

## Low Noise Amplifier

0.01-67GHz/5.0dB NF/18dB Gain/15dBm P1dB

Model: TLLA0.01G67G-18-50

TLLA0.01G67G-18-50 is a low noise amplifier with a typical small signal gain of 18 dB and a nominal noise figure of 5.0 dB across the frequency range of 0.01 to 67 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 1.85mm female.

### Features:

- Frequency range: 0.01-67GHz
- Gain: 18dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Communication systems

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.01		67	GHz
Small Signal Gain		18		dB
Gain Flatness		±2		dB
Noise Figure		5.0		dB
Output P1dB		15		dBm
Output IP3		20		dBm
Input VSWR		1.8	2.5	:1
Output VSWR		1.8	2.5	:1
DC Voltage		+12		V DC
DC Supply Current		200		mA
Impedance		50		Ohms

### Mechanical Specifications:

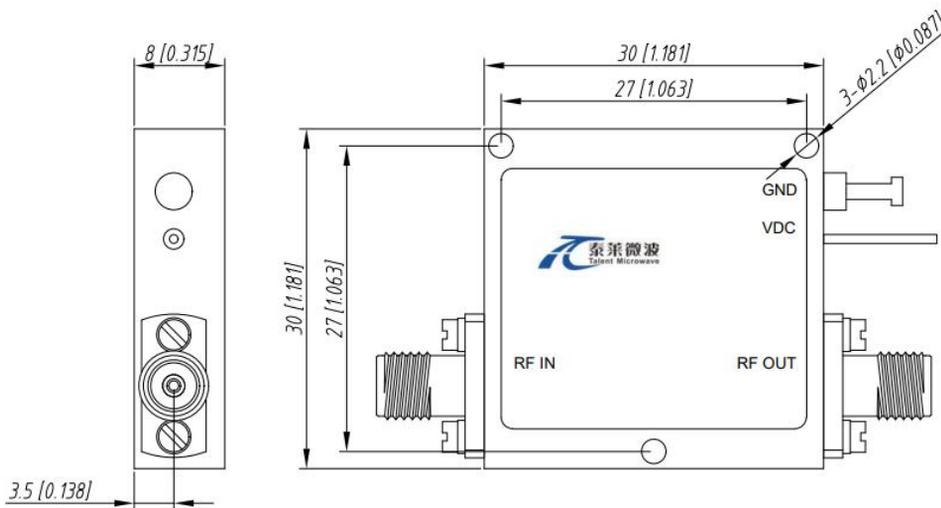
Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Bias	Solder Pin	
Size	30*30*8	mm
Weight	50	g

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	5 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	-40		+75	°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
TLLA0.01G67G-18-50	Low Noise Amplifier, 0.01-67GHz, Noise Figure:5.0dB, Gain:18dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA0.01G67G-18-50-HS	Low Noise Amplifier, 0.01-67GHz, Noise Figure:5.0dB, Gain:18dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1