

Low Noise Amplifier

0.1-18GHz /2.8dB NF/12dB Gain/12 dBm P1dB

Model: TLLA0.1G18G-12-28

TLLA0.1G18G-12-28 is a low noise amplifier with small signal gain of 12 dB and noise figure of 2.8 dB across the frequency range of 0.1 to 18 GHz. The DC power requirement for the amplifier is +12 V DC/70 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Ultra Wide Band:0.1-18GHz
- Gain: 12dB Min
- 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	0.1		18	GHz
Gain	12			dB
Gain Flatness		±2.0		dB
Noise Figure		2.5	2.8	dB
Output P1dB	12	13		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage	+8	+12	+15	V DC
DC Supply Current		70		mA
Impedance	50			Ohms

Mechanical Specifications:

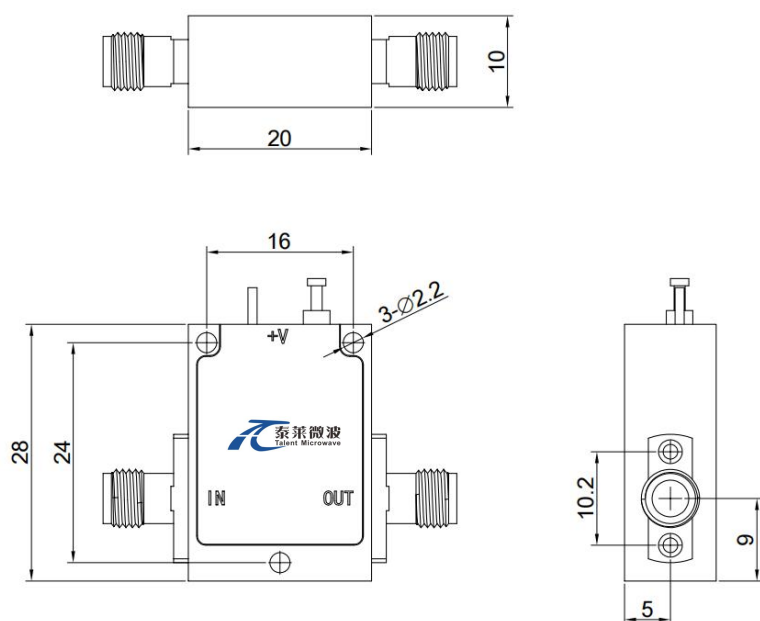
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	28*20*10	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 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	°C
Non-operating Temperature	-55		+125	°C
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			

Ordering Information:

Base Number	Description	Revision
TLLA0.1G18G-12-28	Low Noise Amplifier, 0.1-18GHz, Noise Figure:2.8dB, Gain:12 dB,P1dB:12dBm,+12V DC,Without Heatsink	Rev.1.0
TLLA0.1G18G-12-28-HS	Low Noise Amplifier, 0.1-18GHz, Noise Figure:2.8dB, Gain:12 dB,P1dB:12dBm,+12V DC,With Heatsink	Rev.1.0