

Low Noise Amplifier

8-28GHz/2.5dB NF/27.5dB Gain/10dBm P1dB

Model: TLLA8G28G-28-25

TLLA8G28G-28-25 is a low noise amplifier with a typical small signal gain of 27.5 dB and a nominal noise figure of 2.5 dB across the frequency range of 8 to 28 GHz. The DC power requirement for the amplifier is +12 V DC/200 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 8-28GHz
- Gain: 27.5dB Typ
- Noise Figure: 2.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	8		28	GHz
Small Signal Gain	25	27.5	30	dB
Gain Flatness		±2.5		dB
Noise Figure		2.5		dB
Output P1dB		10		dBm
Output Psat		11		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12		V DC
DC Supply Current		200		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mmFemale	
DC Bias	Solder Pin	
Size	32.1*29.2*11	mm

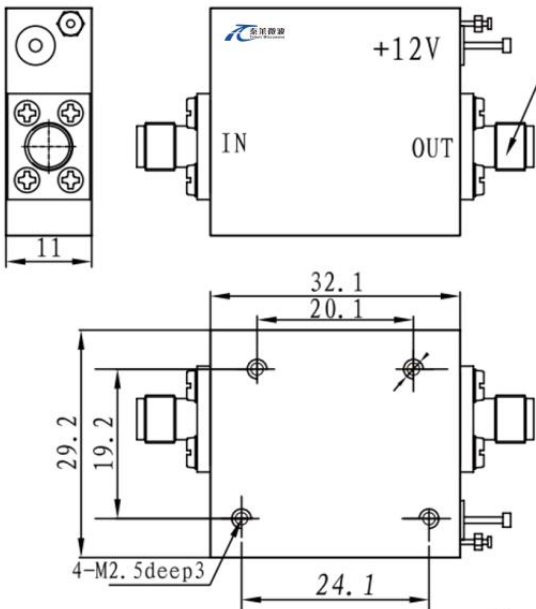
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+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
TLLA8G28G-28-25	Low Noise Amplifier, 8-28GHz, Noise Figure:2.5dB, Gain:27.5dB,P1dB:10dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA8G28G-28-25-HS	Low Noise Amplifier, 8-28GHz, Noise Figure:2.5dB, Gain:27.5dB,P1dB:10dBm,+12V DC,,With Heatsink	Rev.1.1