

## Power Amplifier

6-26.5GHz/36dB Gain/36dBm Psat

Model: TLPA6G26.5G-36-36

TLPA6G26.5G-36-36 is a power amplifier with a minimum power gain of 36 dB and a minimum Psat of 36 dBm across the frequency range of 6 to 26.5 GHz. The DC power requirement for the amplifier is +18 VDC/8 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 6-26.5GHz
- Gain: 36dB Min
- Output Power Psat: 36dBm 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		26.5	GHz
Power Gain	36			dB
Gain Flatness		±5.5		dB
Output P1dB	27			dBm
Output Psat	36			dBm
Spurious@Pout=36dBm			-55	dBc
Harmonic@Pout=36dBm		-15	-10	dBc
Input VSWR			2	:1
DC Voltage		+18		V DC
DC Supply Current		8		A
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	DSUB-7W2	
Size	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
Weight	2	Kg

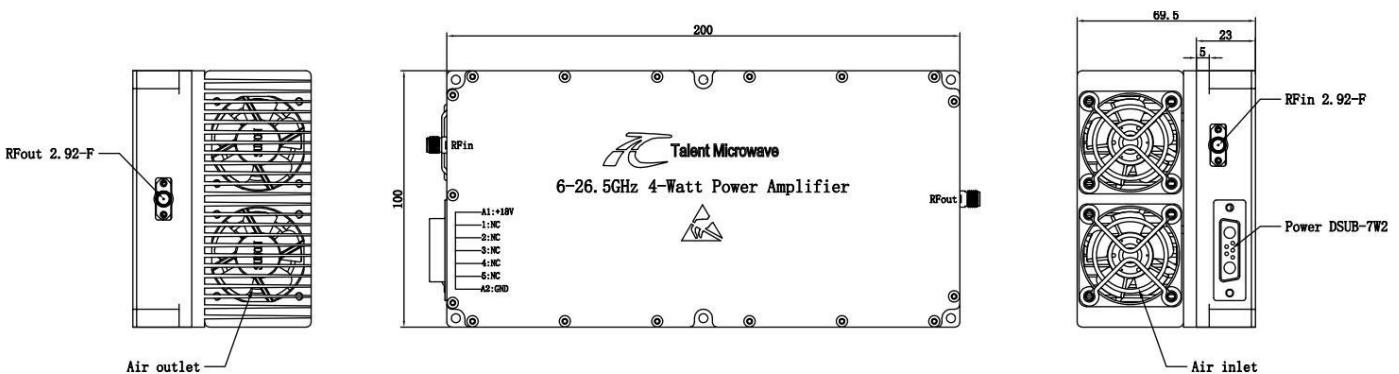
## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+19 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm



### DSUB-7W2 Definition

Pin	Function
A1	+18V
A2,1~5	GND



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

### Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-40		+70	°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			

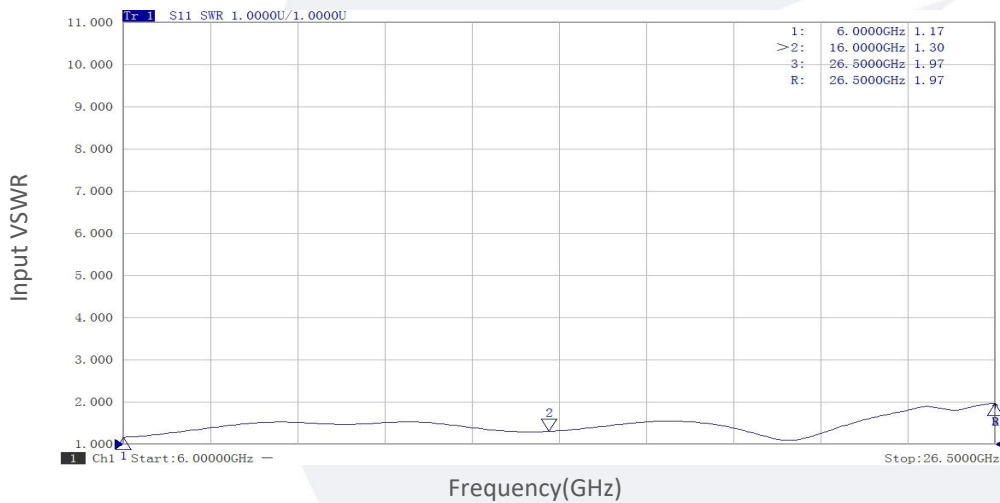
\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

Base Number	Description	Revision
TLPA6G26.5G-36-36	Power amplifier 6-26.5GHz, Gain:36dB,Psat:36dBm,+18V DC,With Heatsink	Rev.1.1

### Typical Performance Data:

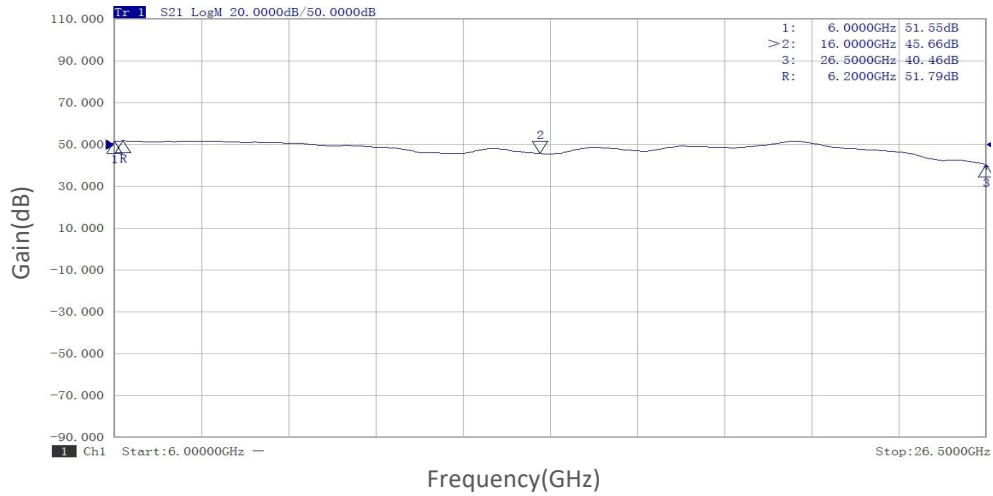
Input VSWR vs Frequency



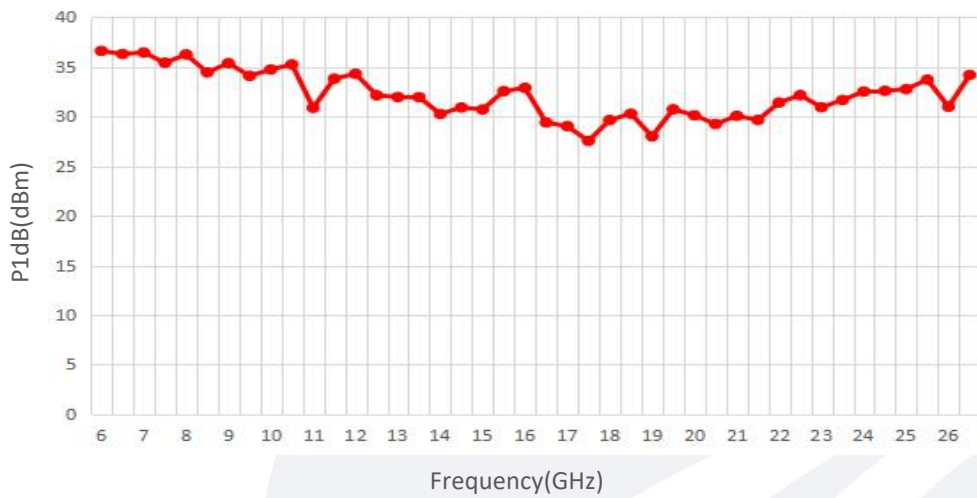
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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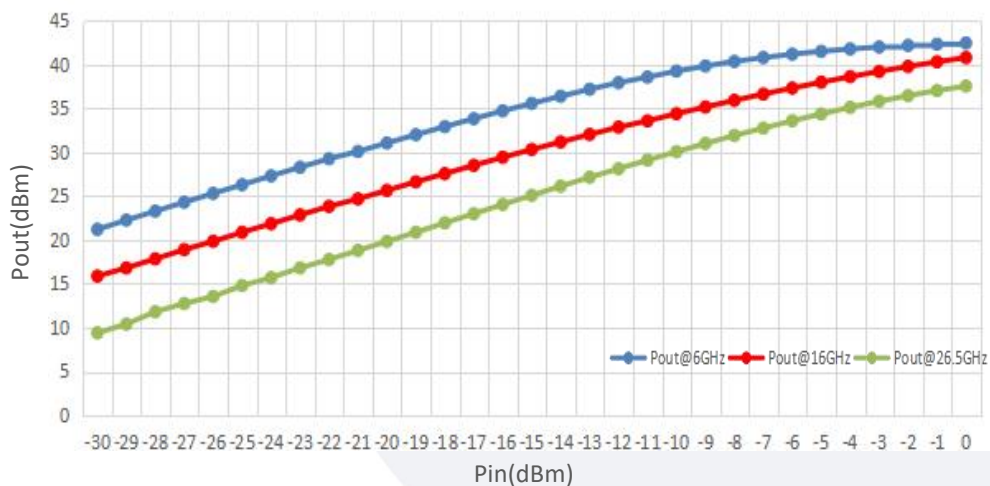
### Small Signal Gain vs Frequency



### P1dB vs Frequency



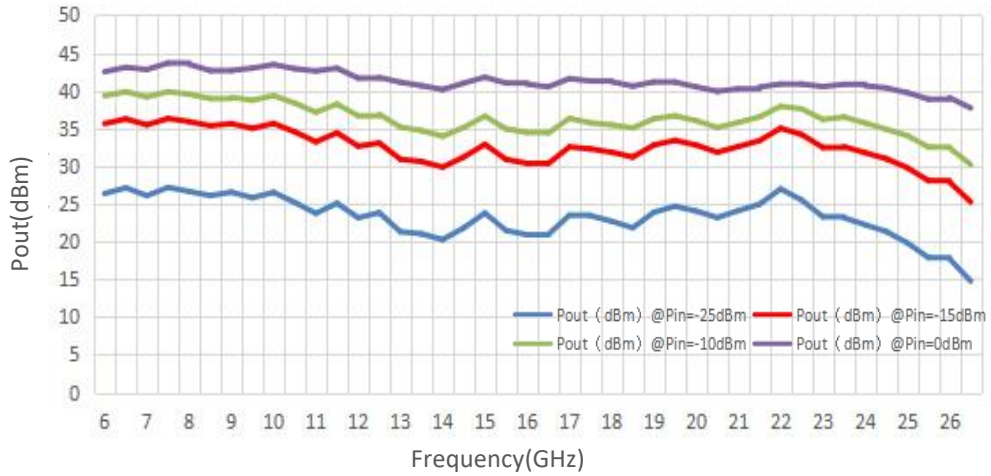
### Pout@Pin



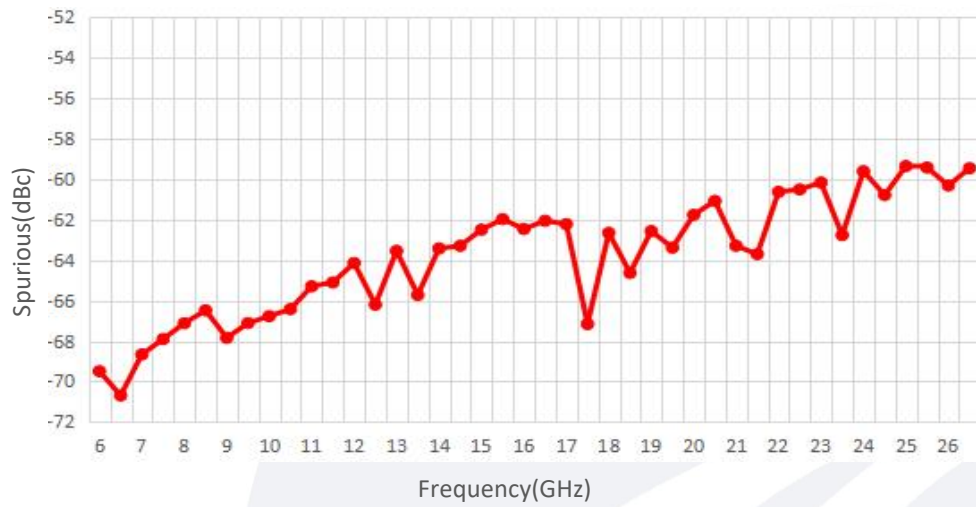
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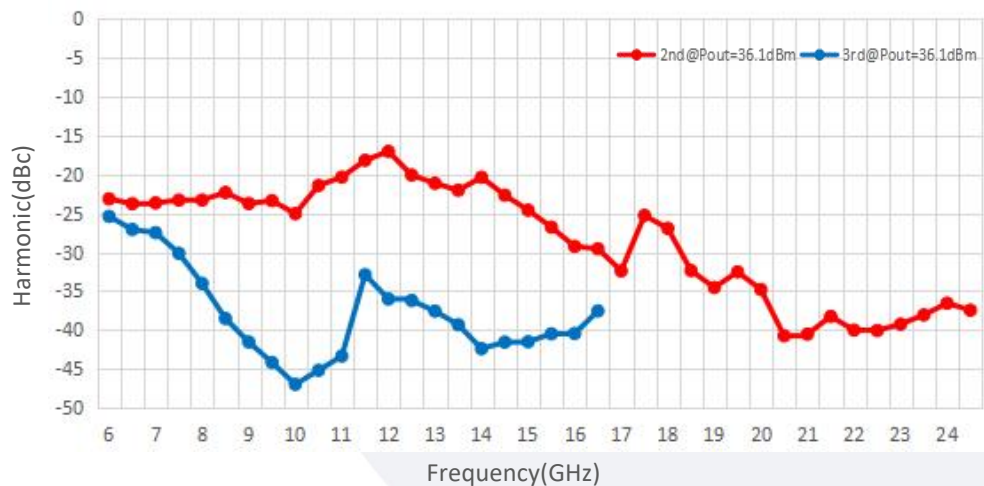
### Pout@Equal\_Pin



### Spurious vs Frequency



### Harmonic vs Frequency



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