泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

0.1-18GHz/30dB Gain/30 dBm P1dB

Model: TLPA0.1G18G-31-32

TLPA0.1G18G-31-32 is a power amplifier with a typical small signal gain of 30 dB and a minimum P1dB of 30 dBm across the frequency range of 0.1 to 18 GHz. The DC power requirement for the amplifier is +18 VDC/0.9 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.1-18GHz
- Gain: 30dB Typ
- Output Power P1dB: 30dBm Min
- 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		0.1-18		GHz
Small Signal Gain*	28	30		dB
Gain Flatness		±5		dB
Output P1dB	30			dBm
Spurious		-60		dBc
Input VSWR			2.2	:1
DC Voltage		18		V DC
DC Supply Current		0.9		A
Impedance		50		Ohms

*Note:This parameters reaches 32~40dBm within the frequency range of 100Mhz to 1GHz.

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Mechanical Specifications:

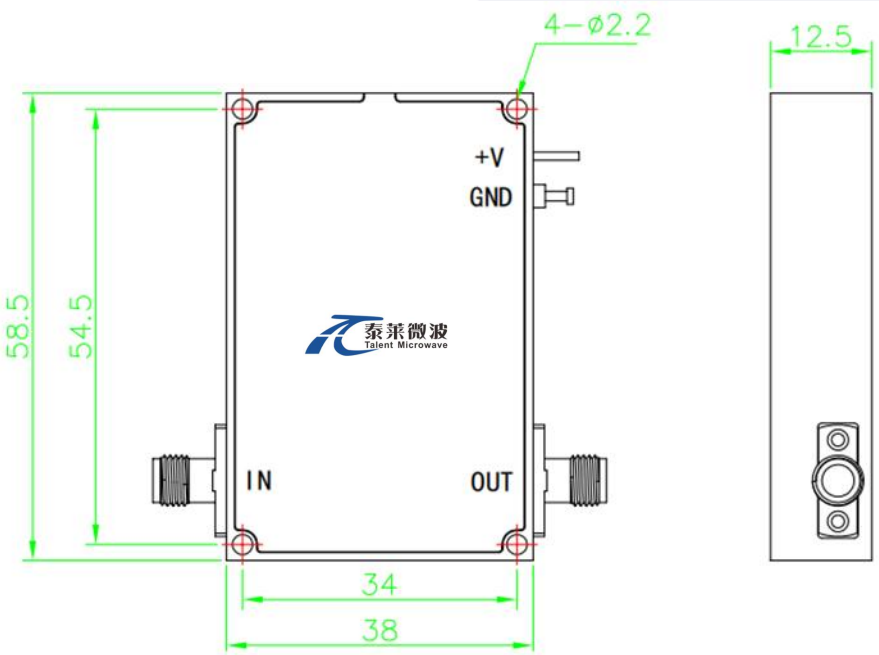
Parameter	Value	Units
Input /Output Connector	SMA Femlae/SMA Female	
DC Bias	Solder Pin	
Size	38*58.5*12.5	mm
Weight	200	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+18 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:

***Heat Sink Required During Operation

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

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Environmental Conditions:

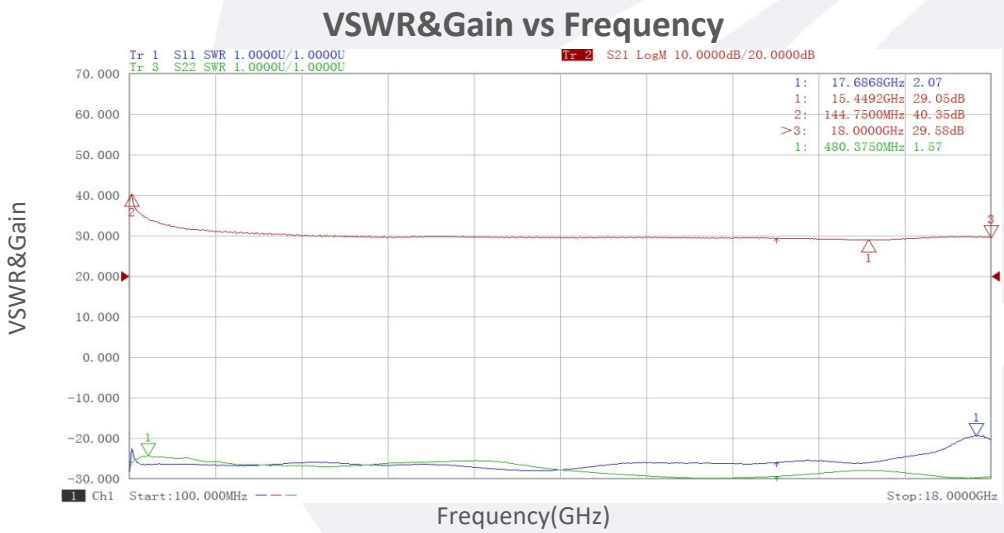
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Desciption	Revision
TLPA0.1G18G-31-32	Power amplifier 0.1-18GHz,Gain:30dB,P1dB:30dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA0.1G18G-31-32-HS	Power amplifier 0.1-18GHz,Gain:30dB,P1dB:30dBm, +18V 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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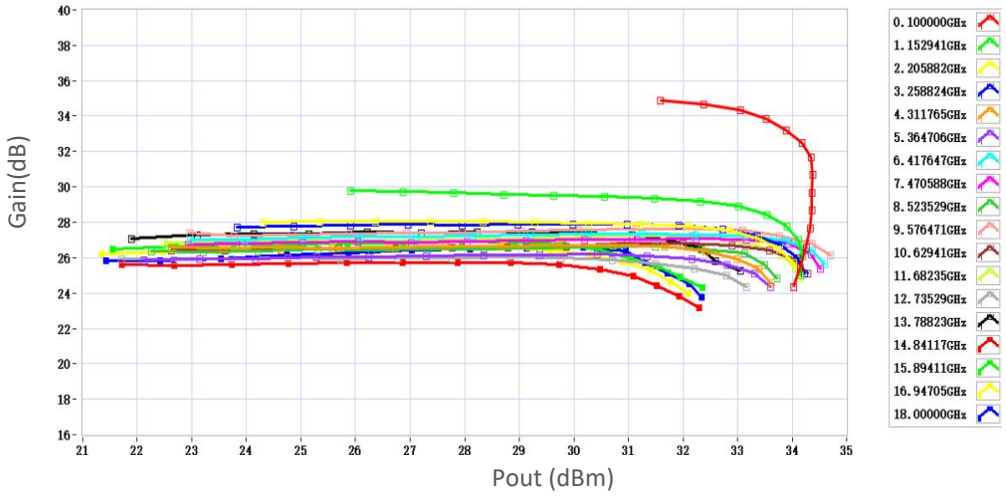
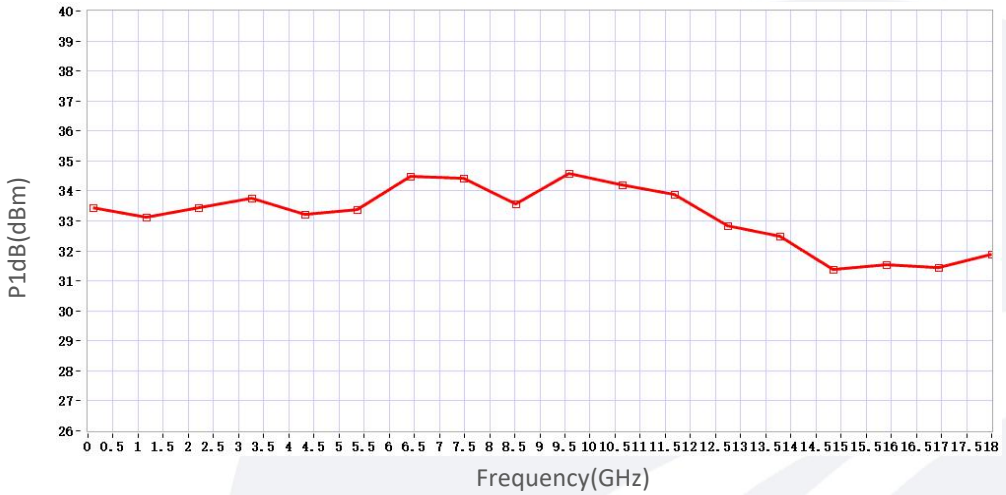
Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency



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