

Model:TLPA2G18G-50-50-HS
Power Amplifier
2-18GHz,Gain:50dB,Psat:50dBm
Feature:

- Ultra Wide Band: 2-18GHz
- Gain: 50 dB Min
- Psat Output Power: 50 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	2-18			GHz
Small Signal Gain	50			dB
Gain Flatness		±4.5	±5	dB
Output Psat	50			dBm
Spurious@Pout=51dBm			-60	dBc
Harmonics@Pout=51dBm			-10	dBc
Input VSWR			2.0	:1
DC Voltage	+28			V DC
Power Consumption	1800@Max			W
Impedance	50			Ohms

Mechanical Specifications:

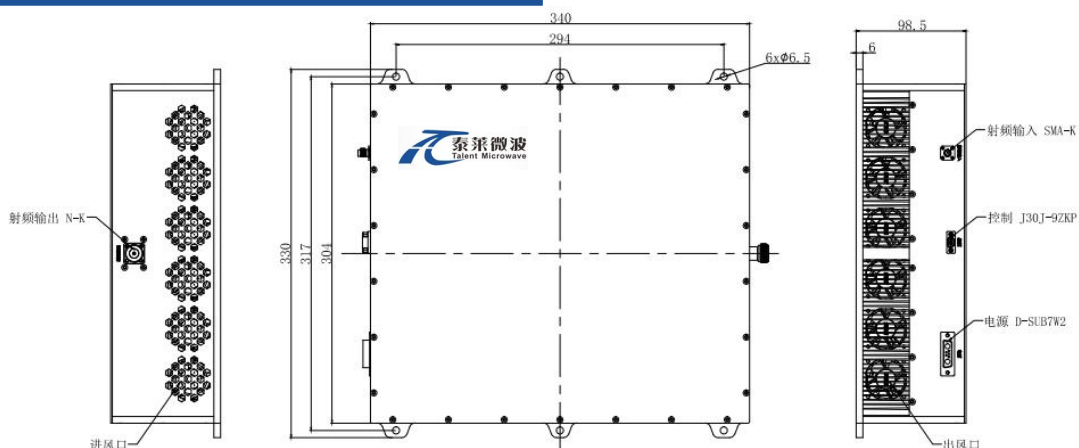
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	SUB-7W2	
Size	340*330*98.5	mm
Weight	25	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28V
RF Input Power	10dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



SUB-2W2 Define

Pin	Function
A1	+28V
A2	GND
Pin1-5	NC



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

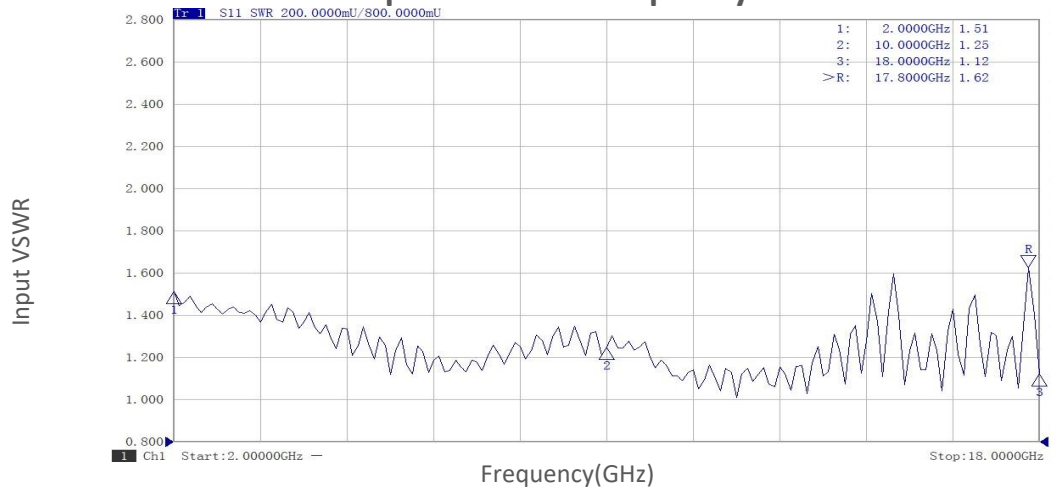
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

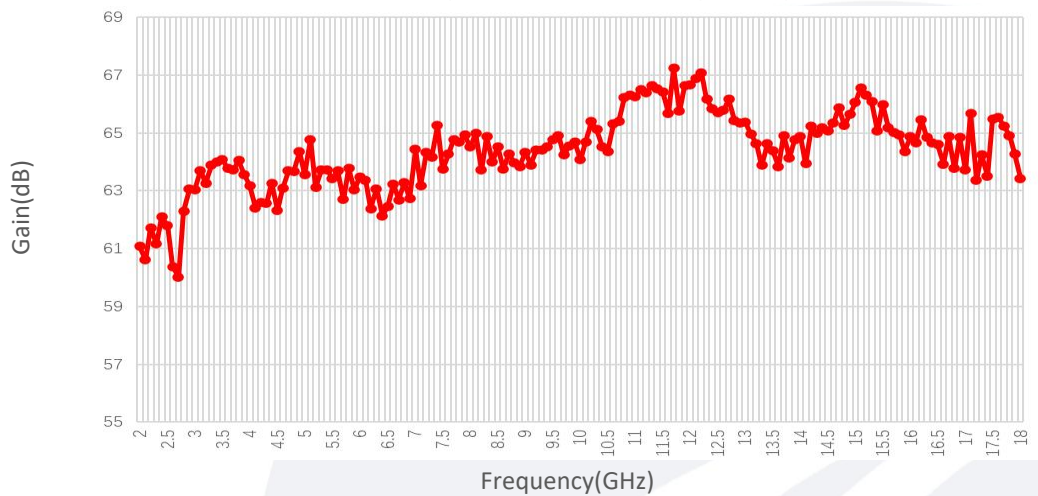
Part Number	Description	Revision
TLPA2G18G-50-50-HS	Power amplifier 2-18GHz,Gain:50dB,Psat:47dBm, +28V DC,Built in Fan Cooling	Rev.1.1

Typical Performance Data:

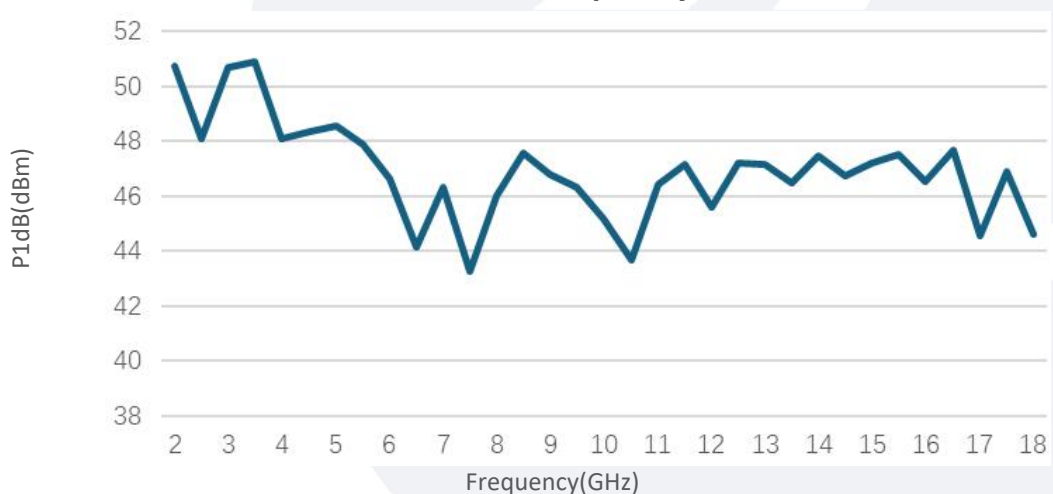
Input VSWR vs Frequency



Small Signal Gain vs Frequency



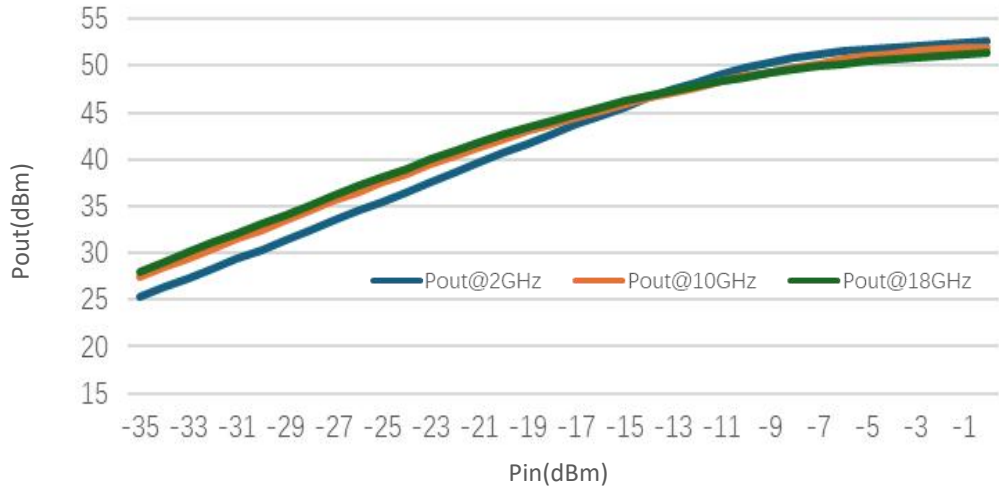
P1dB vs Frequency



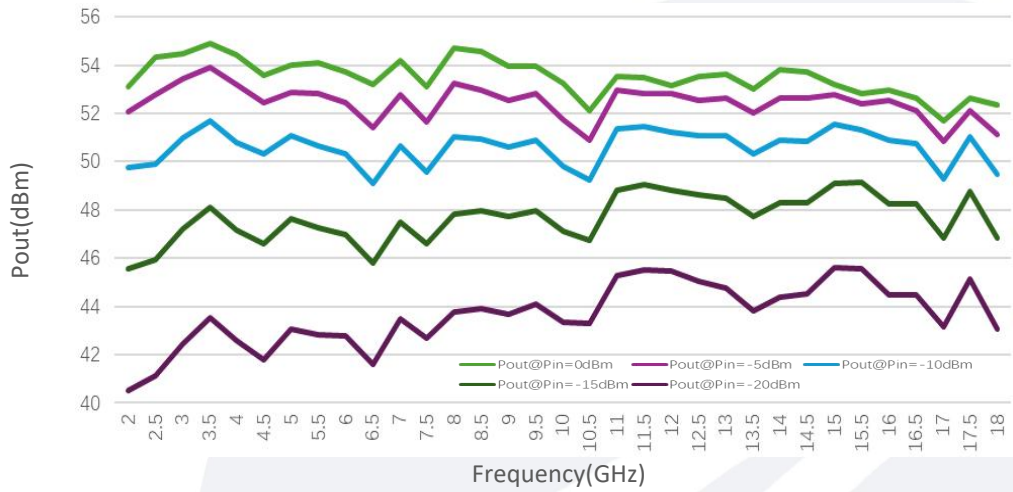
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

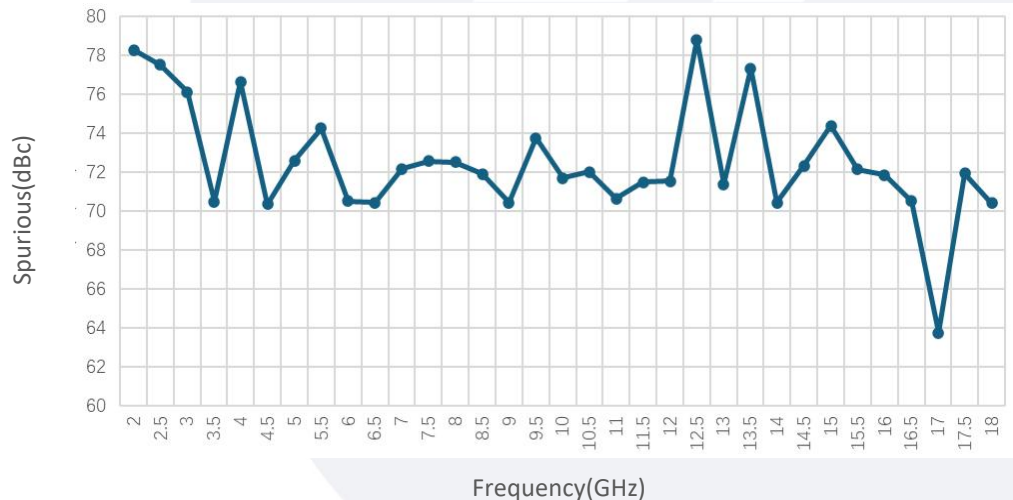
Pout@Pin



Pout@Equal_Pin



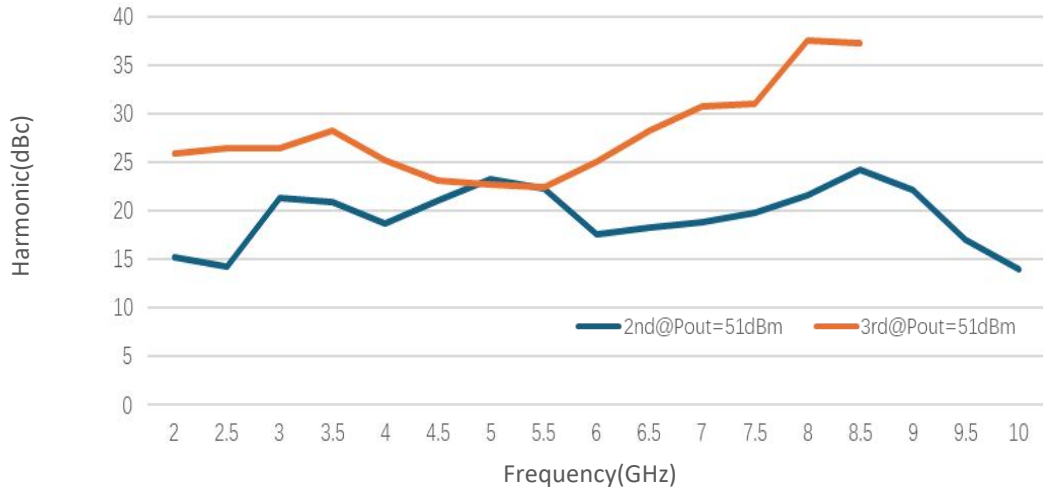
Spurious vs Frequency



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Typical Performance Data:

Harmonic vs Frequency



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