Suzhou Talent Microwave,Inc
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Low Noise Amplifier

22-26GHz/2.5dB NF/40dB Gain/12dBm P1dB Model: TLLA22G26G-40-25

TLLA22G26G-40-25 is a low noise amplifier with a minimum small signal gain of 40 dB and a nominal noise figure of 2.5 dB across the frequency range of 22 to 26 GHz. The DC power requirement for the amplifier is +8 V DC/70 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 22-26GHz
- Gain: 40dB 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	22		26	GHz
Small Signal Gain	40			dB
Gain Flatness			±0.5	dB
Noise Figure		2.5	2.8	dB
Output P1dB	12			dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		8		V DC
DC Supply Current		70		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	25*35*13	mm

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Absolute Maximum Ratings:

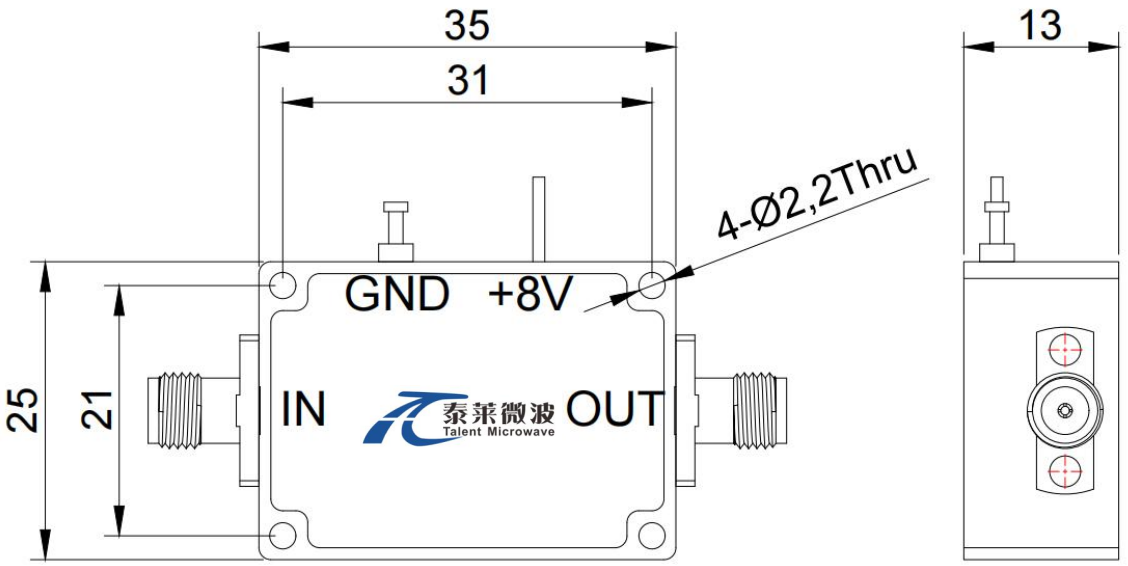
Parameter	Value
Supply Bias Voltage	+10 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

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	-45		+85	℃
Non-operating Temperature	-55		+125	℃
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			

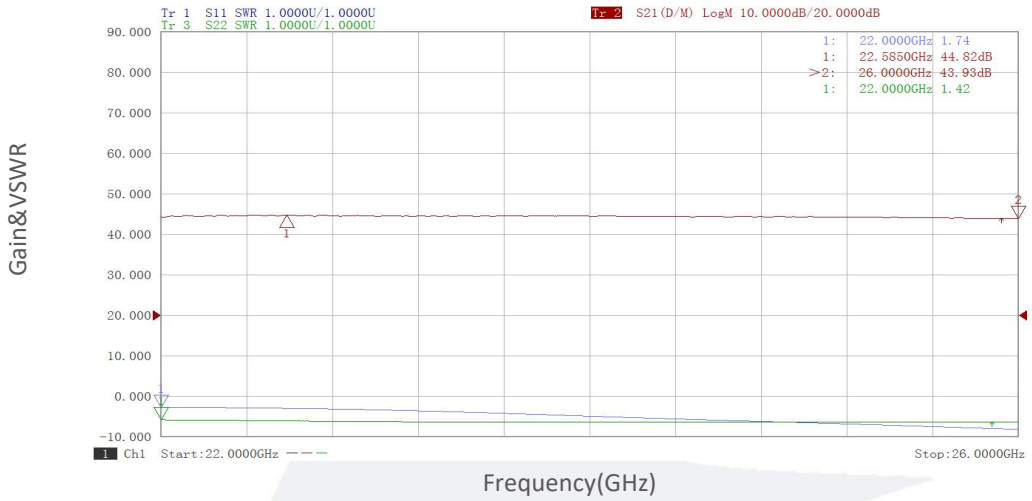
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Ordering Information:

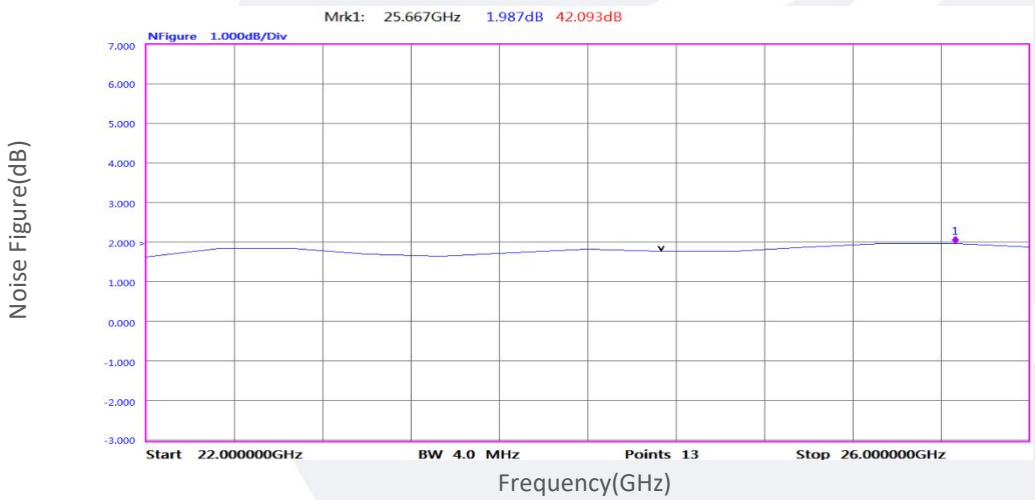
Base Number	Description	Revision
TLLA22G26G-40-25	Low Noise Amplifier, 22-26GHz, Noise Figure:2.5dB, Gain:40dB,P1dB:12dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA22G26G-40-25-HS	Low Noise Amplifier, 22-26GHz, Noise Figure:2.5dB, Gain:40dB,P1dB:12dBm,+8V DC,With Heatsink	Rev.1.1

Typical Performance Data:

Gain&VSWR vs Frequency



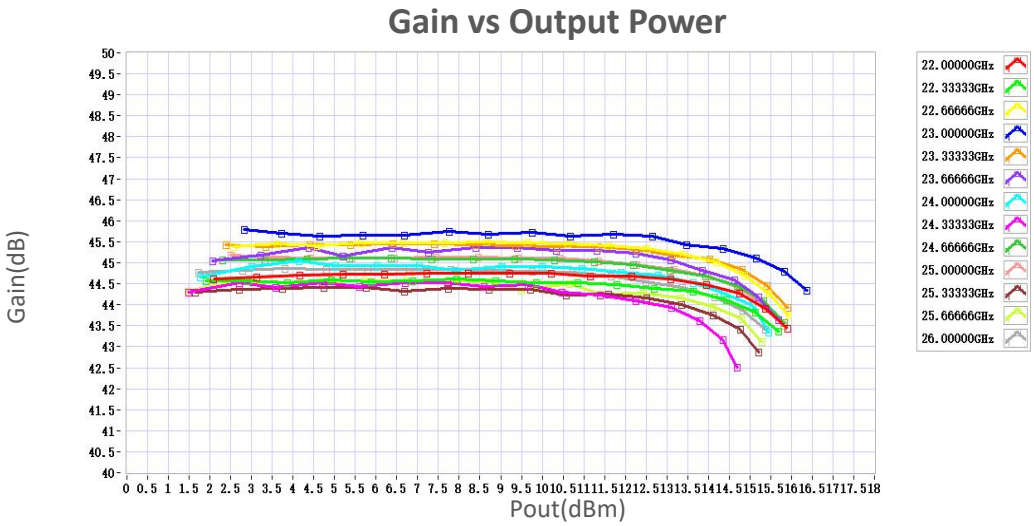
Noise Figure vs Frequency

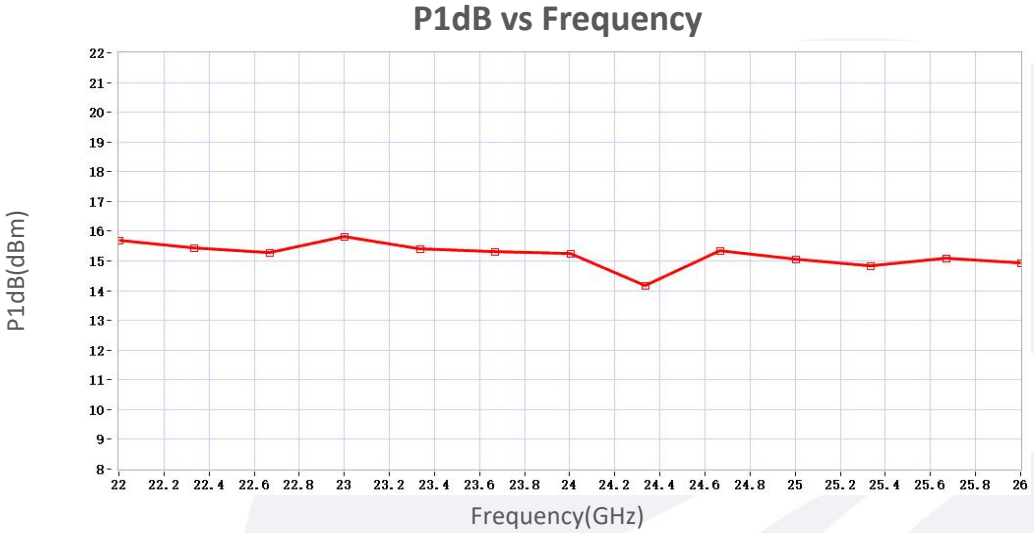


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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