

2-27GHz, Gain:40dB, Psat:33dBm

Feature:

- Ultra Wide Band: 2-27GHz
- Gain:40dB Typ
- Psat Output Power: 33dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical Specifications:

参数Parameter	Min	Typ	Max	单位Units
频率范围 Frequency range	2-27			GHz
增益 Gain	33			dB
小信号增益 Small-signal Gain@2-8G		40		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB		30		dBm
饱和输出功率 Output Psat	33	34		dBm
噪声系数 Noise Figure		4		dB
杂散 Spurious			-60	dBc
谐波 Harmonic			-10	dBc
输入驻波 Input VSWR			2.0	:1
输出驻波 Output VSWR		2.0		:1
直流电压 DC Voltage		+18		V DC
直流电流 DC Supply Current			2	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	2.92 Female/2.92 Female	
DC加电接口 DC Power Interface	J30J-9ZKP	
尺寸 Size	150*90*20	mm
重量 Weight	500	g

绝对最大值 Absolute Maximum Ratings:

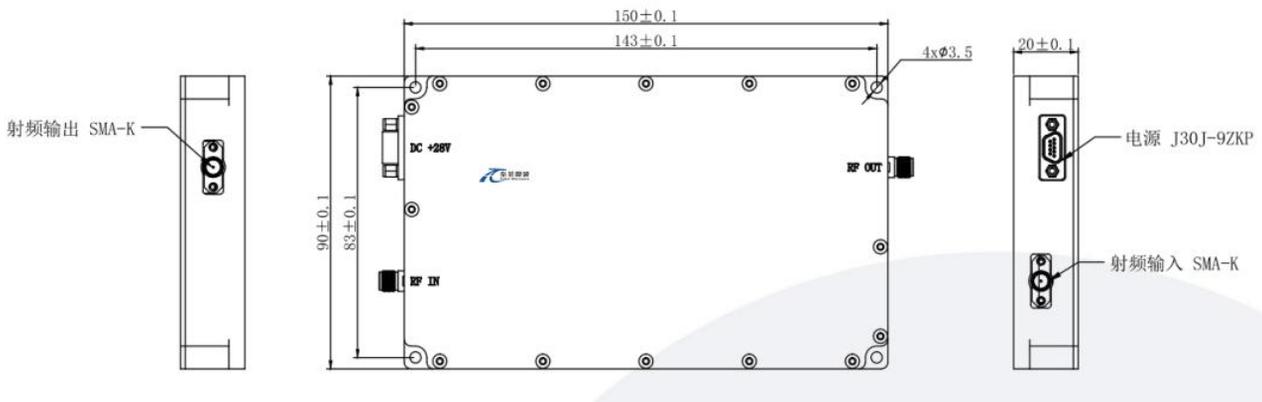
参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	5dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System Benchtop Amplifier

外形尺寸 Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

温度环境 Environmental Conditions:



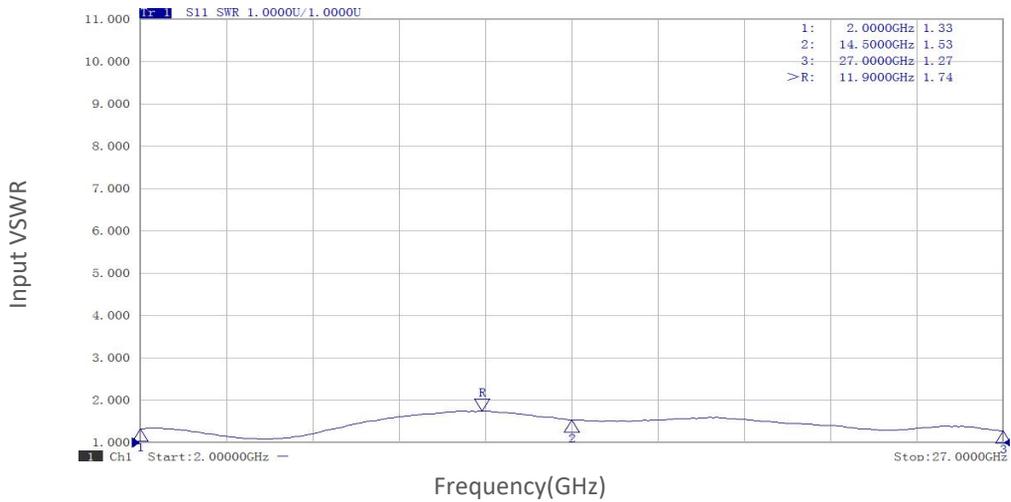
OBSERVE PRECAUTIONS
 ELECTROSTATIC SENSITIVE
 DEVICES

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	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			

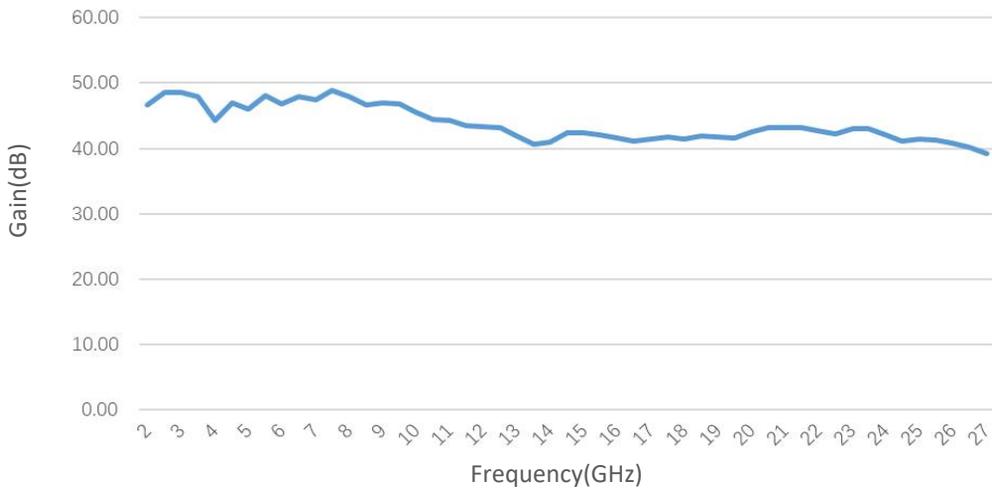
标准型号 Part Number	描述 Description	版本号Revision
TLPA2G27G-40-33	Power amplifier 2-27GHz,Gain:40dB,Psat:33dBm,NF:4.0dB,+18V DC,Without Heatsink.	Rev.1.1
TLPA2G27G-40-33 -HS	Power amplifier 2-27GHz,Gain:40dB,Psat:33dBm,NF:4.0dB,+18V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

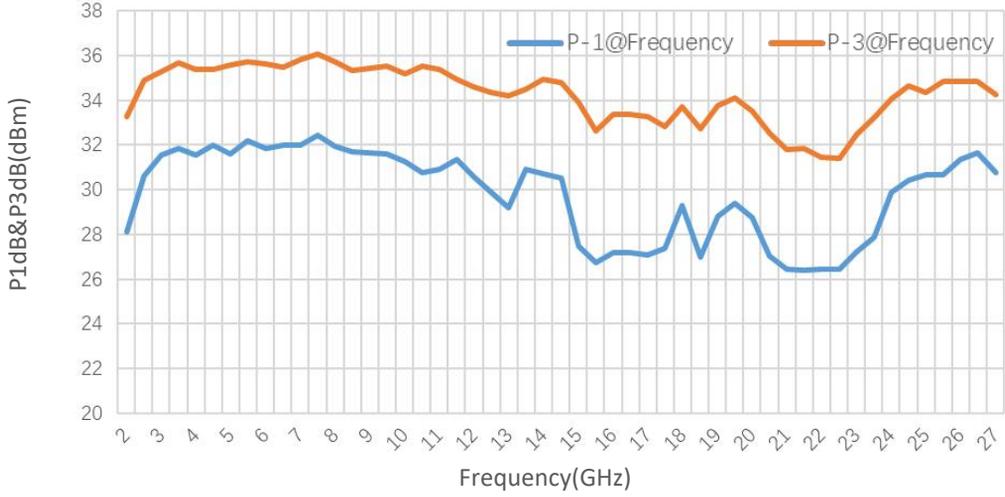
Input VSWR vs Frequency



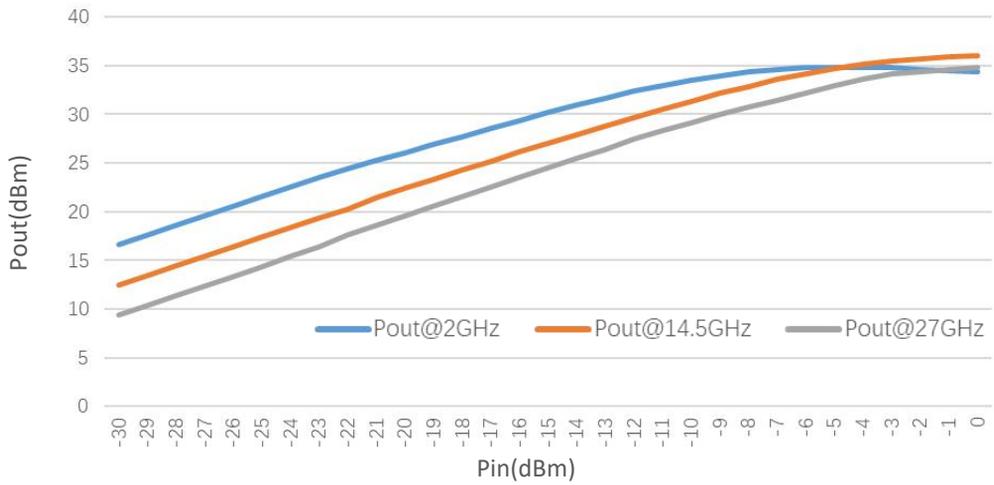
Gain vs Frequency



P1dB&P3dB vs Frequency



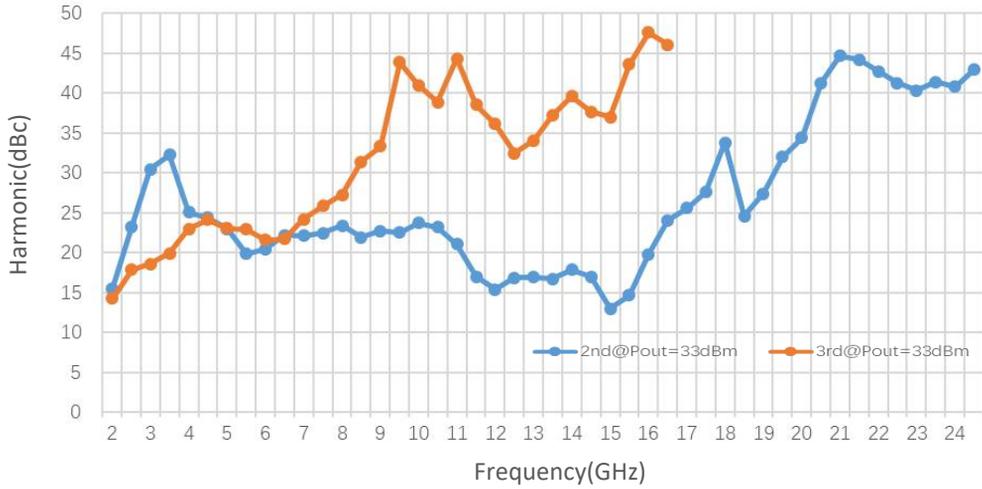
Pout@Pin



Pout@Equal_Pin

Pout(dBm)

Harmonic vs Frequency



Spurious vs Frequency

