

Power Amplifier

6-18GHz/43dB Gain/43dBm Psat

Model: TLPA6G18G-43-43

TLPA6G18G-43-43 is a power amplifier with a minimum power gain of 43 dB and a minimum Psat of 43 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/200W. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 6-18GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm 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	6-18			GHz
Power Gain	43			dB
Gain Flatness		±3		dB
Output Psat	43			dBm
Spurious@Pout=43dBm			-60	dBc
Harmonic@Pout=43dBm			-10	dBc
Input VSWR			2	:1
DC Voltage		28		V DC
Power Consumption			200	W
Impedance	50			Ohms

Mechanical Specifications:

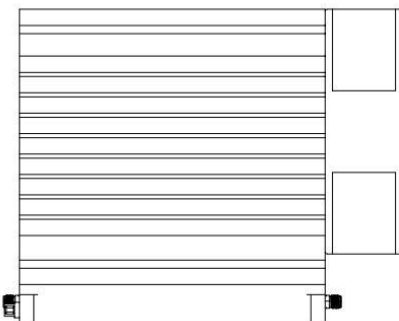
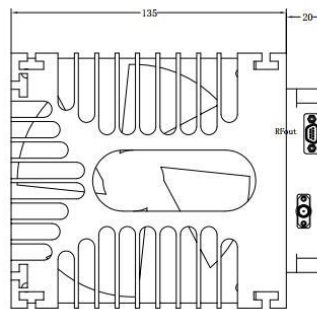
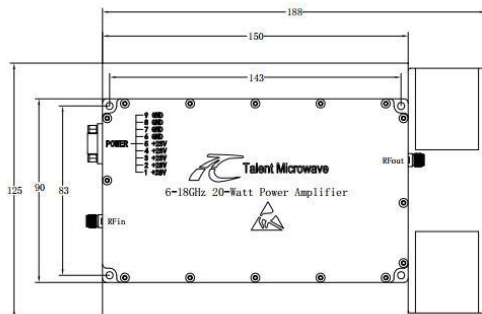
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Supply Connector	J30J-9ZKP	Pin1~5:+28V Pin6~9:GND
Size	150*90*20(Without heatsink) 188*125*155(With heatsink)	mm
Weight	≤200	g

绝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

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)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

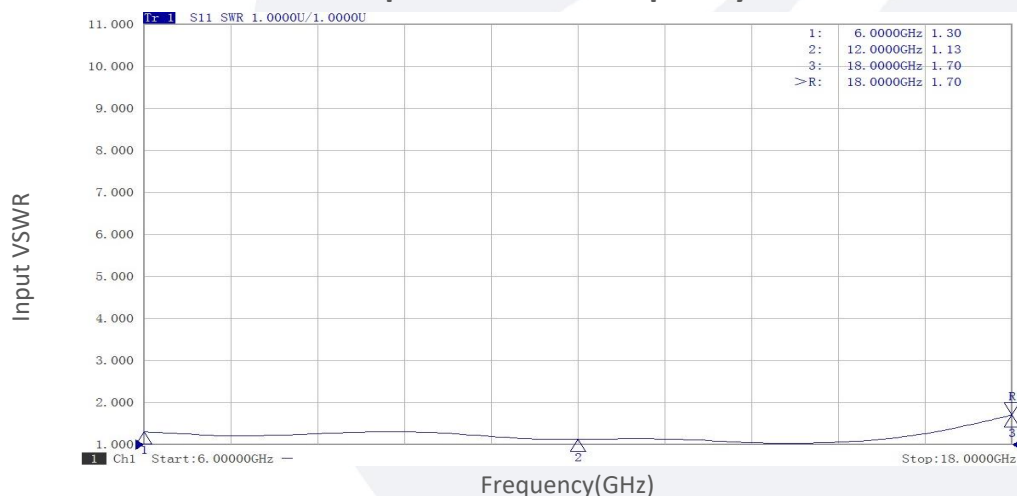
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

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

Typical Performance Data:

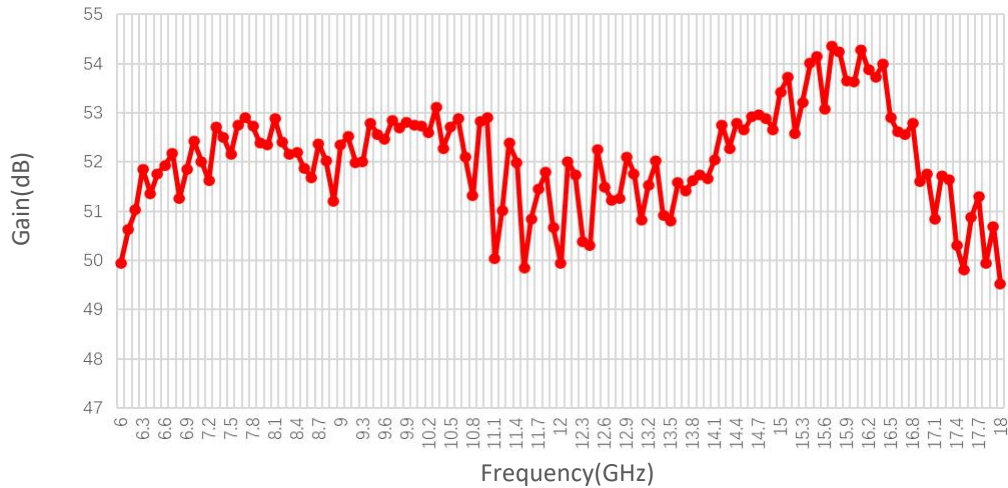
Input VSWR vs Frequency



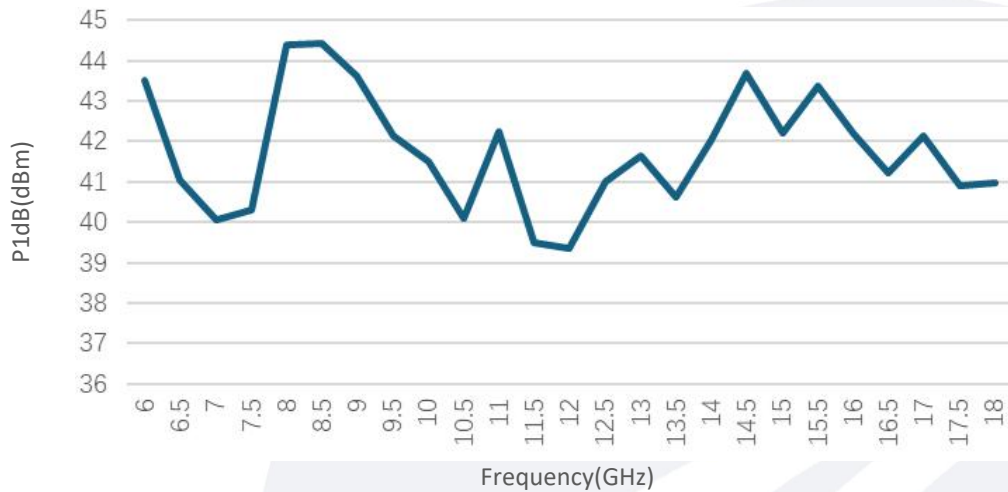
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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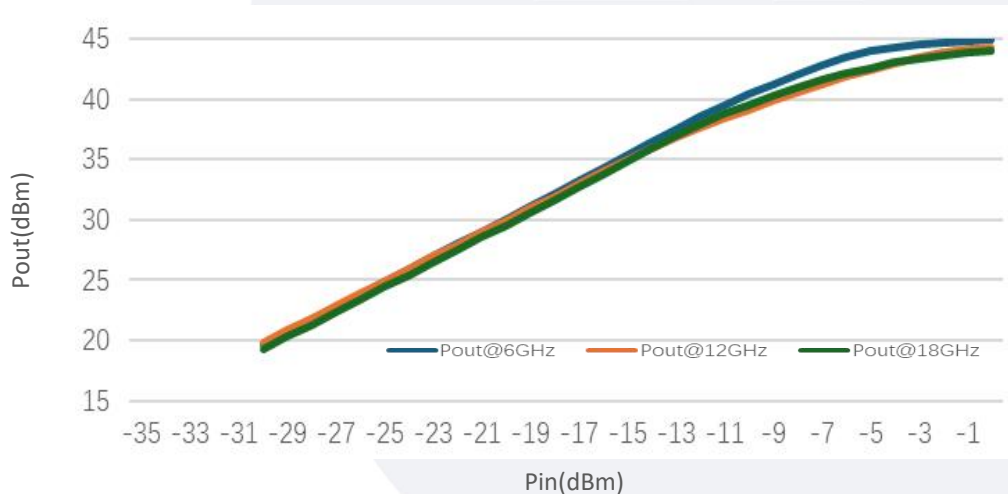
Small Signal Gain vs Frequency



P1dB vs Frequency

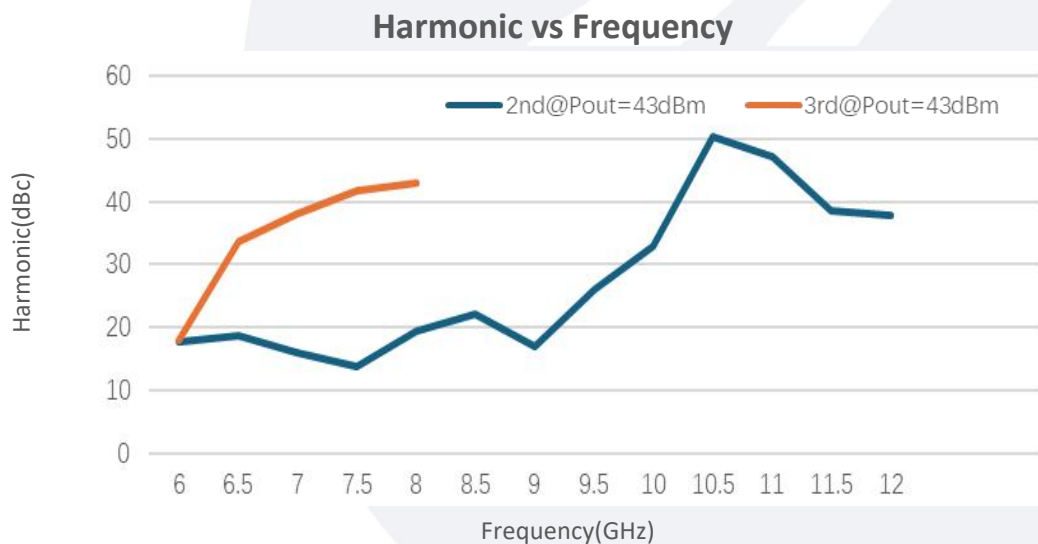
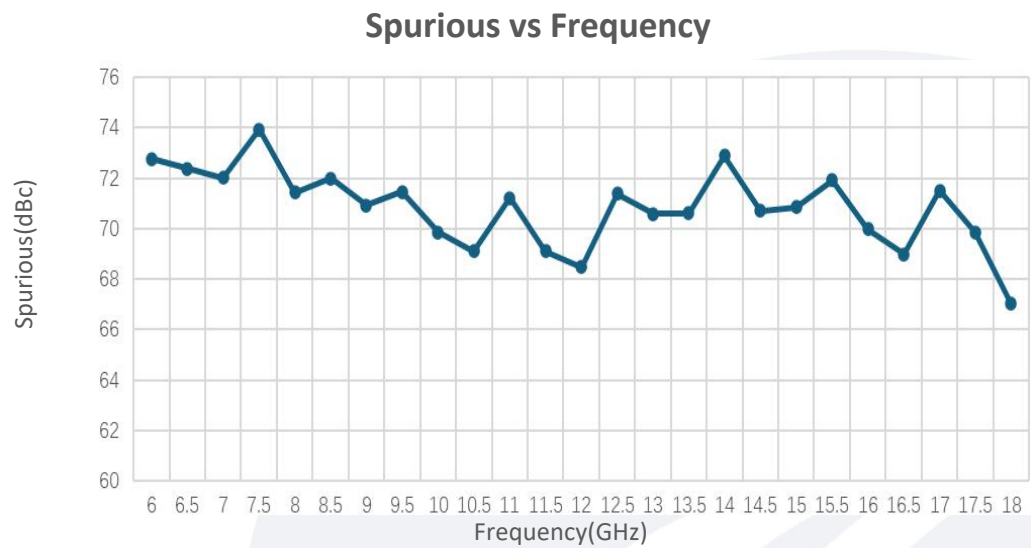
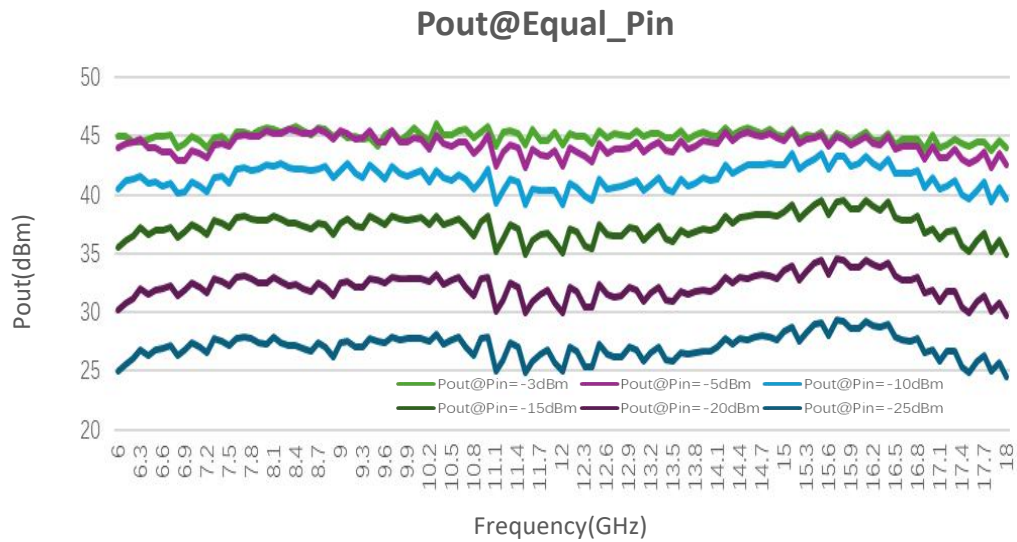


Pout@Pin



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