

## Low Noise Amplifier

18-40GHz/6.0dB NF/30dB Gain/25dBm P1dB

Model: TLLA18G40G-30-60

TLLA18G40G-30-60 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 6.0 dB across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 V DC. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 18-40GHz
- Gain: 30dB Typ
- Noise Figure: 6.0dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Communication systems

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	18		40	GHz
Small Signal Gain		30		dB
Gain Flatness		±4		dB
Noise Figure		3.5	6	dB
Output P1dB	25			dBm
Spurious			-60	dBc
Harmonic			-15	dBc
nput VSWR		2		:1
DC Voltage		+12		V DC
Power Consumption			7	W
Impedance		50		Ohms

## Mechanical Specifications:

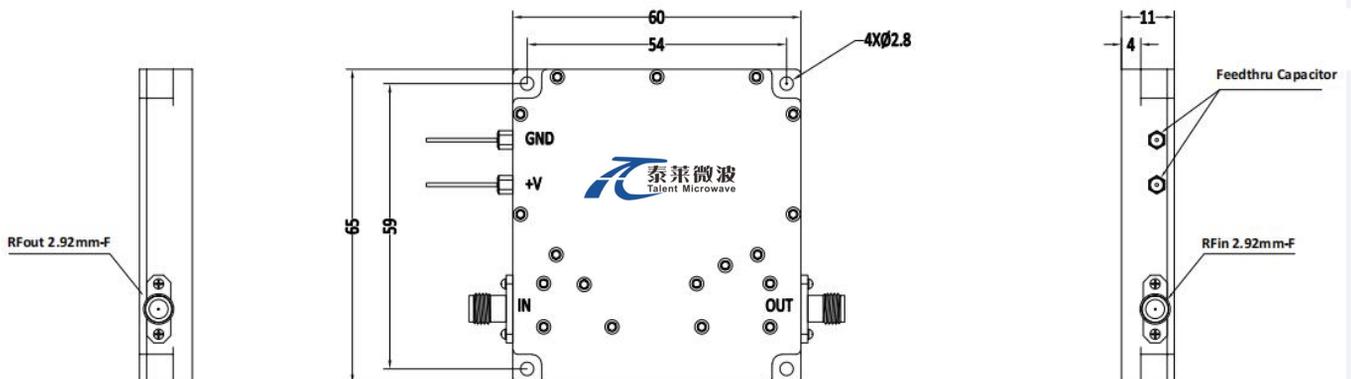
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	60*65*11	mm
Weight	≤200	g

## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
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		+60	°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
TLLA18G40G-30-60	Low Noise Amplifier, 18-40GHz, Noise Figure:6.0dB, Gain:30 dB,P1dB:25dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA18G40G-30-60-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:6.0dB, Gain:30 dB,P1dB:25dBm,+12V DC,With Heatsink	Rev.1.1