泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

0.7-20GHz/32dB Gain/25dBm Psat

Model: TLPA0.7G20G-32-22

TLPA0.7G20G32-22 is a power amplifier with a typical small signal gain of 32 dB and a nominal Psat of 25 dBm across the frequency range of 0.7 to 20 GHz. The DC power requirement for the amplifier is +12 VDC/300 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 0.7-20GHz
- Gain: 32dB Typ
- Output Power Psat: 25dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.7		20	GHz
Small Signal Gain	30	32		dB
Gain Flatness		±2		dB
Output P1dB	22	23		dBm
Output Psat		25		dBm
Noise Figure		3	4.5	dB
Input VSWR		1.5		:1
Output VSWR		1.5		:1
DC Voltage		+12		V DC
DC Supply Current		300		mA
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	44*36*11	mm
Weight	50	g

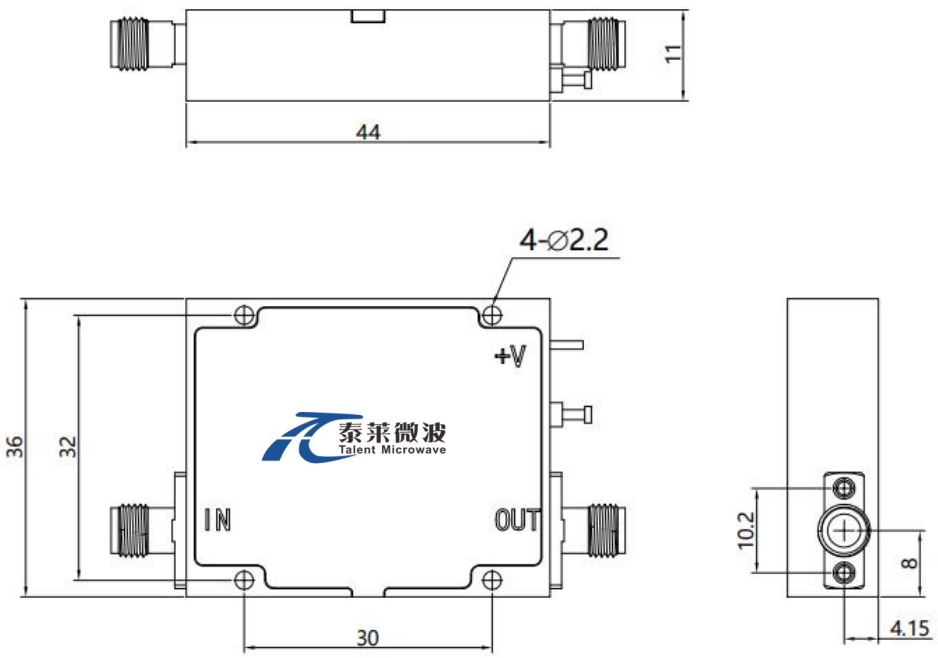
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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Environmental Conditions:

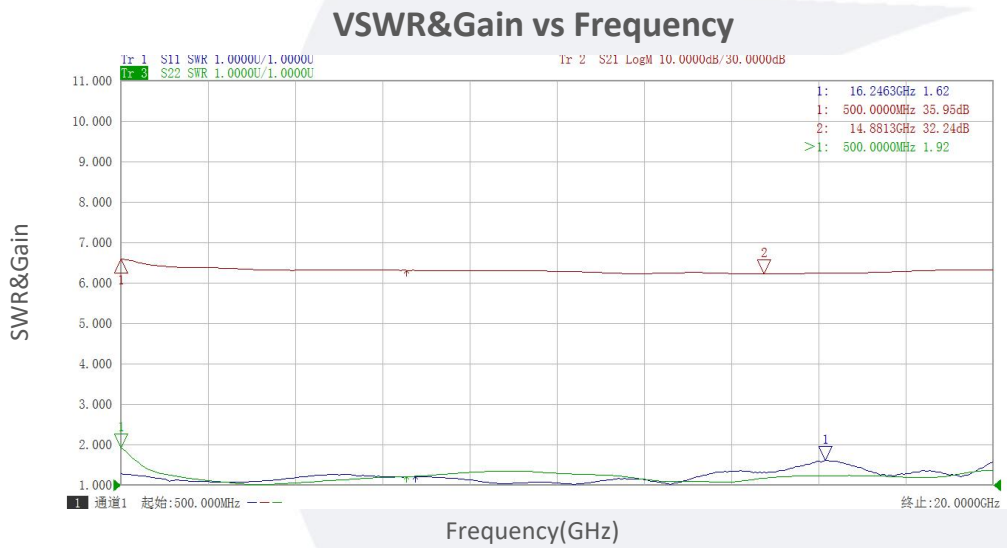
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA0.7G20G-32-22	Power amplifier 0.7-20GHz, Gain:32dB,Psat:25dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA0.7G20G-32-22-HS	Power amplifier 0.7-20GHz, Gain:32dB,Psat:25dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:



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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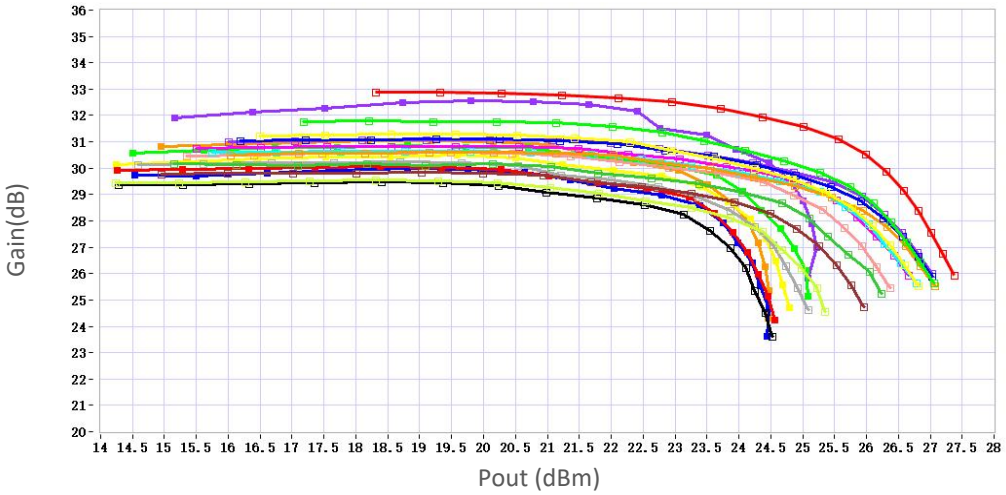
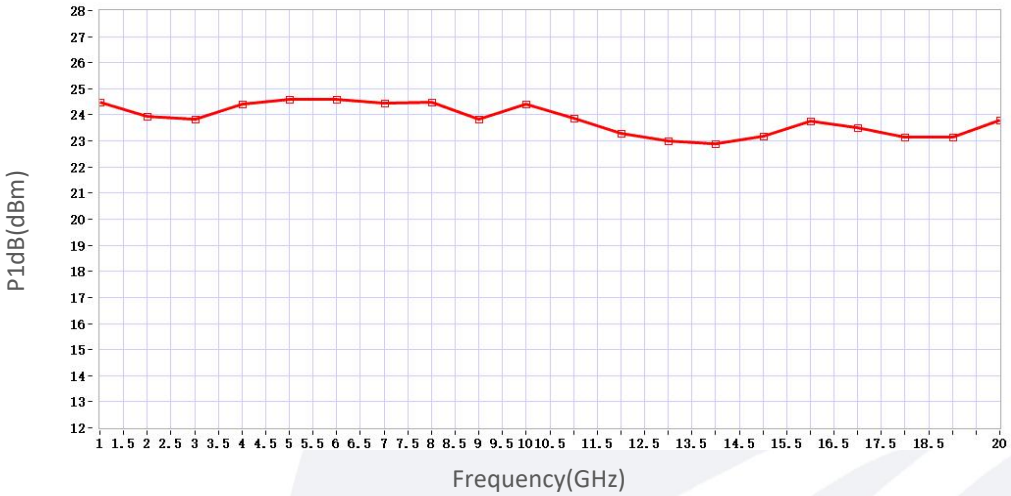
Typical Performance Data:

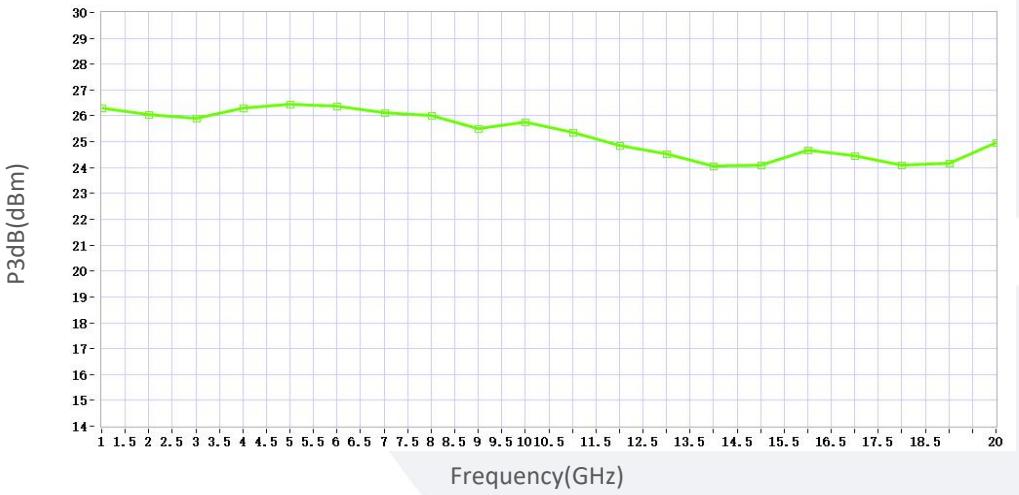
Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency



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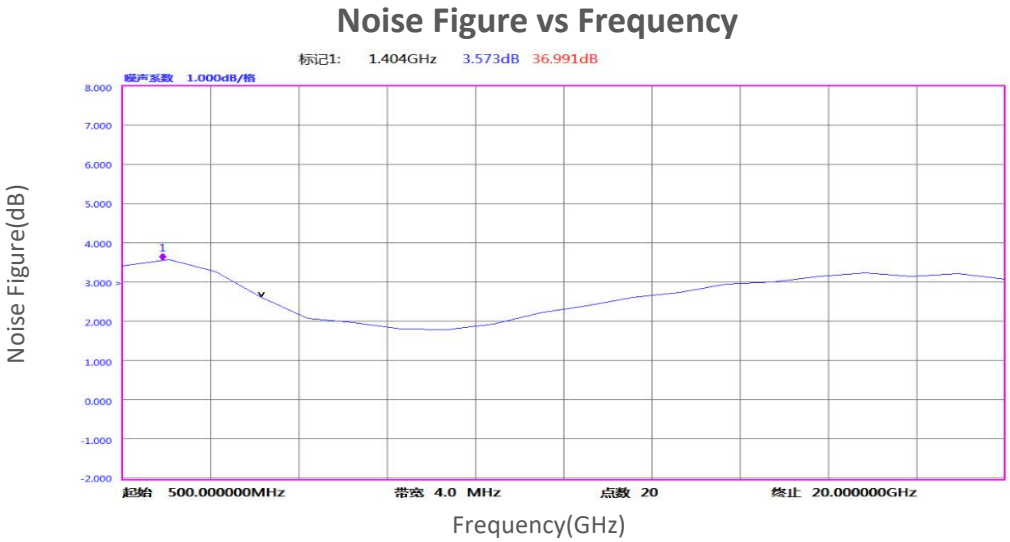

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