Suzhou Talent Microwave,Inc
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Power Amplifier

12-18GHz/47dB Gain/40dBm Psat

Model: TLPA12G18G-47-40

TLPA12G18G-47-40 is a power amplifier with a minimum power gain of 47 dB and a minimum Psat of 40 dBm across the frequency range of 12 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/3 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 12-18GHz
- Gain: 47dB Min
- Output Power Psat: 40dBm 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		12-18		GHz
Power Gain	47			dB
Gain Flatness		±2		dB
Output P1dB		37		dBm
Output Psat	40			dBm
Input VSWR		2		:1
DC Voltage		28		V DC
DC Supply Current		3		A
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

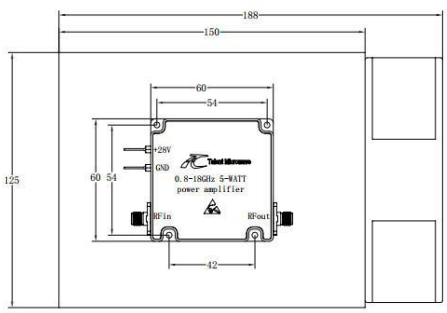
Absolute Maximum Ratings:

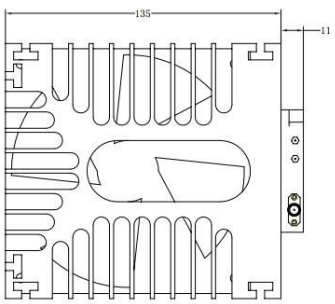
Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

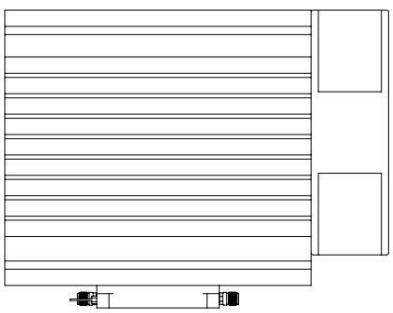
Outline Drawing:

Unit:mm

Regulatory Compliance:







***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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Environmental Conditions:

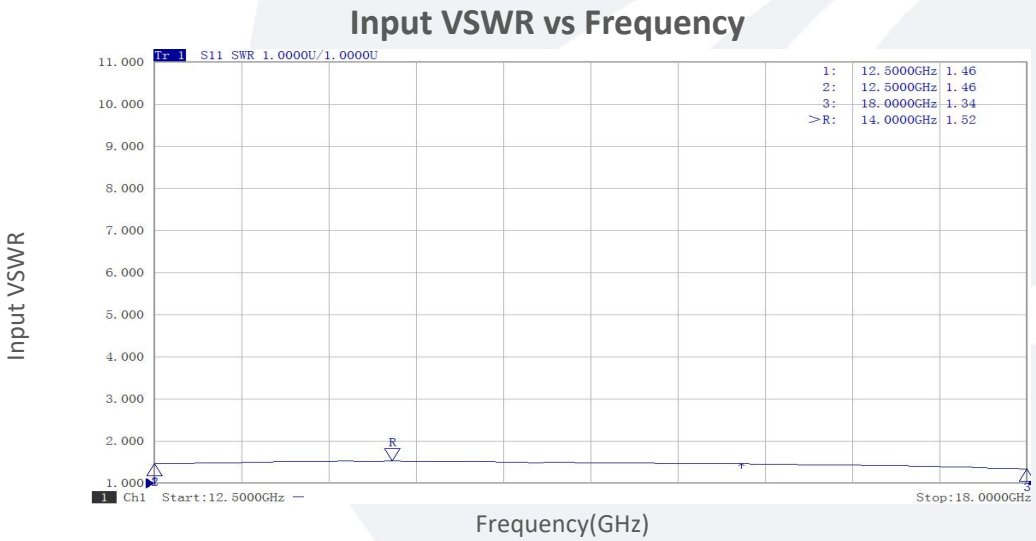
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	℃
Non-operating Temperature*	-50		+60	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA12G18G-47-40	Power amplifier 12-18GHz, Gain:47dB,Psat:40dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA12G18G-47-40-HS	Power amplifier 12-18GHz, Gain:47dB,Psat:40dBm,+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.

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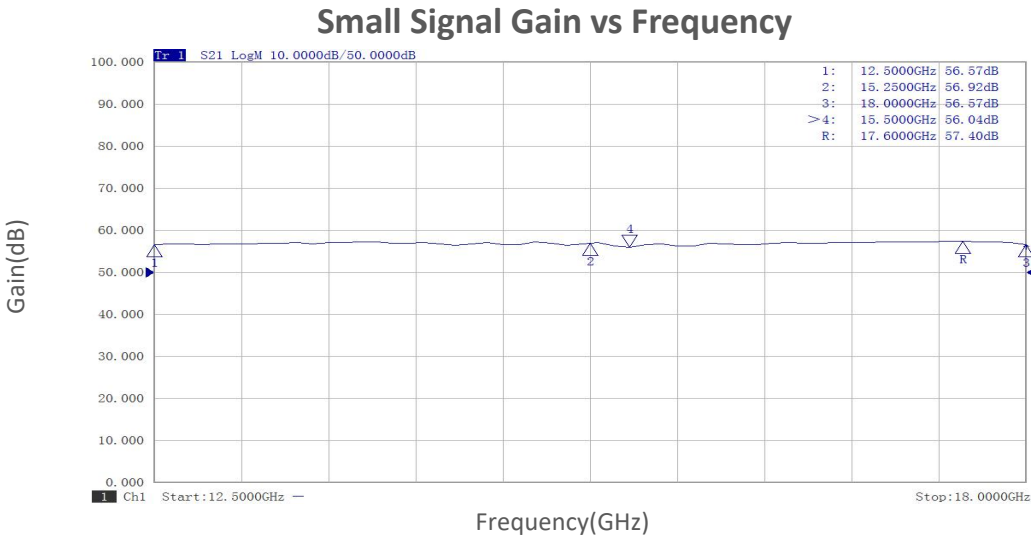

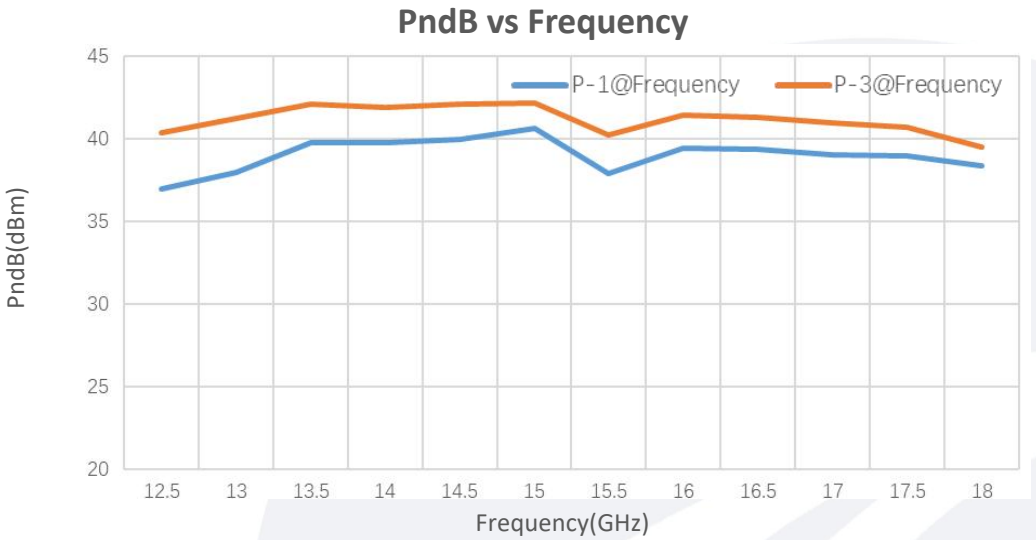

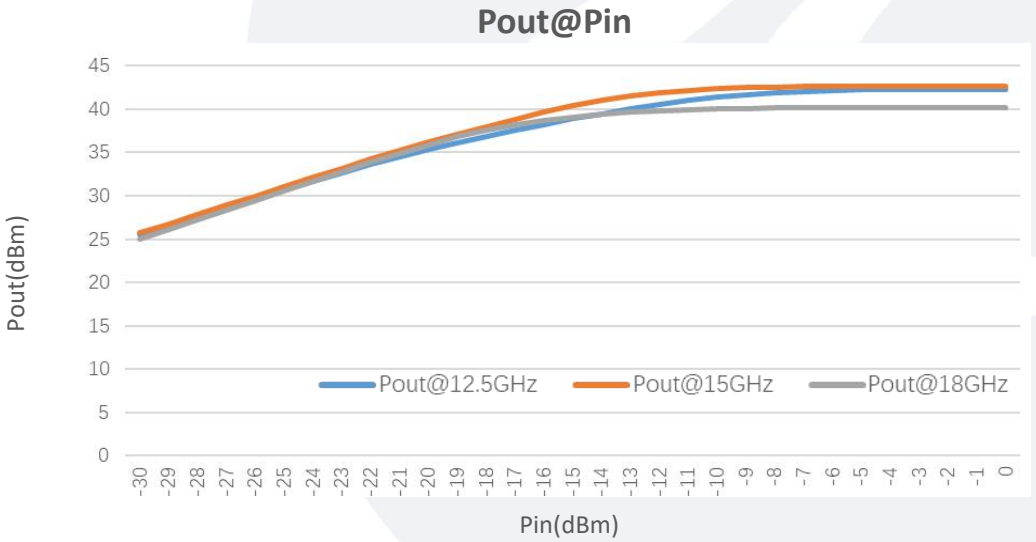

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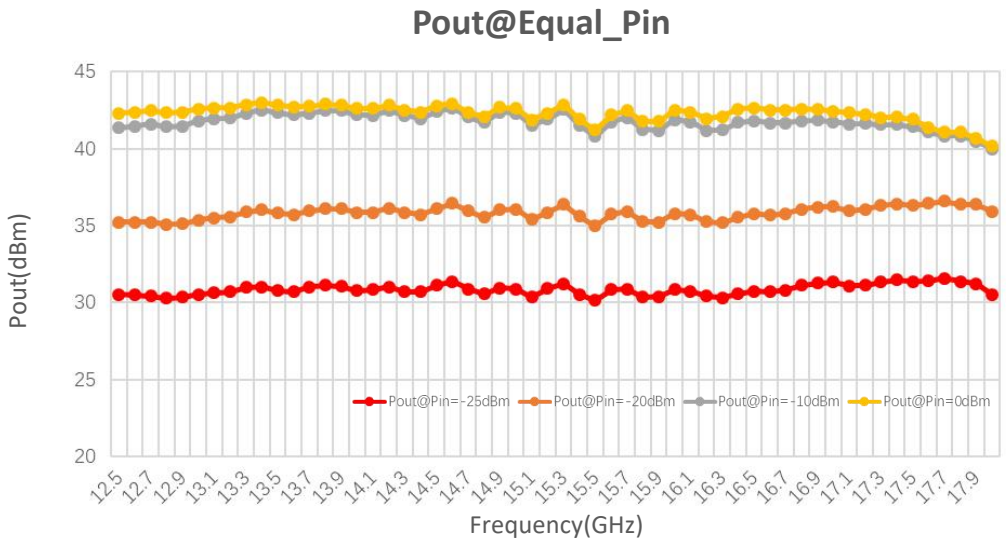

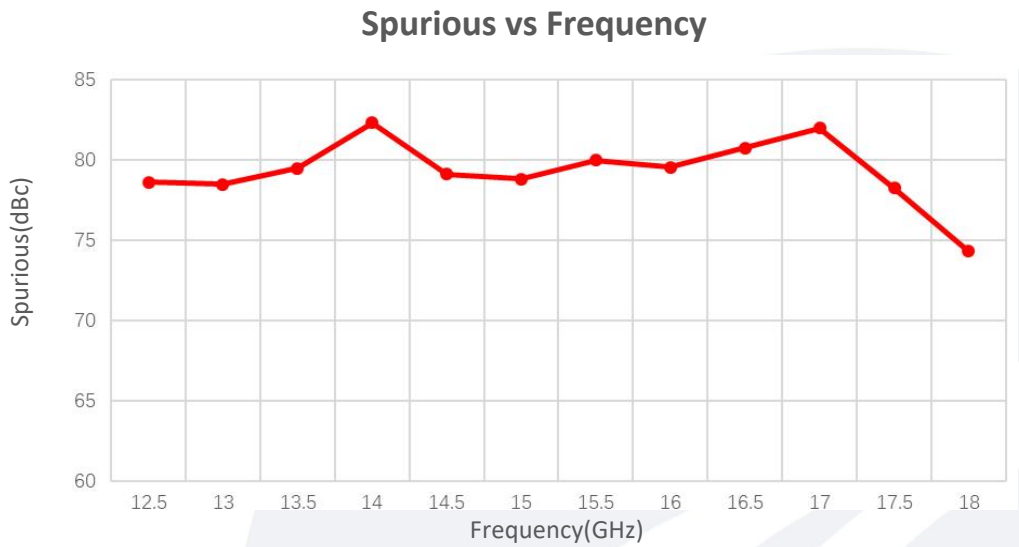

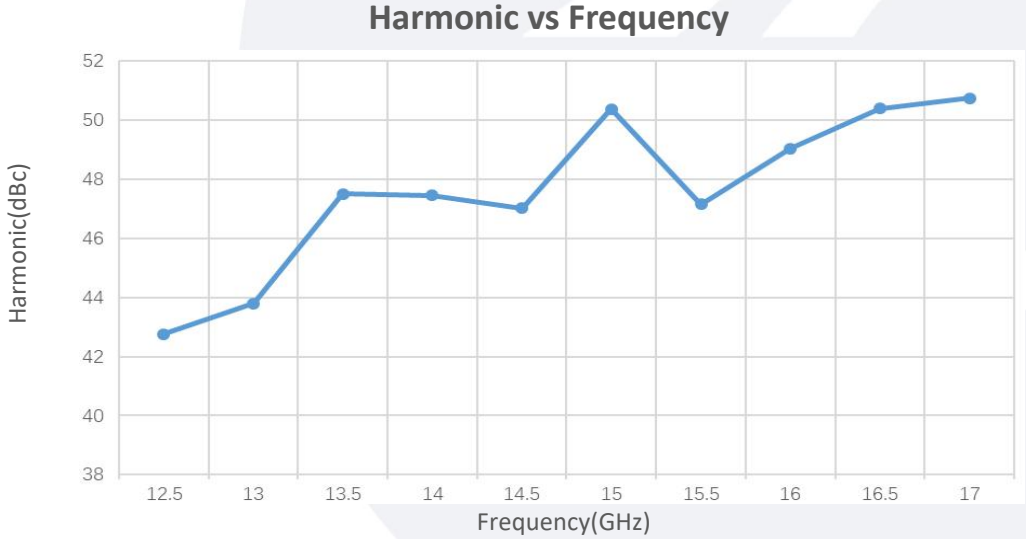

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