

Low Noise Amplifier

26.5-40GHz/2.5dB NF/30dB Gain/0dBm P1dB

Model: TLLA26.5G40G-30-30

TLLA26.5G40G-30-30 is a low noise amplifier with a minimum small signal gain of 30 dB and a nominal noise figure of 2.5 dB across the frequency range of 26.5 to 40 GHz. The DC power requirement for the amplifier is +12 V DC/60 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 26.5-40GHz
- Gain: 30dB 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	26.5		40	GHz
Small Signal Gain	30			dB
Gain Flatness		±1.5	±2	dB
Noise Figure		2.5	3	dB
Output P1dB	0			dBm
Output IP3		10		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12		V DC
DC Supply Current		60		mA
Impedance		50		Ohms

Mechanical Specifications:

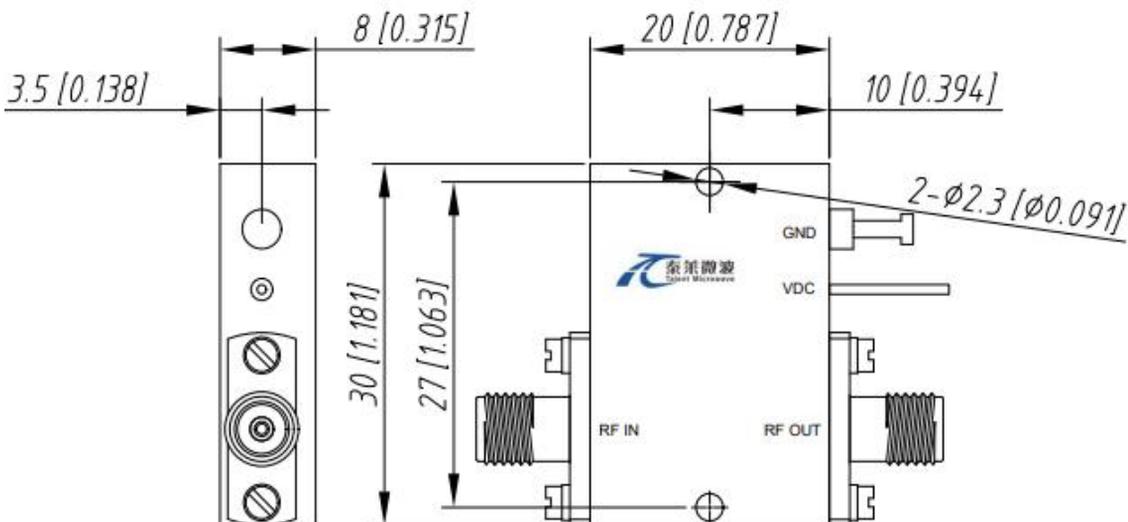
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	20*30*8	mm
Weight	50	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	-25 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
TLLA26.5G40G-30-30	Low Noise Amplifier, 26.5-40GHz, Noise Figure:2.5dB, Gain:30 dB,P1dB:0dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA26.5G40G-30-30-HS	Low Noise Amplifier, 26.5-40GHz, Noise Figure:2.5dB, Gain:30 dB,P1dB:0dBm,+12V DC,With Heatsink	Rev.1.1