Suzhou Talent Microwave,Inc
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Low Noise Amplifier

4-8GHz/1.5dB NF/40dB Gain/16dBm P1dB Model: TLLA4G8G-40-15

TLLA4G8G-40-15 is a low noise amplifier with a minimum small signal gain of 40 dB and a maximum noise figure of 1.5 dB across the frequency range of 4 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: 4-8GHz
- Gain: 40dB Min
- Noise Figure: 1.5dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	4		8	GHz
Small Signal Gain	40	43		dB
Noise Figure		1	1.5	dB
Output P1dB	14	16		dBm
Output Psat		17		dBm
Input VSWR		1.6		:1
Output VSWR		1.8		:1
DC Voltage	+8	+12	+16	V DC
DC Supply Current		100		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

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Absolute Maximum Ratings:

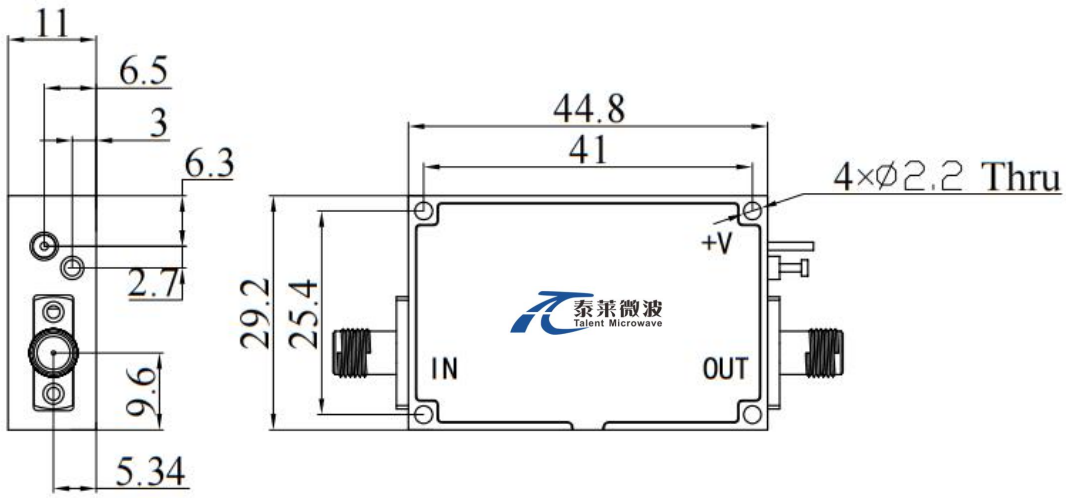
Parameter	Value
Supply Bias Voltage	+16 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



***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	-40		+60	℃
Non-operating Temperature	-55		+125	℃
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			

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Ordering Information:

Base Number	Description	Revision
TLLA4G8G-40-15	Low Noise Amplifier, 4-8GHz, Noise Figure:1.5dB, Gain:40dB,P1dB:16dBm,+12V DC,Without Heatsink	Rev.1.2
TLLA4G8G-40-15-HS	Low Noise Amplifier, 4-8GHz, Noise Figure:1.5dB, Gain:40dB,P1dB:16dBm,+12V DC,With Heatsink	Rev.1.2