

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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	6-26.5			GHz
功率增益 Power Gain	36			dB
增益平坦度 Gain Flatness		±5.5		dB
线性输出功率 Output P1dB	27			dBm
饱和输出功率 Output Psat	36			dBm
杂散 Spurious@Pout=36dBm			-55	dBc
谐波抑制 Harmonic@Pout=36dBm		-15	-10	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		18		V DC
直流电流 DC Supply Current		8		A
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

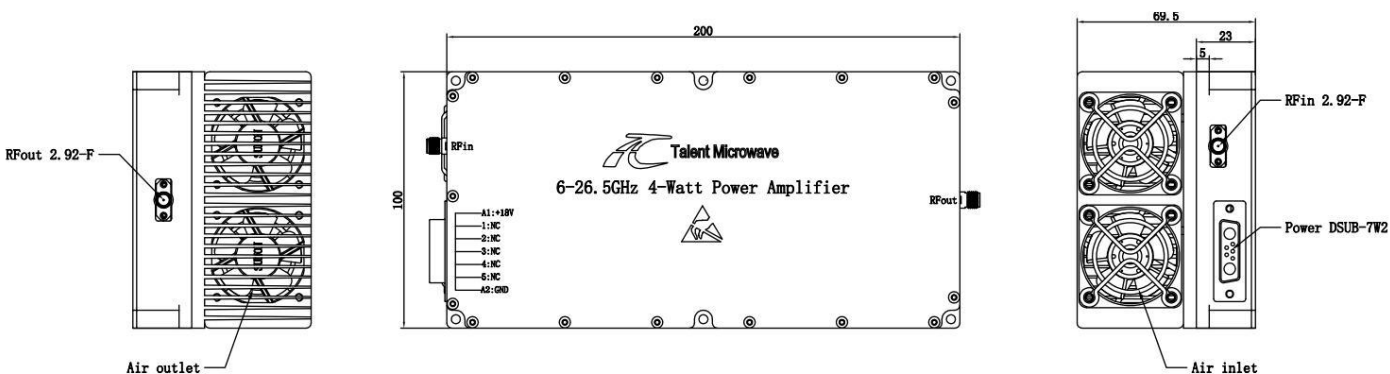
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	
直流偏置 DC Bias	DSUB-7W2	
尺寸 Size	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
重量 Weight	2	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+19 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



DSUB-7W2 Definition

引脚 Pin	功能 Function
A1	+18V
A2,1~5	GND

*****Heat Sink Required During Operation**



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

温度环境 Environmental Conditions:

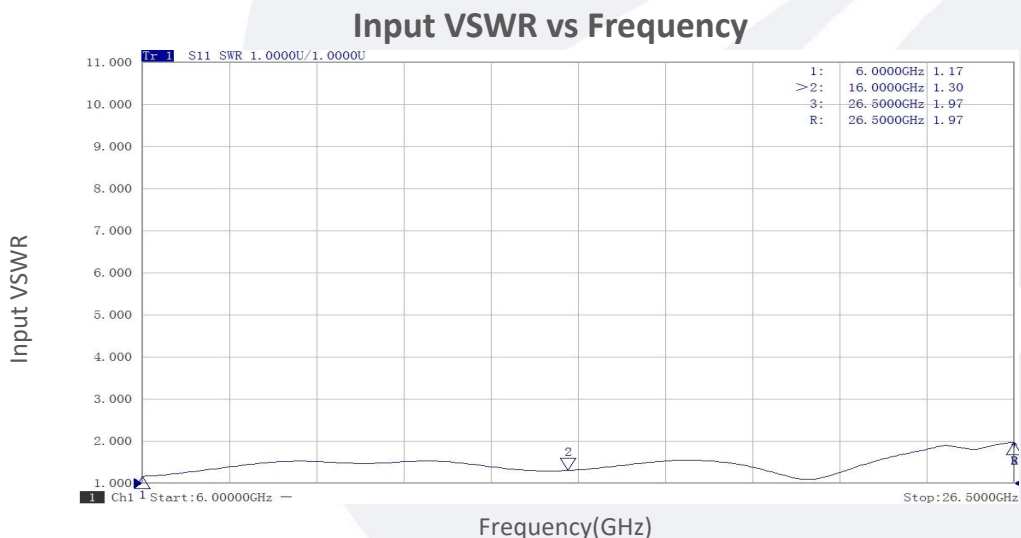
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	°C
存储温度 Non-operating Temperature*	-40		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA6G26.5G-36-36	Power amplifier 6-26.5GHz, Gain:36dB,Psat:36dBm,+18V DC,Without Heatsink	Rev.1.1
TLPA6G26.5G-36-36-HS	Power amplifier 6-26.5GHz, Gain:36dB,Psat:36dBm,+18V DC,With Heatsink	Rev.1.1

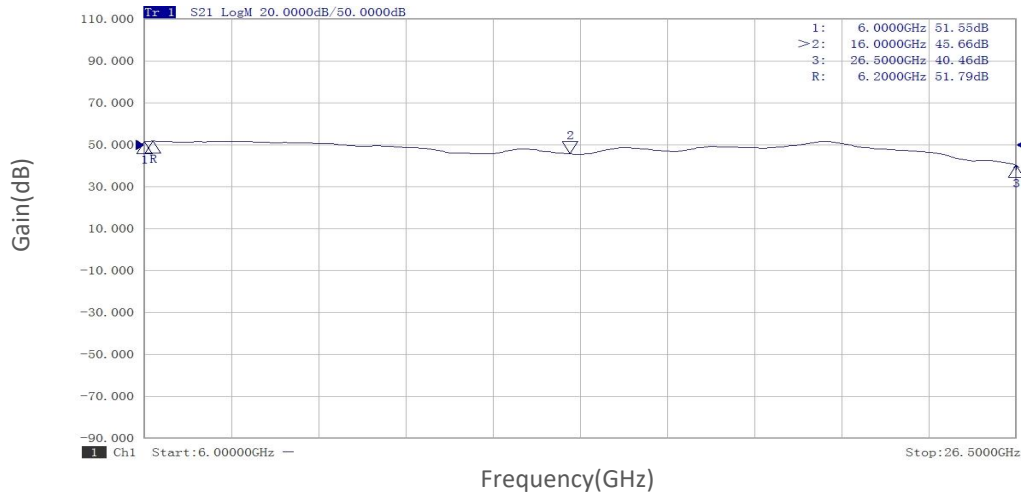
典型曲线 Typical Performance Data:



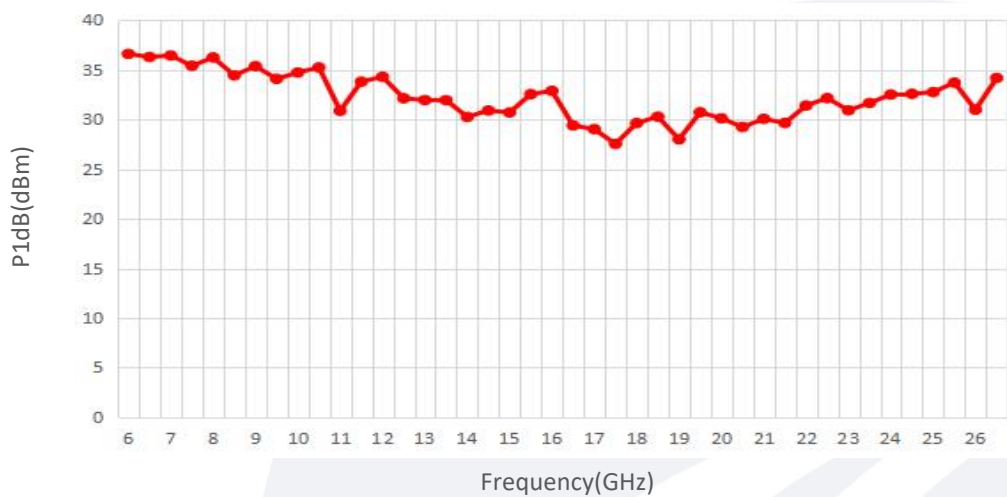
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

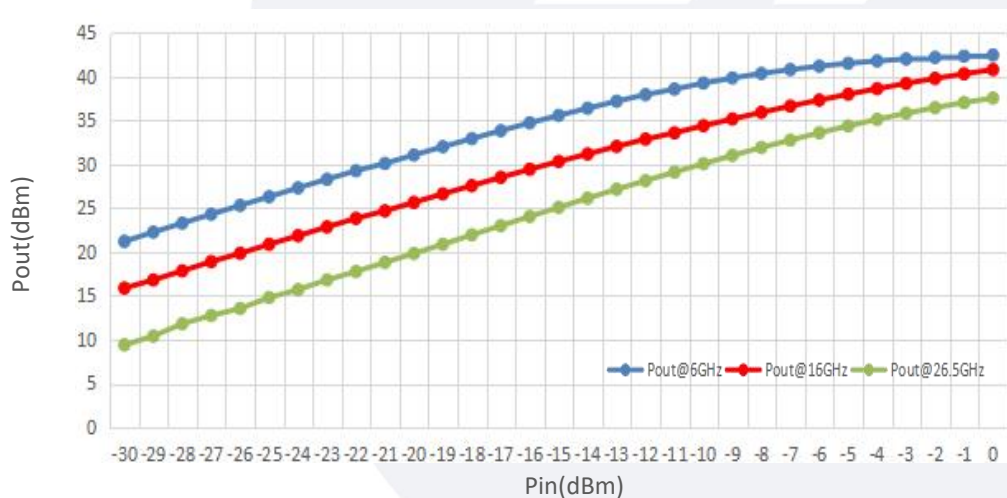
Small Signal Gain vs Frequency



P1dB vs Frequency



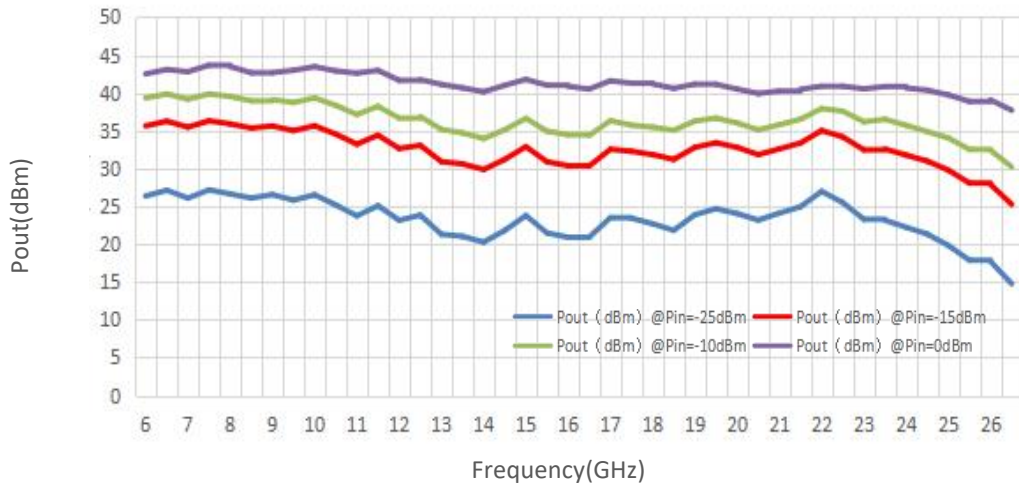
Pout@Pin



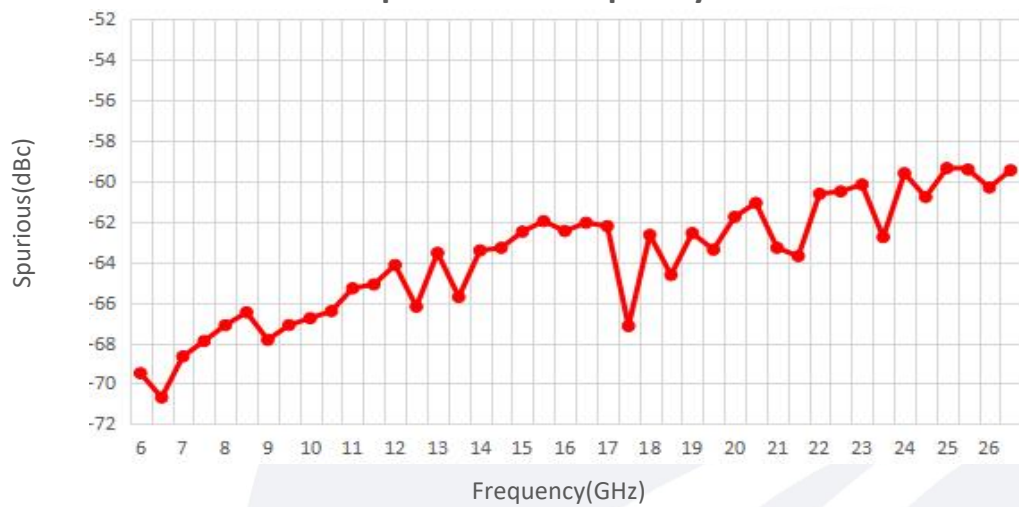
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典型曲线 Typical Performance Data:

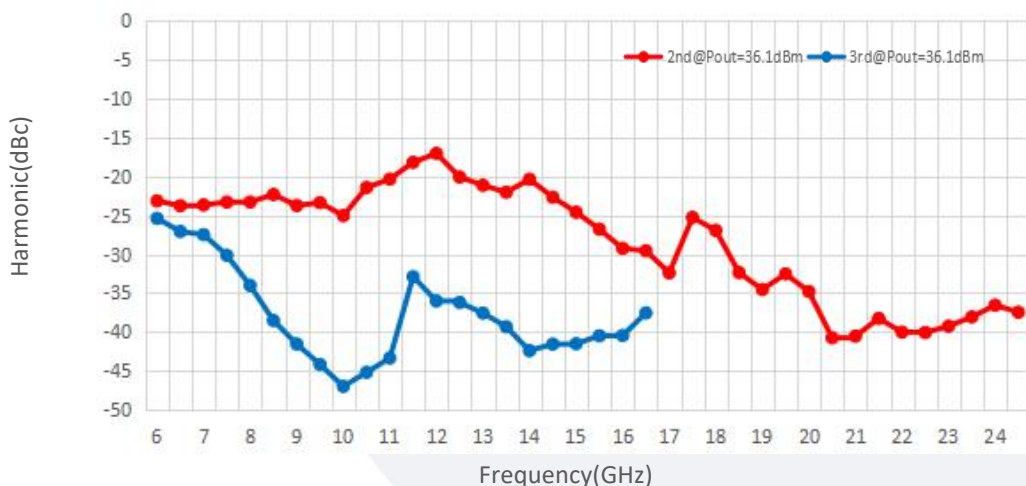
Pout@Equal_Pin



Spurious vs Frequency



Harmonic vs Frequency



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