

Model:TLPA6G18G-43-43

Power Amplifier

6-18GHz,Gain:50dB,Psat:43dBm

Feature:

- Ultra Wide Band: 6-18GHz
- Gain:50dB Min
- Psat Output Power: 43dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	6-18			GHz
Power Gain	50			dB
Gain Flatness		±4		dB
Output Psat	43			dBm
Spurious@Pout=43dBm			-60	dBc
Harmonics@Pout=43dBm			-10	dBc
Input VSWR			2	:1
DC Voltage		+28		V DC
Power Consumption			350	W
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	D-SUB7W2	A1+28V:A2: GND Pin1:TTL;Pin2~5:NC
Size	130.4*74.5*16	mm
Weight	500	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30V
RF Input Power	10dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+50	°C
Non-operating Temperature	-50		+60	°C
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			

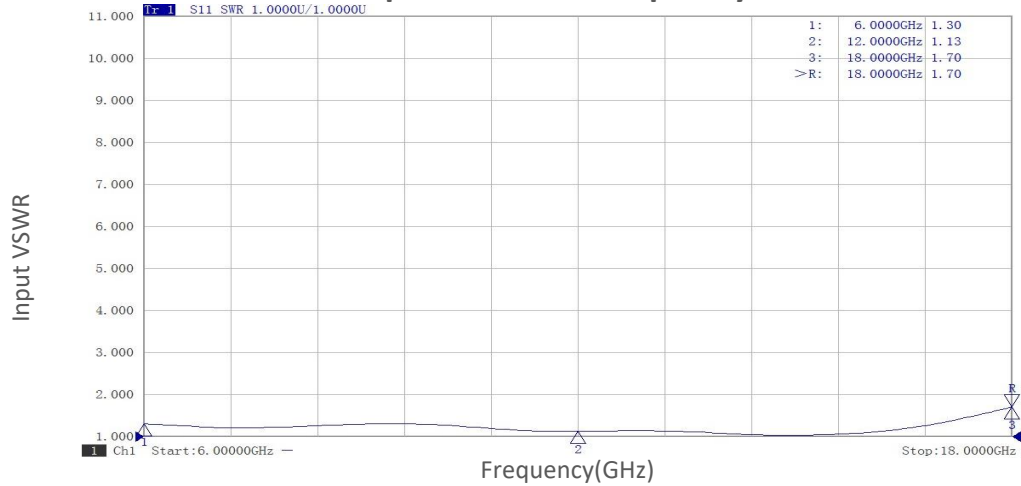
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

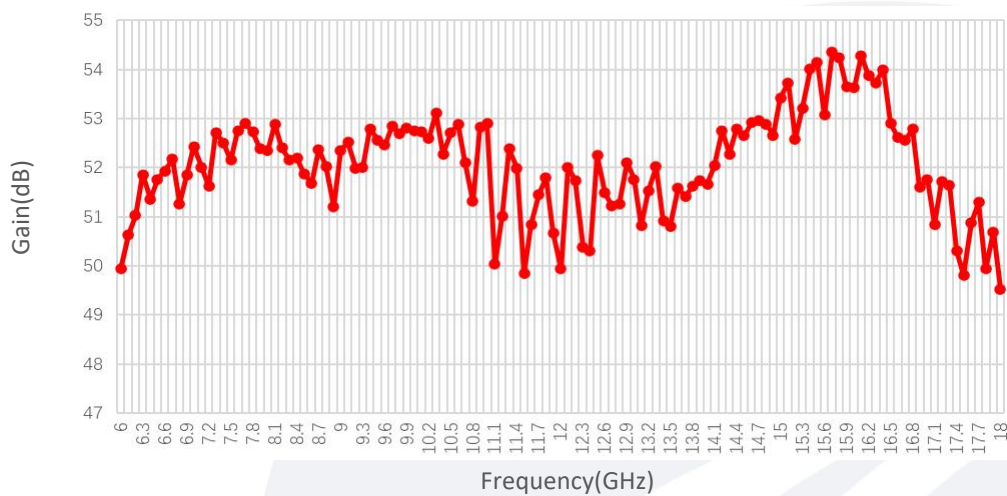
Part Number	Description	Revision
TLPA6G18G-43-43	Power amplifier 6-18GHz,Gain:50dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA6G18G-43-43-HS	Power amplifier 6-18GHz,Gain:50dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1
TLPA6G18G-43-43-HS-T	Power amplifier 6-18GHz,Gain:50dB,Psat:43dBm, +28V DC,With Heatsink,Operating Temperature -40~+70°C	Rev.1.1

Typical Performance Data:

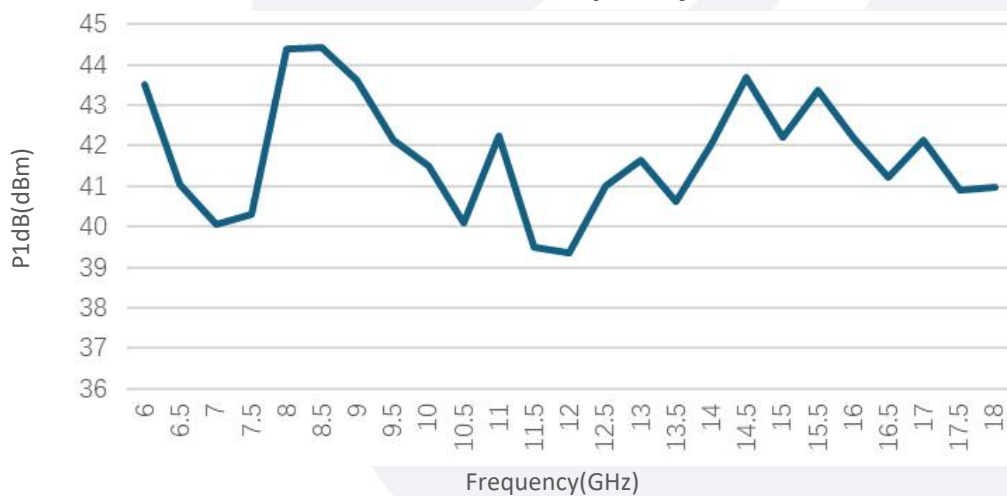
Input VSWR vs Frequency



Small Signal Gain vs Frequency



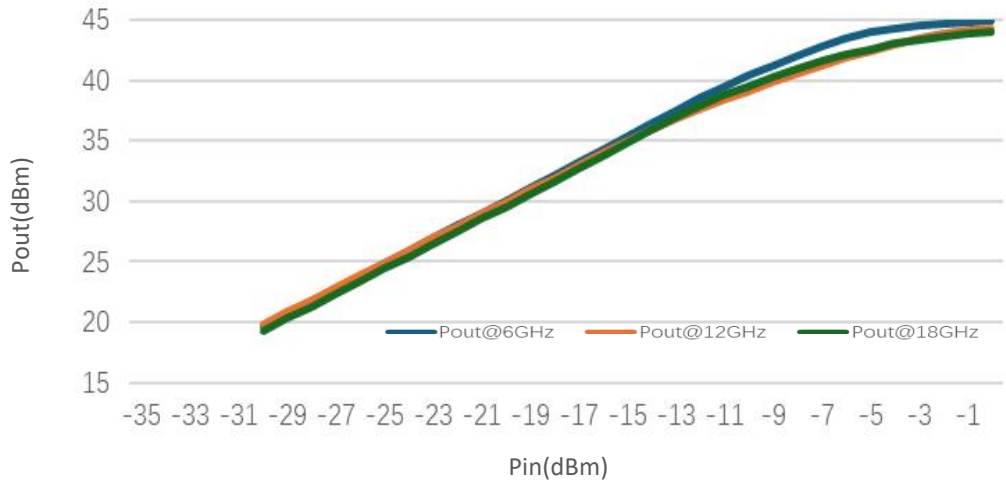
P1dB vs Frequency



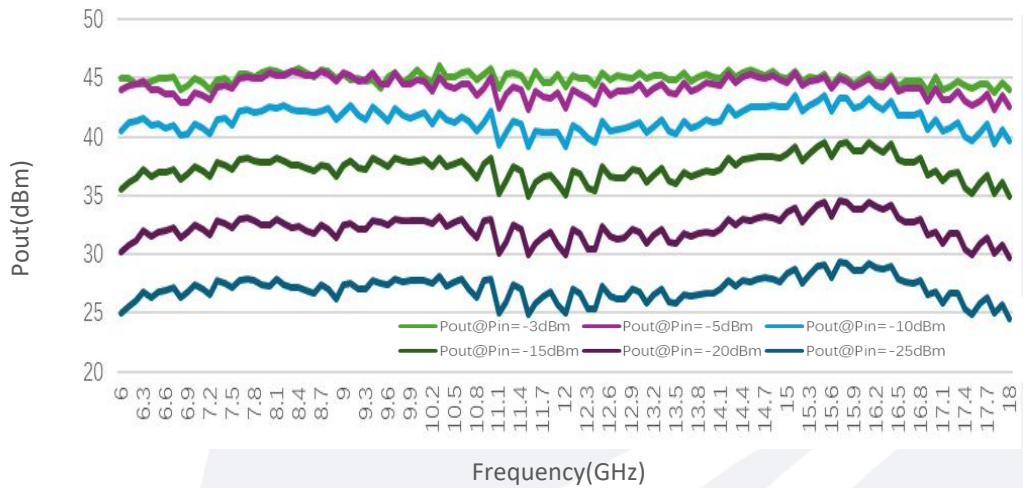
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

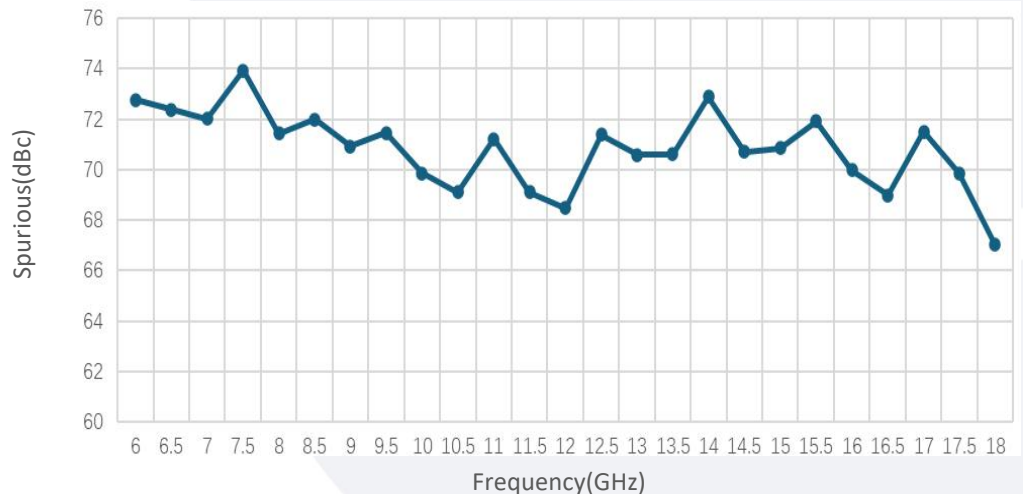
Pout@Pin



Pout@Equal_Pin

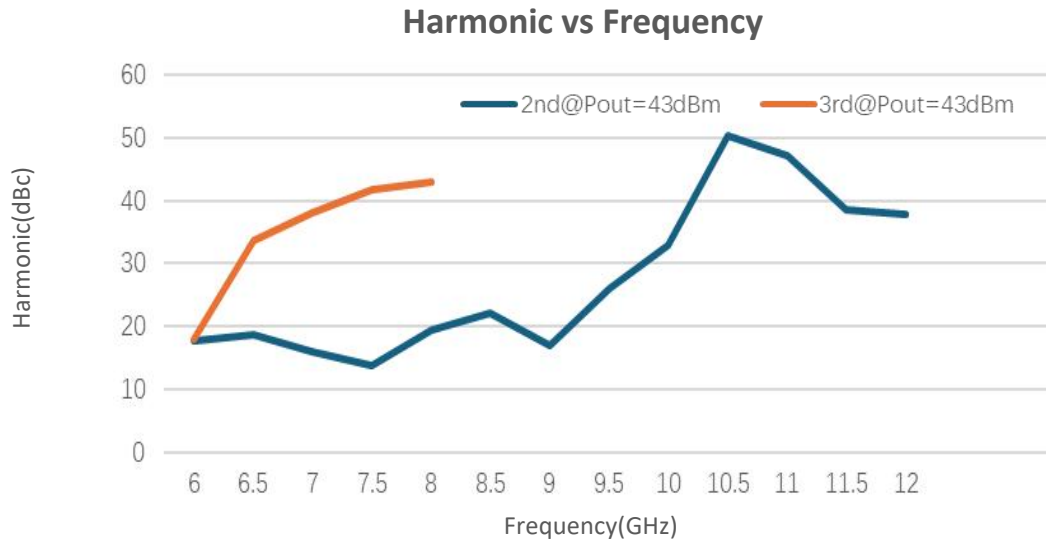


Spurious vs Frequency



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