

Low Noise Amplifier

6-18GHz/2.0dB NF/28dB Gain/17dBm P1dB

Model: TLLA6G18G-28-20

TLLA6G18G-28-20 is a low noise amplifier with a typical small signal gain of 28 dB and a maximum noise figure of 2.0 dB across the frequency range of 6 to 18 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: 6-18GHz
- Gain: 28dB Typ
- Noise Figure: 2.0dB Max
- 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		±2.0		dB
Noise Figure			2.0	dB
Output P1dB		17		dBm
Input VSWR		2.0	2.2	:1
Output VSWR		2.0	2.2	:1
DC Voltage	+8	+12	+15	V DC
DC Supply Current		150		mA
Impedance		50		Ohms

Mechanical Specifications:

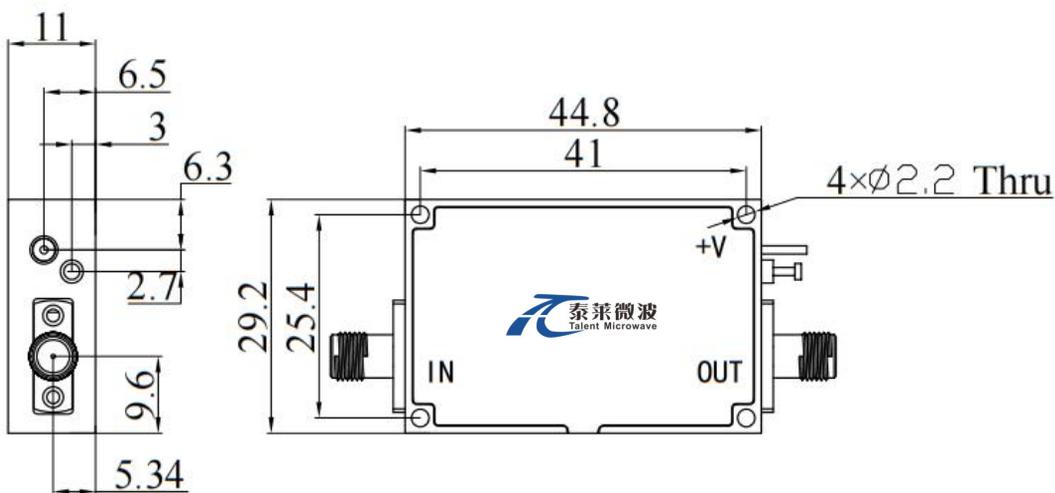
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	55	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15V
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	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
TLLA6G18G-28-20	Low Noise Amplifier, 6-18GHz, Noise Figure:2.0dB, Gain:28dB,P1dB:17dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA6G18G-28-20-HS	Low Noise Amplifier, 6-18GHz, Noise Figure:2.0dB, Gain:28dB,P1dB:17dBm,+12V DC,With Heatsink	Rev.1.1