Suzhou Talent Microwave,Inc
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Low Noise Amplifier

6-18GHz/4.0dB NF/28dB Gain/28 dBm P1dB Model: TLLA6G18G-28-40

TLLA6G18G-28-40 is a low noise amplifier with a typical small signal gain of 28 dB and a nominal noise figure of 4.0 dB across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +12 V DC/750 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 6-18GHz
- Gain: 28dB Typ
- Noise Figure: 4.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	6		18	GHz
Small Signal Gain		28		dB
Gain Flatness		±1.5		dB
Noise Figure		4	6	dB
Output P1dB	27	28		dBm
Output Psat		29		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage	+10	+12	20	V DC
DC Supply Current		750		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	35.3*40.3*12	mm

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Absolute Maximum Ratings:

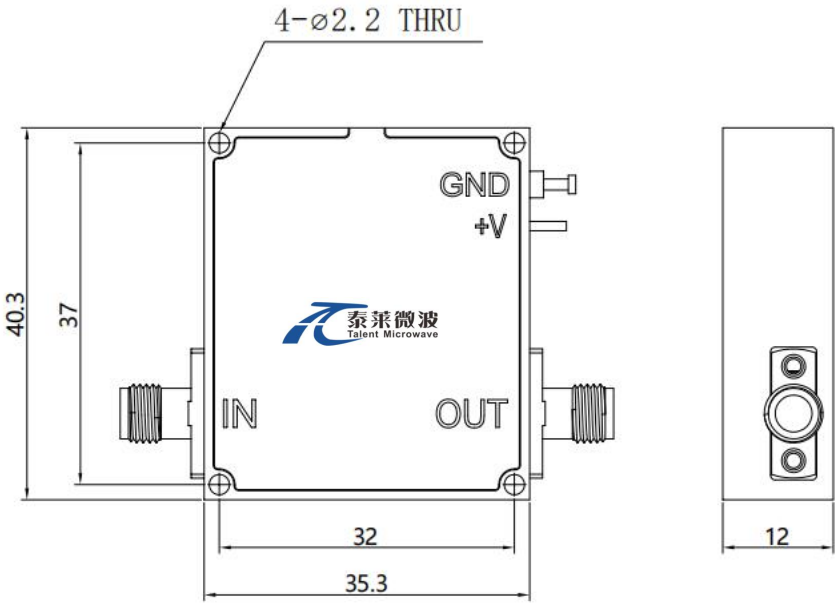
Parameter	Value
Supply Bias Voltage	+20 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



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	-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
TLLA6G18G-28-40	Low Noise Amplifier, 6-18GHz, Noise Figure:4.0dB, Gain:28 dB,P1dB:28dBm,+12V DC,Without Heatsink	Rev.1.2
TLLA6G18G-28-40-HS	Low Noise Amplifier, 6-18GHz, Noise Figure:4.0dB, Gain:28 dB,P1dB:28dBm,+12V DC,With Heatsink	Rev.1.2