泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Model:TLPA0.01G18G-31-25

Power Amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm

Feature:

- Ultra Wide Band: 0.01-18GHz
- Gain: 31 dB Typ
- Psat Output Power: 25 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range		0.01-18		GHz
Gain	27	31		dB
Gain Flatness		±2.5		dB
Output P1dB		25		dBm
Output Psat	25	27		dBm
Noise Figure		2.5		dB
Input VSWR		2.0	2.5	:1
Output VSWR		1.8	2.4	:1
DC Voltage		+12		V DC
DC Supply Current		500		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	52*44*13	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Available 220V System Benchtop Amplifier

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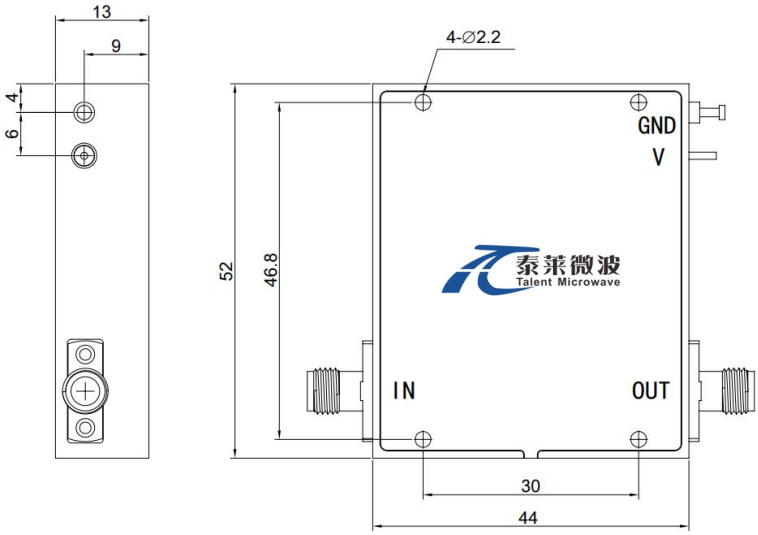
Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	℃
Non-operating Temperature	-55		+125	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLPA0.01G18G-31-25	Power amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm, +12V DC,Without Heatsink	Rev.1.2
TLPA0.01G18G-31-25-HS	Power amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm, +12V DC,With Heatsink	Rev.1.2

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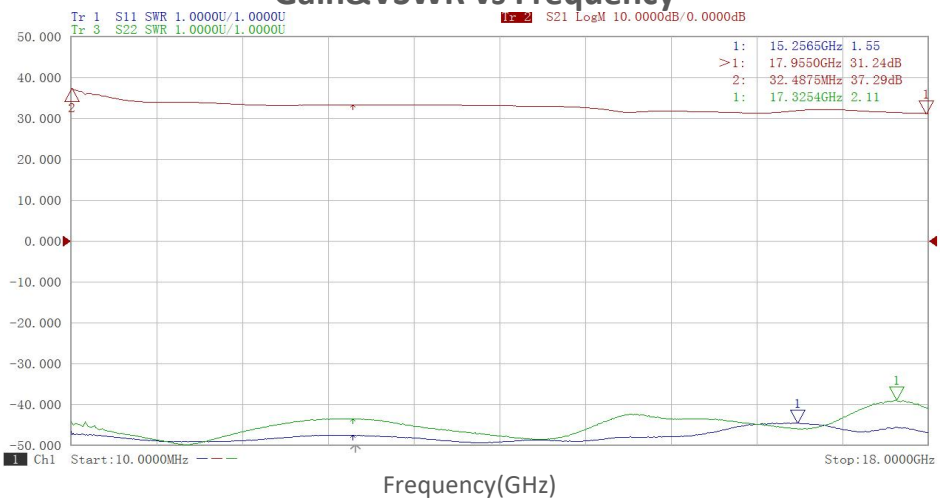
Typical Performance Data:

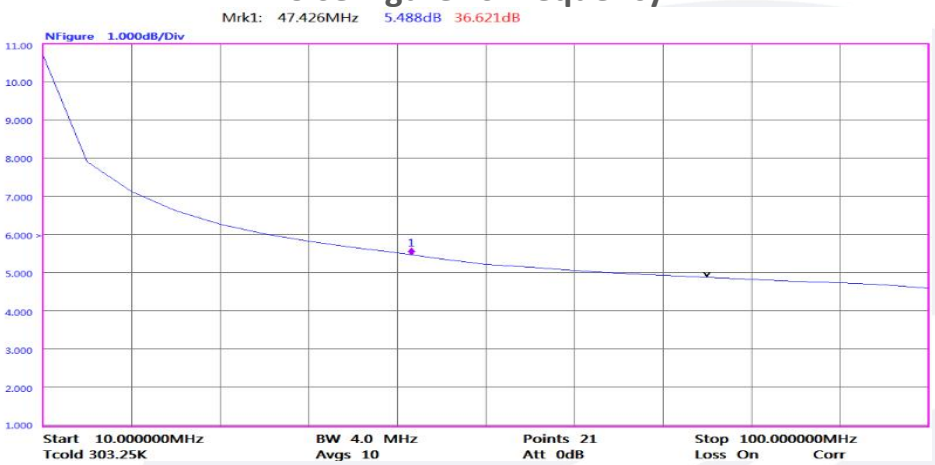
Gain&VSWR vs Frequency



Gain&VSWR

Frequency(GHz)

Noise Figure vs Frequency



Noise Figure(dB)

Frequency(MHz)

Noise Figure vs Frequency

Noise Figure(dB)

Frequency(GHz)

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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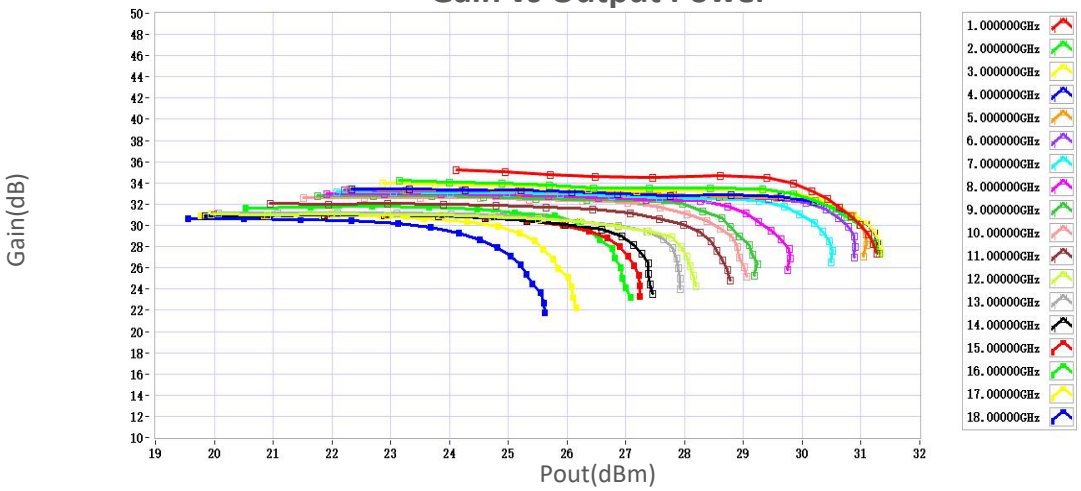
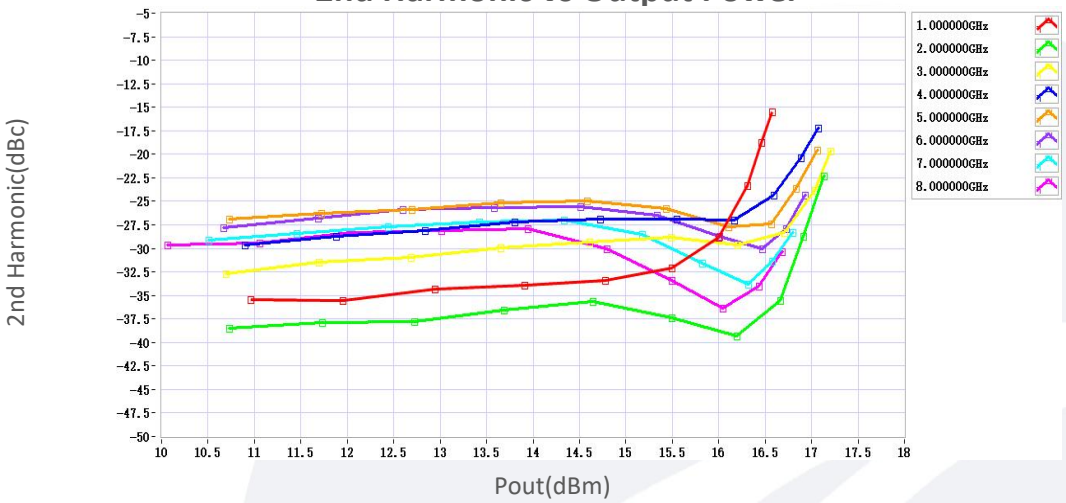
Typical Performance Data:

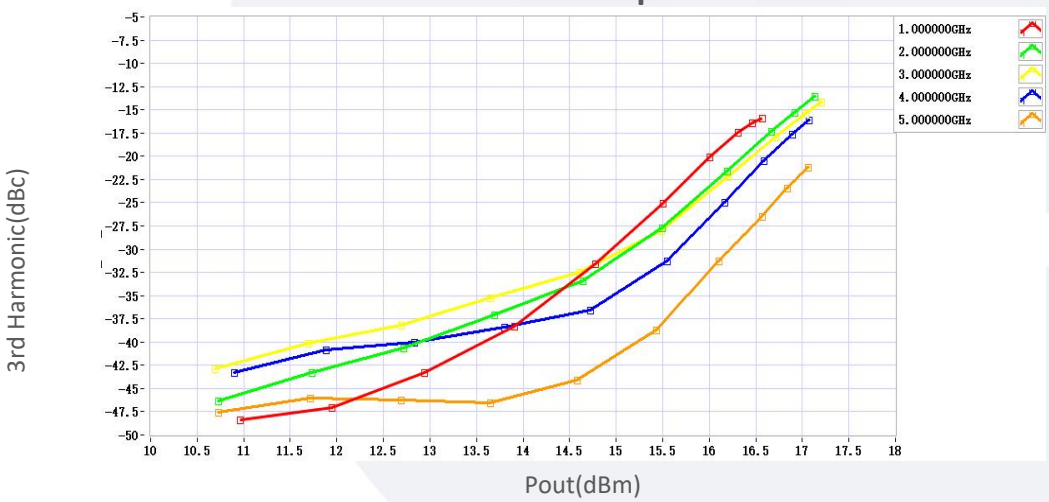
Gain vs Output Power



2nd Harmonic vs Output Power



3rd Harmonic vs Output Power



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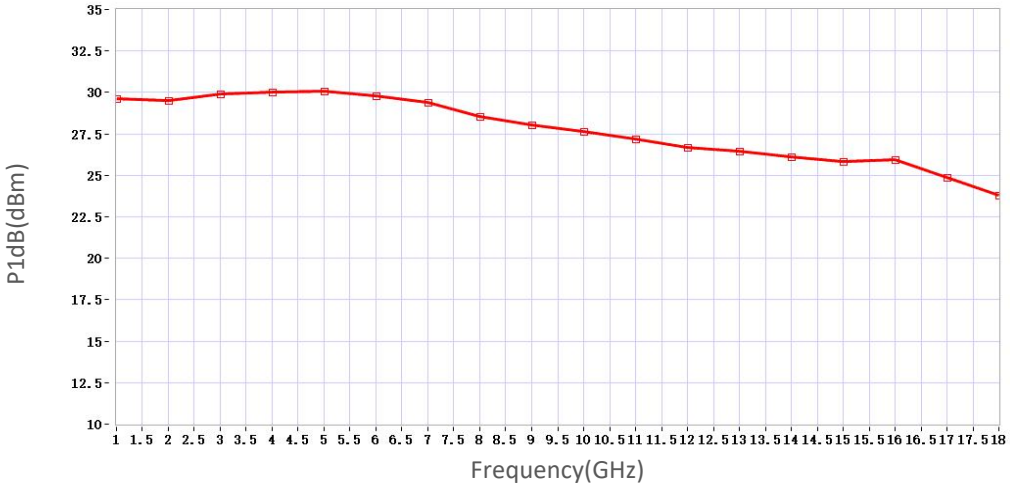
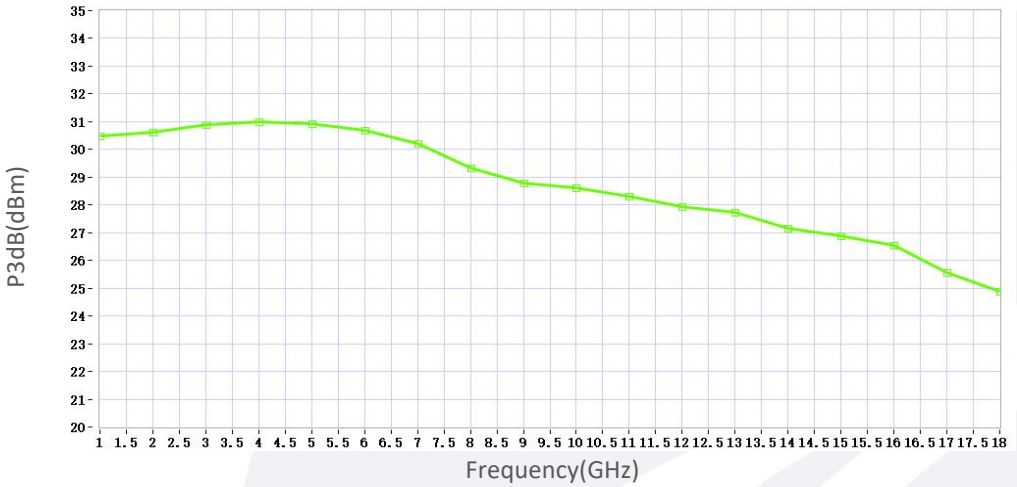
Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

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