

Low Noise Amplifier

26.5-50GHz/6.0dB NF/18dB Gain/14dBm P1dB

Model: TLLA26.5G50G-18-60

TLLA26.5G50G-18-60 is a low noise amplifier with a typical small signal gain of 18 dB and a nominal noise figure of 6.0 dB across the frequency range of 26.5 to 50 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 2.4mm female.

Features:

- Frequency range: 26.5-50GHz
- Gain: 18dB Typ
- Noise Figure: 6.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	26.5		50	GHz
Small Signal Gain	15	18		dB
Gain Flatness		±2.0	±3.0	dB
Noise Figure		6.0		dB
Output P1dB		14		dBm
Spurious		-60		dBc
Output IP3		20		dBm
Input VSWR		1.8	2.0	:1
Output VSWR		1.8	2.0	:1
DC Voltage		+12		V DC
DC Supply Current		200		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	30*30*8	mm

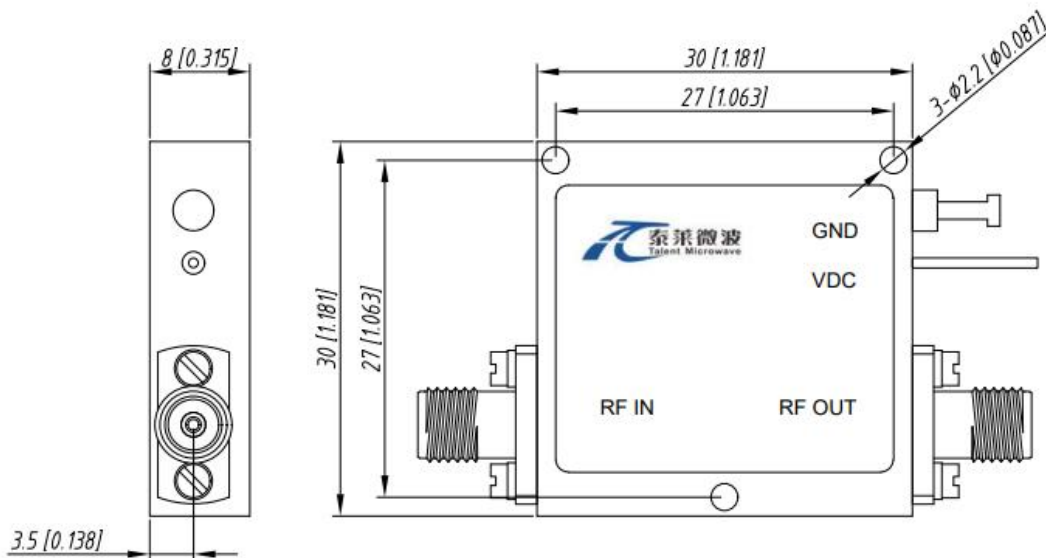
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; 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	-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
TLLA26.5G50G-18-60	Low Noise Amplifier, 26.5-50GHz, Noise Figure:6.0dB, Gain:18dB,P1dB:14dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA26.5G50G-18-60-HS	Low Noise Amplifier, 26.5-50GHz, Noise Figure:6.0dB, Gain:18dB,P1dB:14dBm,+12V DC,With Heatsink	Rev.1.1