泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Low Noise Amplifier

6-34GHz/3.5dB NF/32dB Gain/14dBm P1dB

Model: TLLA6G34G-32-35

TLLA6G34G-32-35 is a low noise amplifier with a typical small signal gain of 32 dB and a nominal noise figure of 3.5 dB across the frequency range of 6 to 34 GHz. The DC power requirement for the amplifier is +12 V DC/280 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 6-34GHz
- Gain: 32dB Typ
- Noise Figure: 3.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	6		34	GHz
Small Signal Gain	30	32		dB
Gain Flatness		±2.5		dB
Noise Figure		3.5		dB
Output P1dB	13	14		dBm
Output Psat		15		dBm
Input VSWR		1.6		:1
Output VSWR		1.6		:1
DC Voltage	+8	+12	+13	V DC
DC Supply Current		280		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mmFemale	
DC Bias	Solder Pin	
Size	44*36*12	mm

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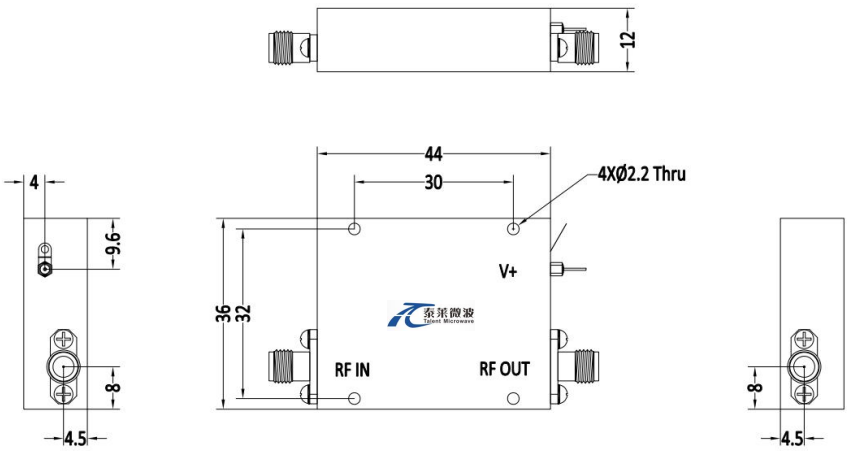
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+13V
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	-45		+85	℃
Non-operating Temperature	-55		+125	℃
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			

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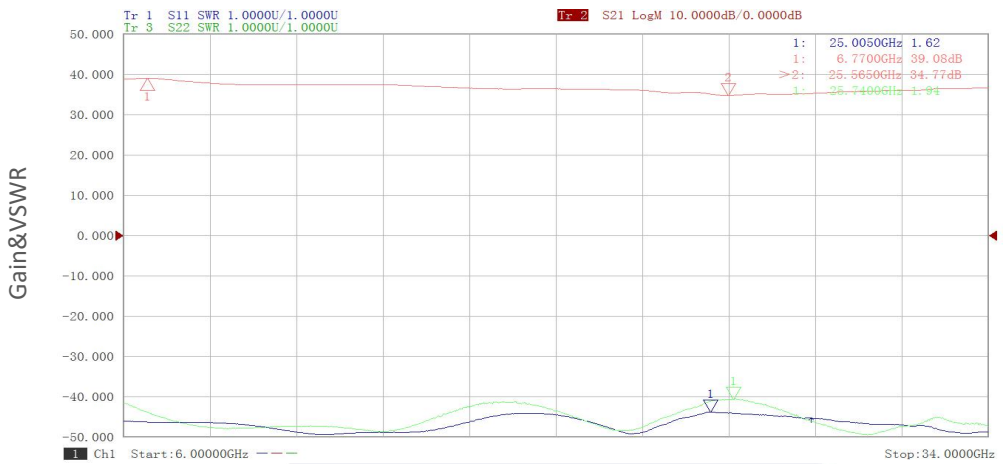
Ordering Information:

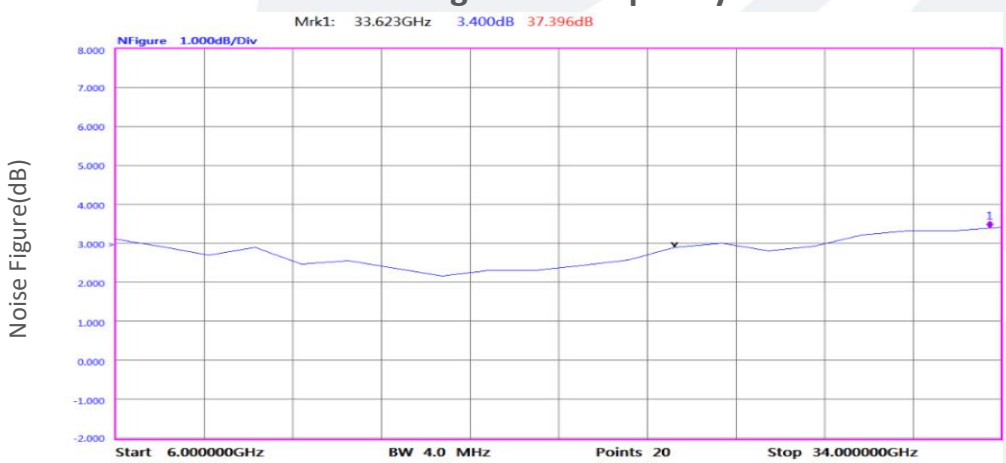
Base Number	Description	Revision
TLLA6G34G-32-35	Low Noise Amplifier, 6-34GHz, Noise Figure:3.5dB, Gain:32dB,P1dB:14dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA6G34G-32-35-HS	Low Noise Amplifier, 6-34GHz, Noise Figure:3.5dB, Gain:32dB,P1dB:14dBm,+12V DC,With Heatsink	Rev.1.1

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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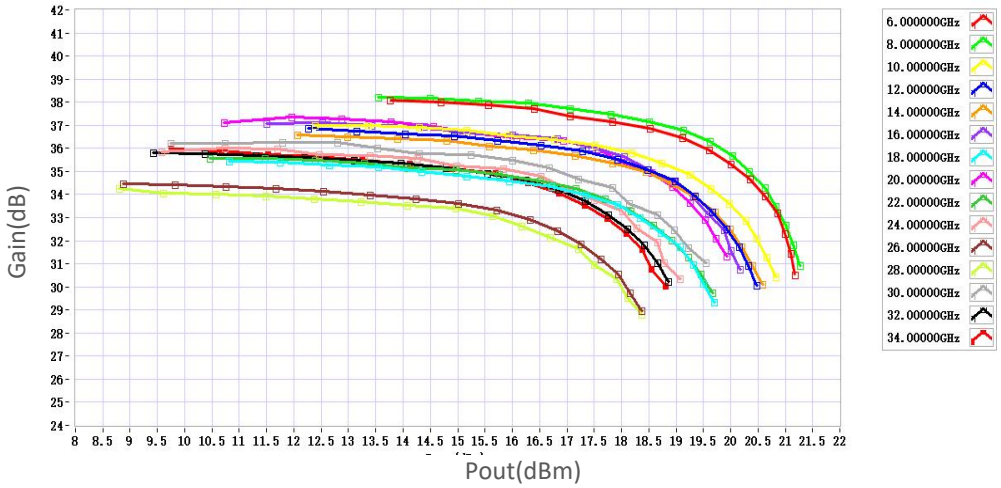
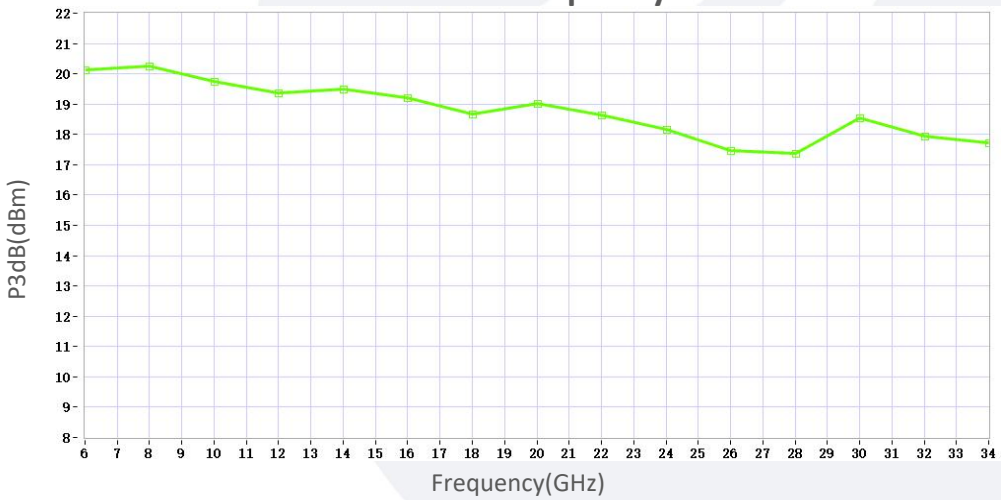
Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency

P3dB vs Frequency



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