Suzhou Talent Microwave,Inc
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Power Amplifier

0.7-6GHz /47dB Gain/47 dBm Psat Model: TLPA0.7G6G-47-47

TLPA0.7G6G-47-47 is a power amplifier with power gain of 47 dB and a nominal Psat of 47 dBm across the frequency range of 0.7 to 6 GHz. The DC power requirement for the amplifier is +36 VDC/400 W. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Ultra Wide Band: 0.7-6GHz
- Gain: 47dB Min
- Output Power Psat: 47dBm Min
- Protection:over voltage protection
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range		0.7-6		GHz
Power Gain	47			dB
Gain Flatness		±3		dB
Output Psat	47			dBm
Spurious@Pout=47dBm			-60	dBc
Harmonic@Pout=47dBm			-10	dBc
Input VSWR			2	:1
DC Voltage		36		V DC
Power Consumption			400	W
Impedance		50		Ohms

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Mechanical Specifications:

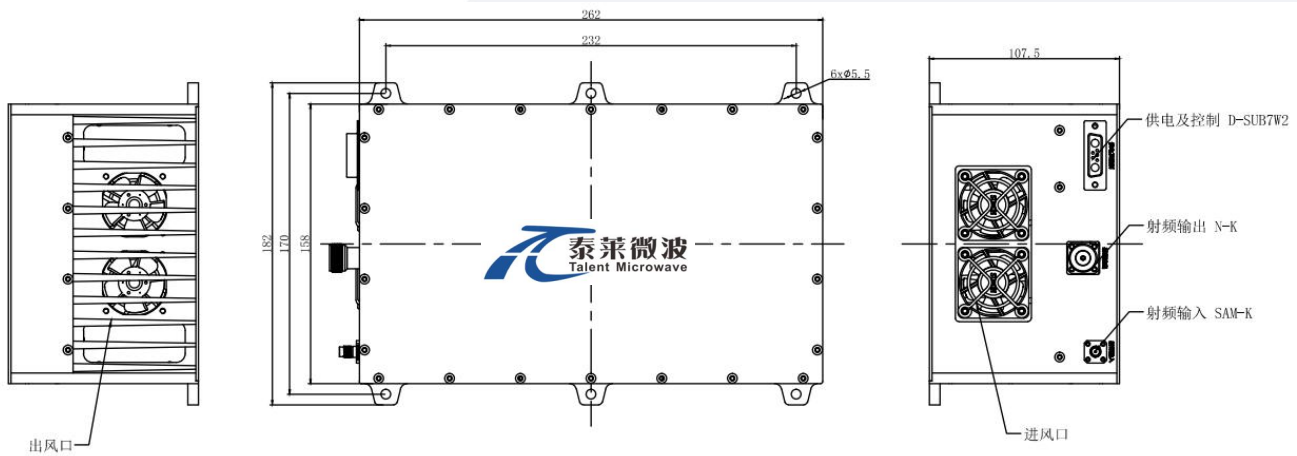
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	D-SUB7W2	A1:+36V A2:GND Pin1~5:NC
Size	262*182*107.5(With heatsink)	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+36 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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Environmental Conditions:

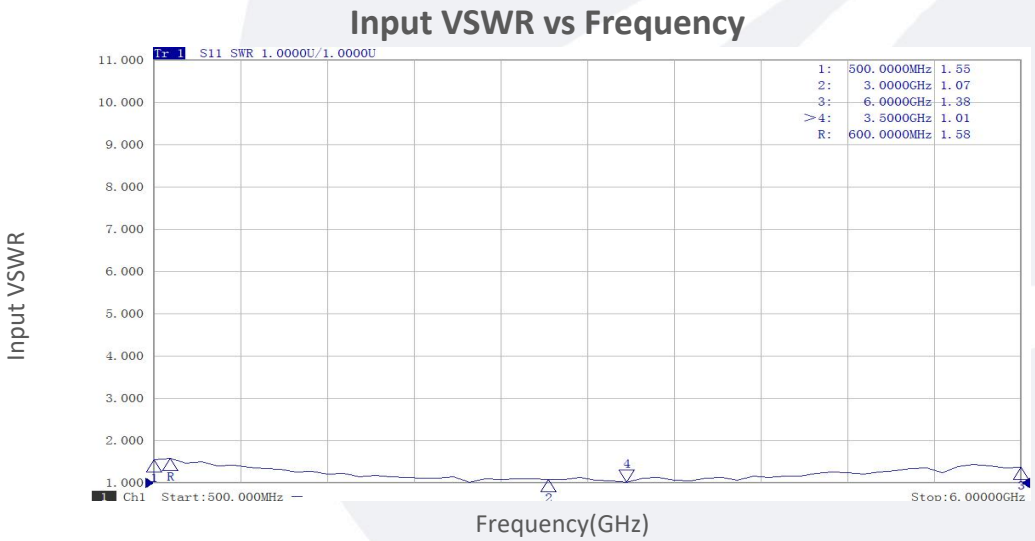
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Desciption	Revision
TLPA0.7G6G-47-47	Power amplifier 0.7-6 GHz,Gain:47dB,Psat:47dBm, +36 V DC,Without Heatsink	
TLPA0.7G6G-47-47-HS	Power amplifier 0.7-6 GHz,Gain:47dB,Psat:47dBm, +36 V 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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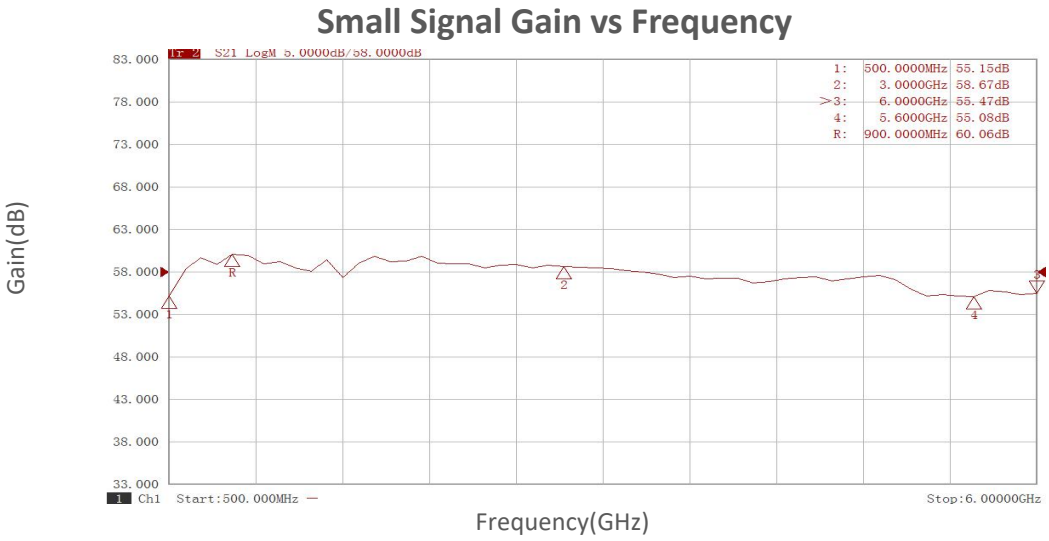

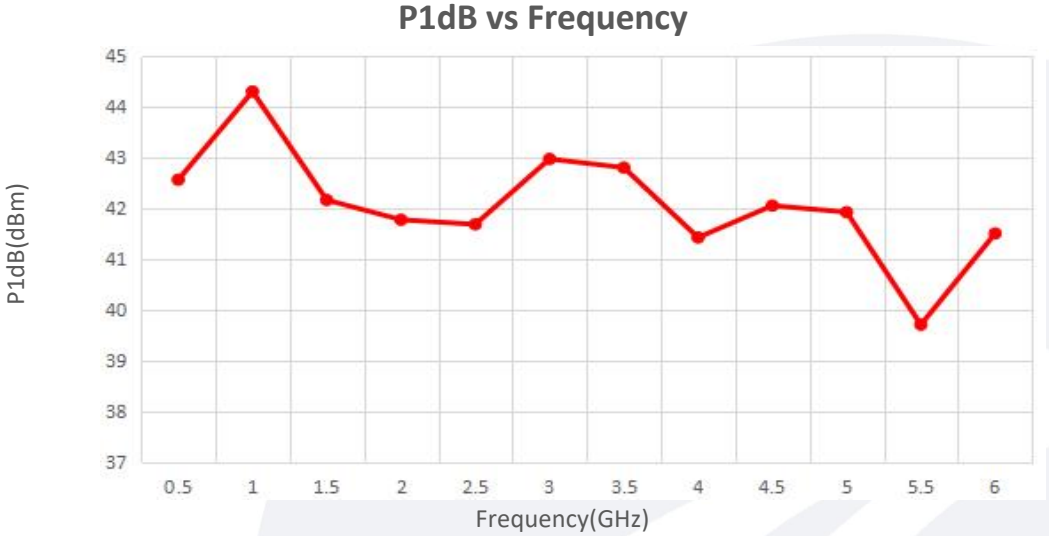

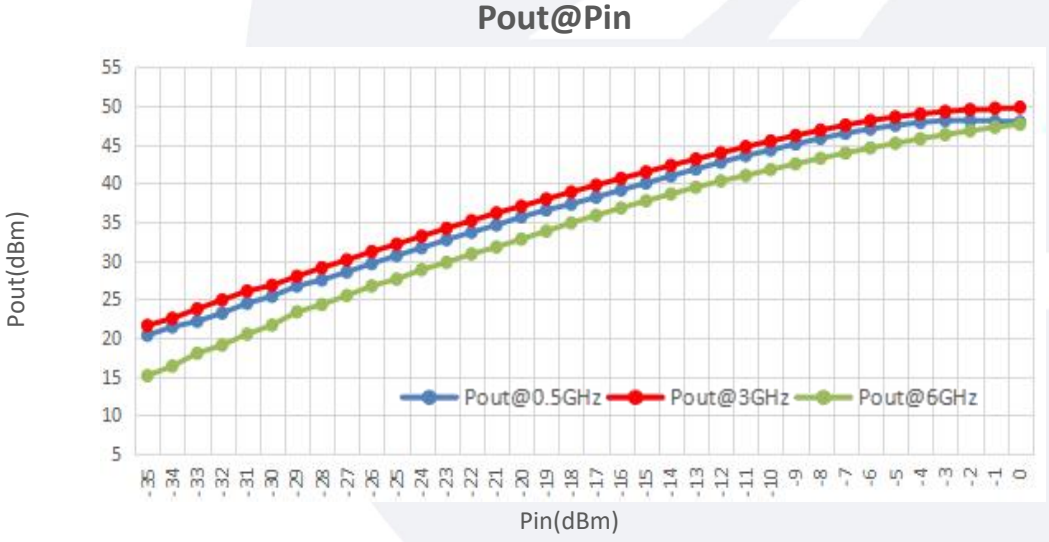

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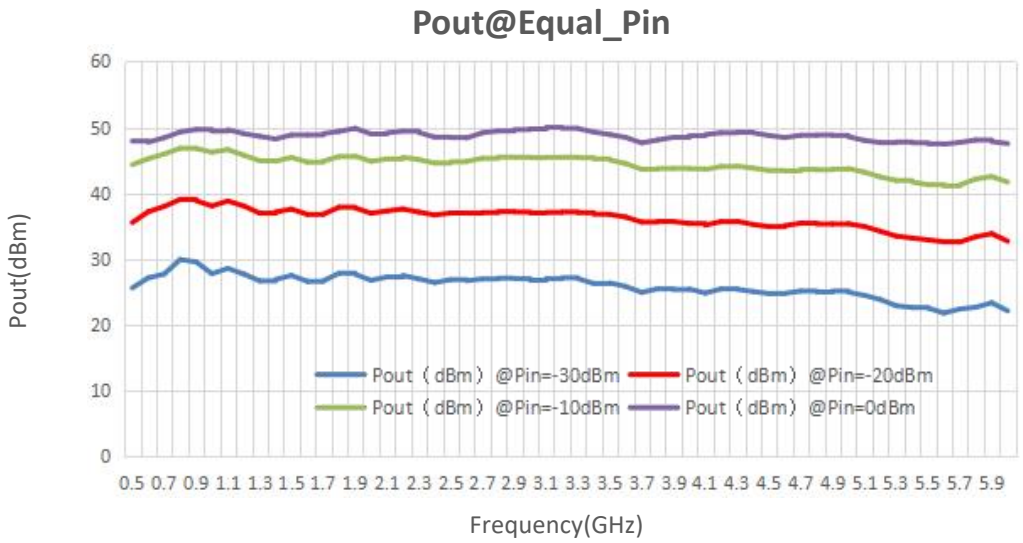

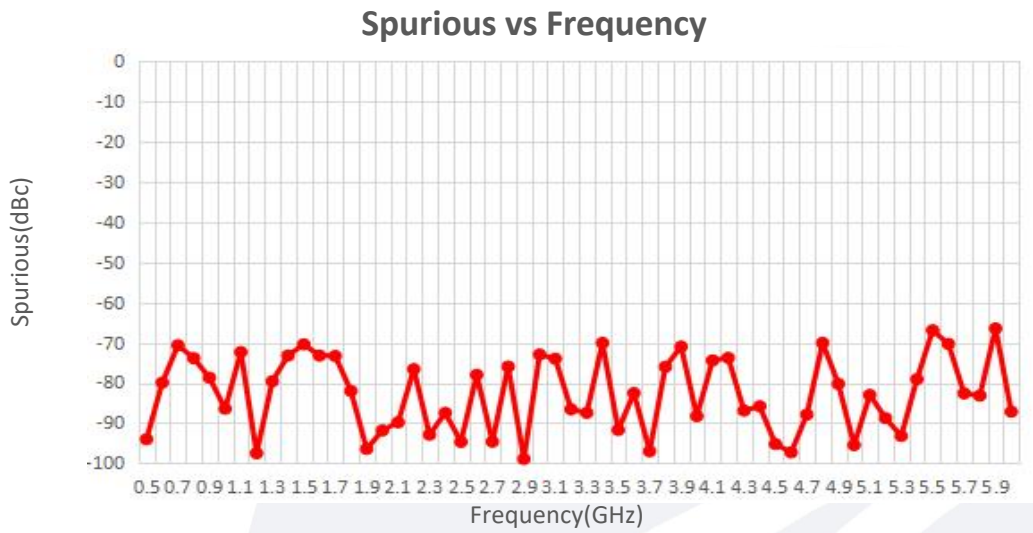

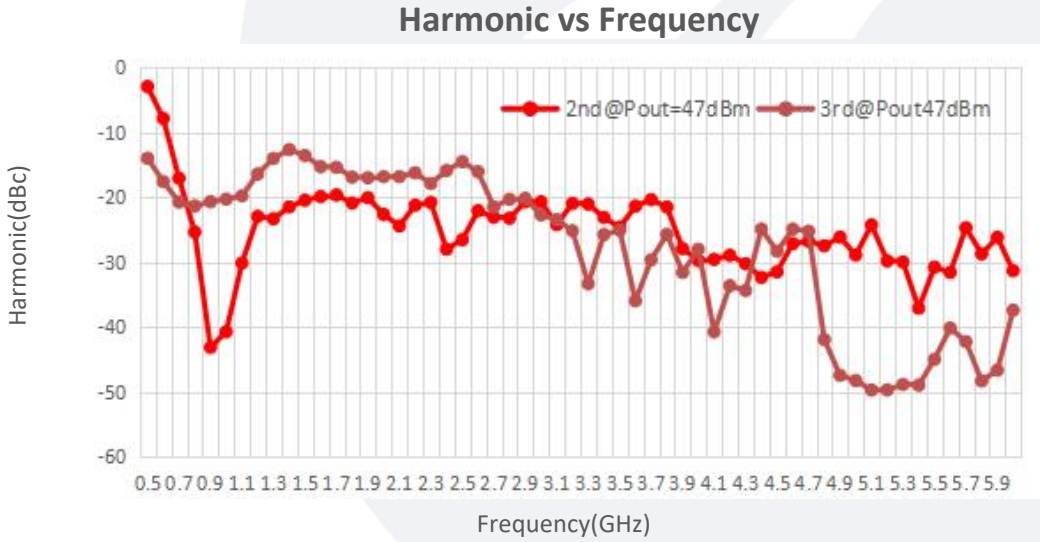

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