泰莱微波
Talent Microwave

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Low Noise Amplifier

8-12GHz/1.0dB NF/22dB Gain/17dBm P1dB Model: TLLA8G12G-22-10

TLLA8G12G-22-10 is a low noise amplifier with a typical small signal gain of 22 dB and a nominal noise figure of 1.0 dB across the frequency range of 8 to 12 GHz. The DC power requirement for the amplifier is +8 V DC/70 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 8-12GHz
- Gain: 22dB Typ
- Noise Figure: 1.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	8		12	GHz
Small Signal Gain	20	22		dB
Gain Flatness		±1.2	±1.5	dB
Noise Figure		1.0	1.5	dB
Output P1dB	15	17		dBm
Output Psat		18		dBm
Input VSWR		1.8	2.0	:1
Output VSWR		1.8	2.0	:1
DC Voltage	+5	+8	+12	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	20*28*10	mm

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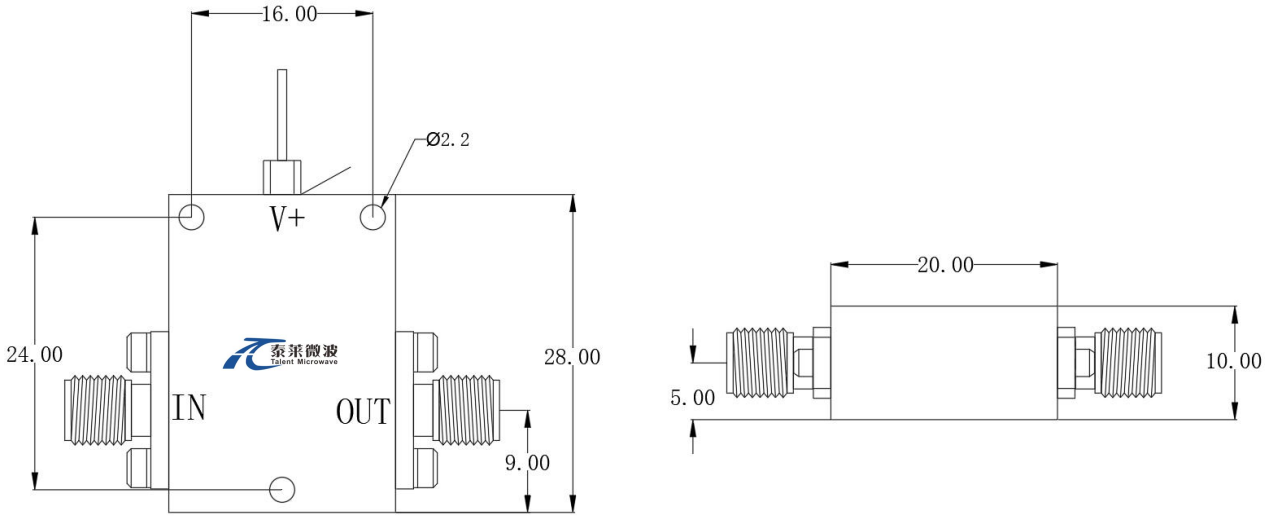
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	℃
Non-operating Temperature	-55		+125	℃
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			

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Ordering Information:

Base Number	Description	Revision
TLLA8G12G-22-10	Low Noise Amplifier, 8-12GHz, Noise Figure:1.0dB, Gain:22dB,P1dB:17dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA8G12G-22-10-HS	Low Noise Amplifier, 8-12GHz, Noise Figure:1.0dB, Gain:22dB,P1dB:17dBm,+8V DC,With Heatsink	Rev.1.1