage	+8	+12	+15	V DC
DC Supply Current		150		mA
Impedance		50		Ohms

Mechanical Specifications:

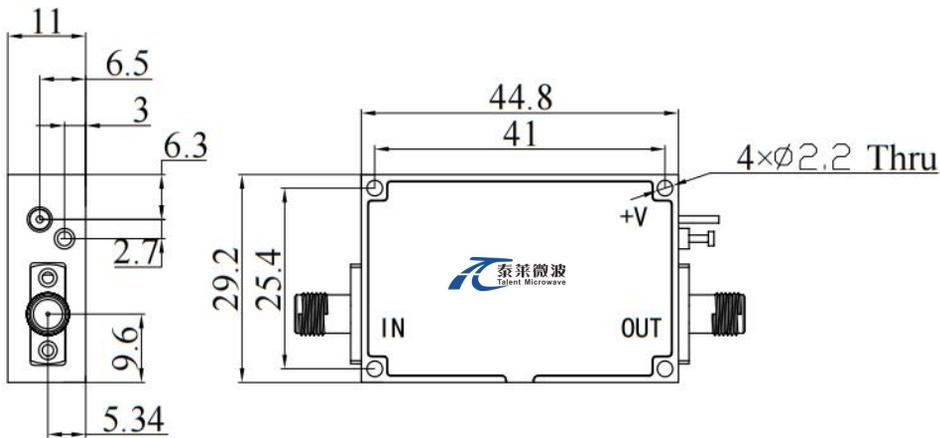
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+15 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
TLLA1.5G2.5G-35-10	Low Noise Amplifier, 1.5-2.5GHz, Noise Figure:1dB, Gain:35 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA1.5G2.5G-35-10-HS	Low Noise Amplifier, 1.5-2.5GHz, Noise Figure:1dB, Gain:35 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1