泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

2-18GHz/40dB Gain/37dBm Psat

Model: TLPA2G18G-40-37

TLPA2G18G-40-37 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 37 dBm across the frequency range of 2 to 18 GHz. The DC power requirement for the amplifier is +28 VDC. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-18GHz
- Gain: 40dB Min
- Output Power Psat: 37dBm 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		2-18		GHz
Small Signal Gain	40			dB
Gain Flatness		±3		dB
Output Psat	37			dBm
Spurious			-60	dBc
Input VSWR			2	:1
DC Voltage		28	29	V DC
Power Consumption			80	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	J30J-9ZKP	
Size	200*100*30	mm
Weight	1	Kg

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

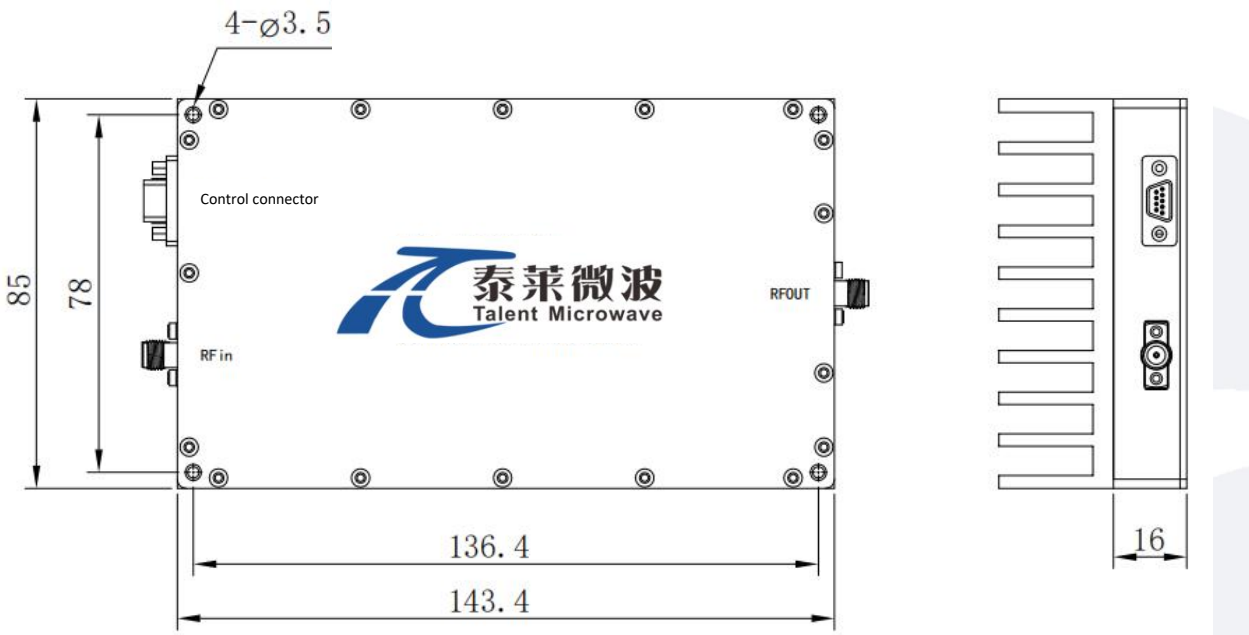
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 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.

J30J-9ZKP Define	
Pin	**Function**
1~4	+28 V
5	TTL high level: +3.3V to +5V, amplifier enable; TTL low level: 0V, amplifier disable
6~9	GND

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Environmental Conditions:

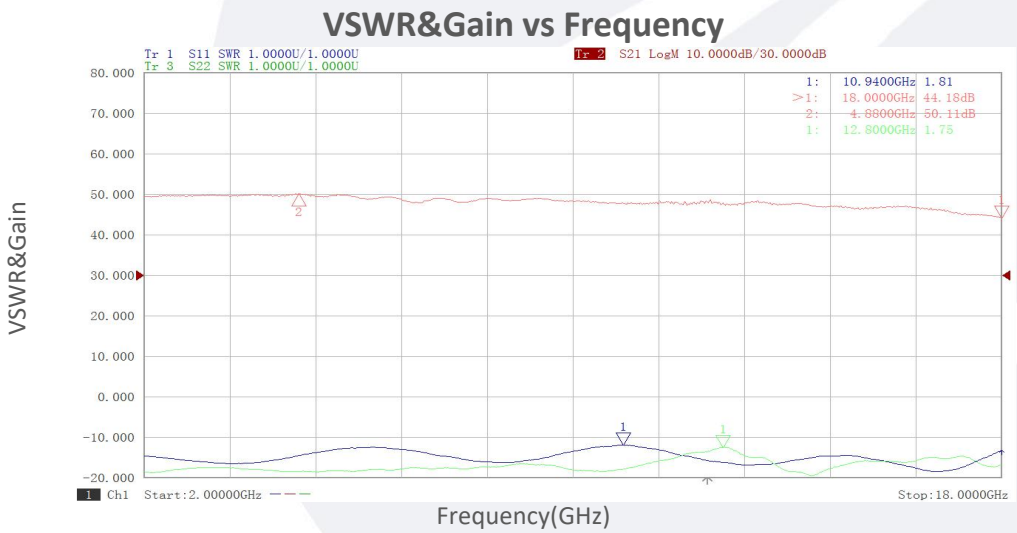
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA2G18G-40-37	Power amplifier 2-18GHz, Gain:40dB,Psat:37dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA2G18G-40-37-HS	Power amplifier 2-18GHz, Gain:40dB,Psat:37dBm,+28V DC,With Heatsink	Rev.1.1

Typical Performance Data:

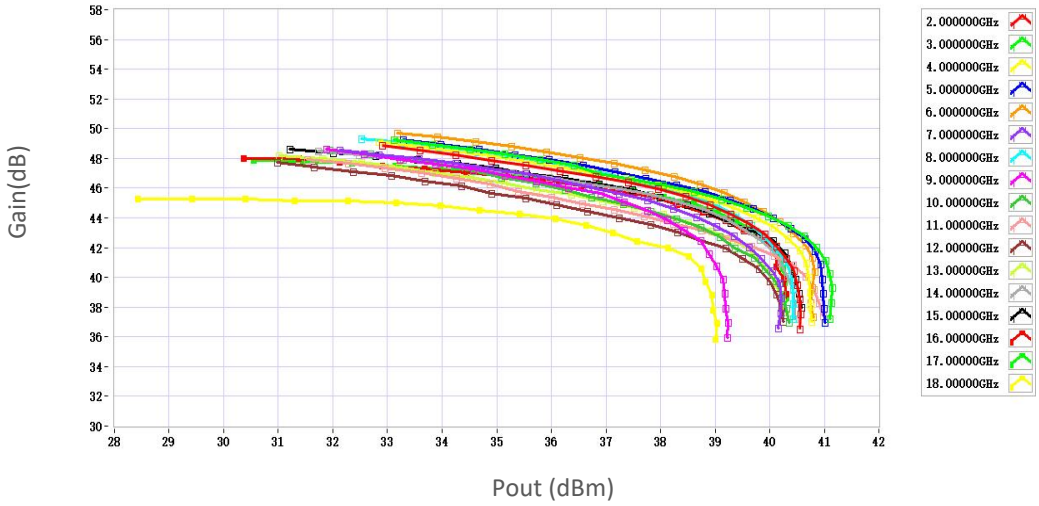


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

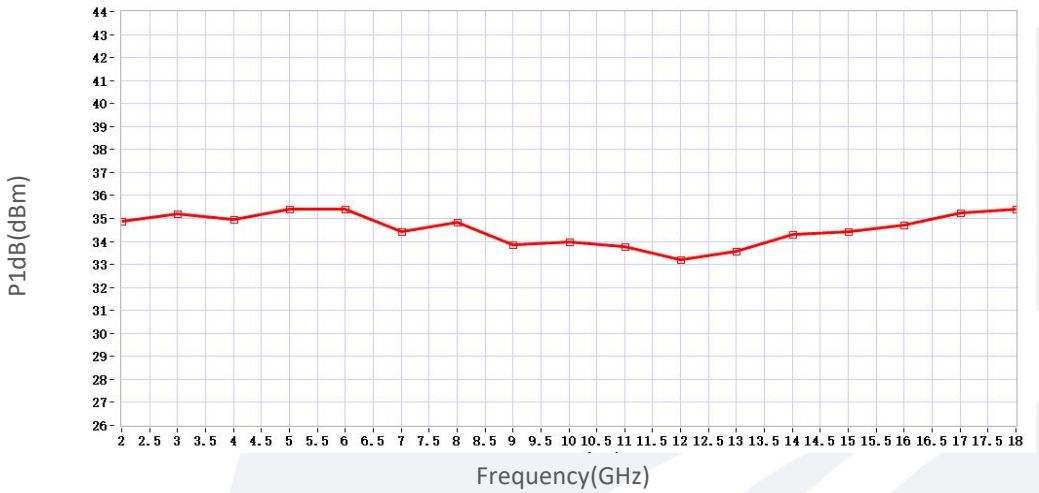
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Typical Performance Data:

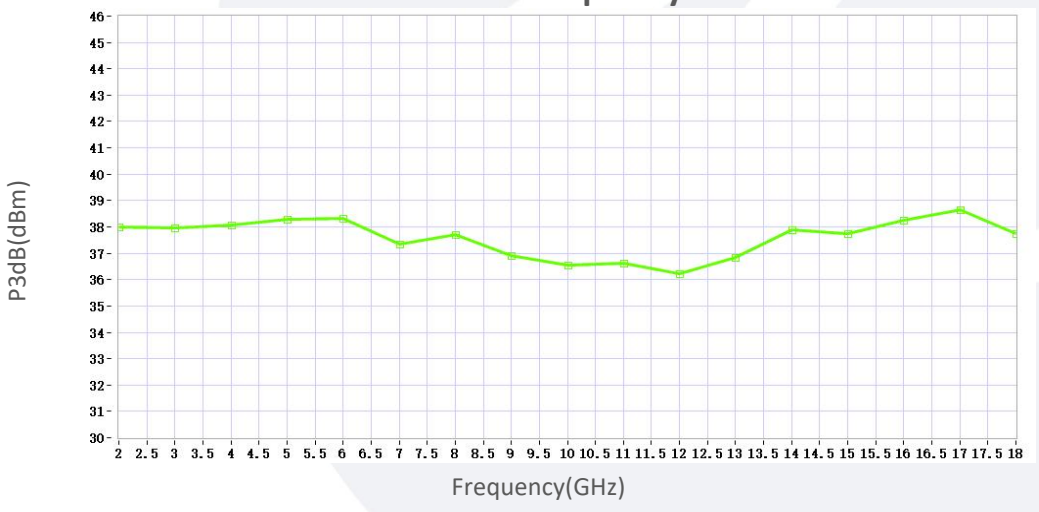
Gain vs Output Power



P1dB vs Frequency



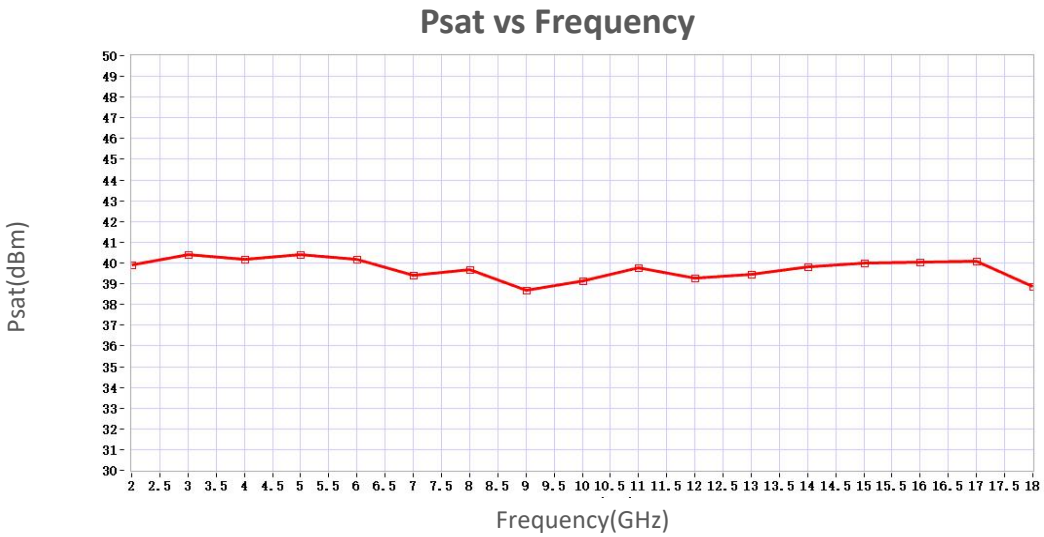
P3dB vs Frequency



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.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

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.