

**Model:TLPA12G20G-33-33-BC**
**Solid State High Power Amplifier Systems  
 12-20GHz,Gain:33dB,Psat:33dBm,220V AC**
**Feature:**

- Wide Band:12-20GHz
- Gain: 33dB Min
- Psat Output Power:33dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection.
- 50 Ohm Matched Input / Output


**电气特性 Electrical Specifications:**

参数Parameter	代码 Symbo	Min	Typ	Max	单位Units
频率范围 Frequency range	BW	12-20			GHz
增益 Gain	GP	33			dB
增益调节范围 Gain adjust range	$\Delta$ GR		31.5		dB
增益调节步进 Gain adjust step	$\Delta$ GS		0.5		dB
饱和输出功率 Output Psat	Psat	33			dBm
杂散 Spurious	Spur			-60	dBc
输入驻波 Input VSWR	VSWRin			2.0	:1
交流电压 AC Voltage	Vac	220			V AC
功耗 Power Consumption	Pdiss	60@Max			Watts
阻抗 Impedance	I/O-IMP	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	SMA Female/SMA Female	
DC加电接口 DC Power Interface	Y50X-1203	
通信接口 Communication Interfaces	J30J-9ZKP	
尺寸 Size	/	mm
重量 Weight	7.5	Kg

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



主要功能 Key Features:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

参数 Parameter	特点 Advantages
控制 Control	LNA
内置保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
控制功能 Control functions	1,Power setting On/Off 2,ALC
冷却系统 Cooling system	Built in Cooling system,forced air cooling

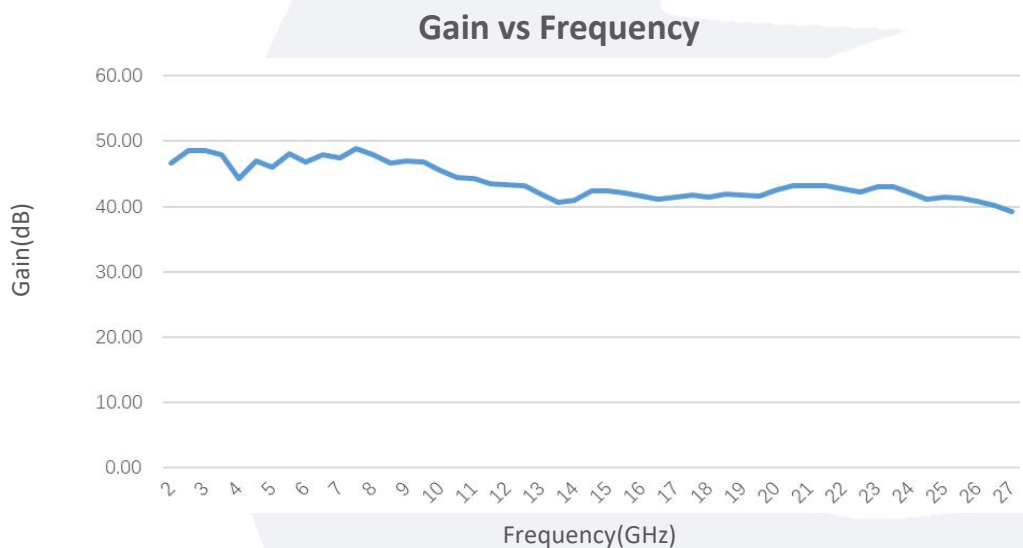
### 温度环境 Environmental Conditions:

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	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50000			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			

### 订货信息 Ordering Information:

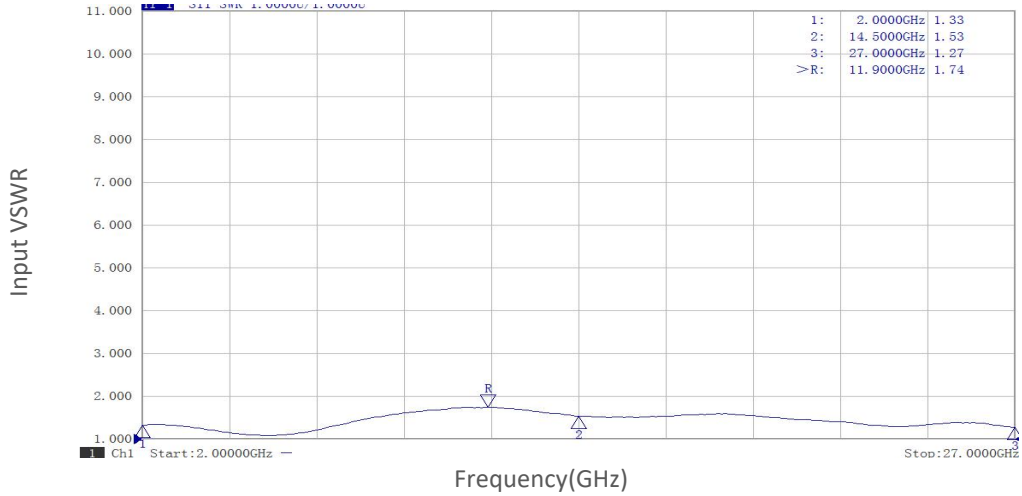
标准型号 Part Number	描述 Description	版本号 Revision
TLPA12G20G-33-33-BC	Solid State High Power Amplifier Systems 12-20GHz,Gain:33dB,Psat:33dBm,220V AC,Built in Fan Cooling	Rev.1.0

### 典型曲线 Typical Performance Data:

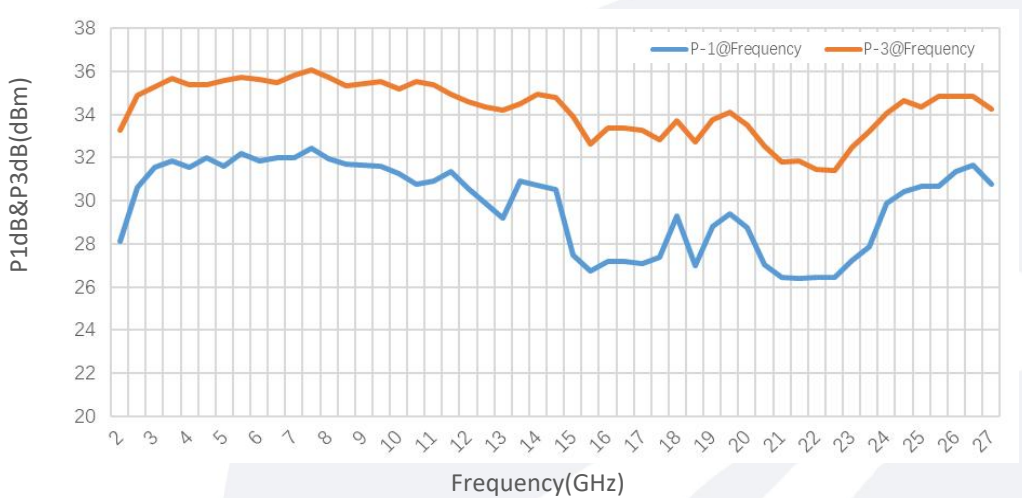


典型曲线 Typical Performance Data:

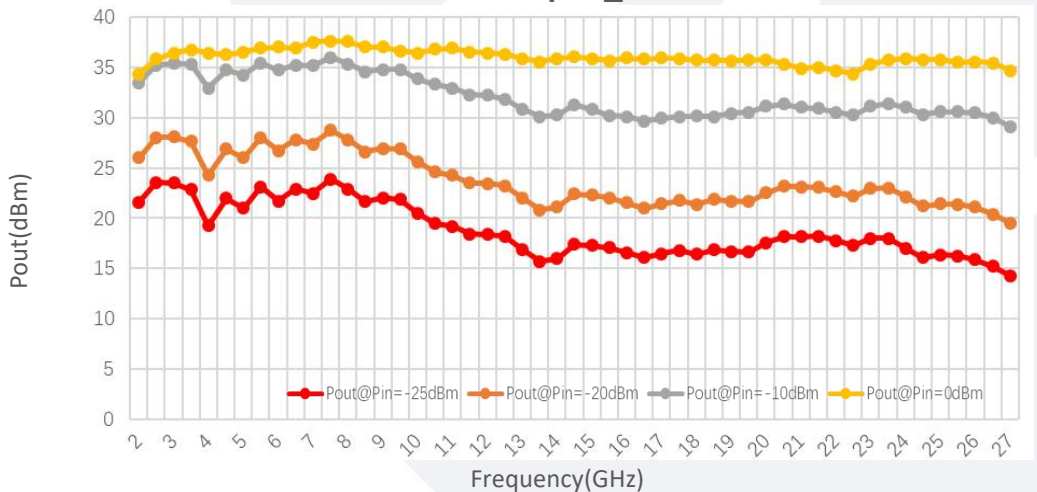
Input VSWR vs Frequency



P1dB&P3dB vs Frequency

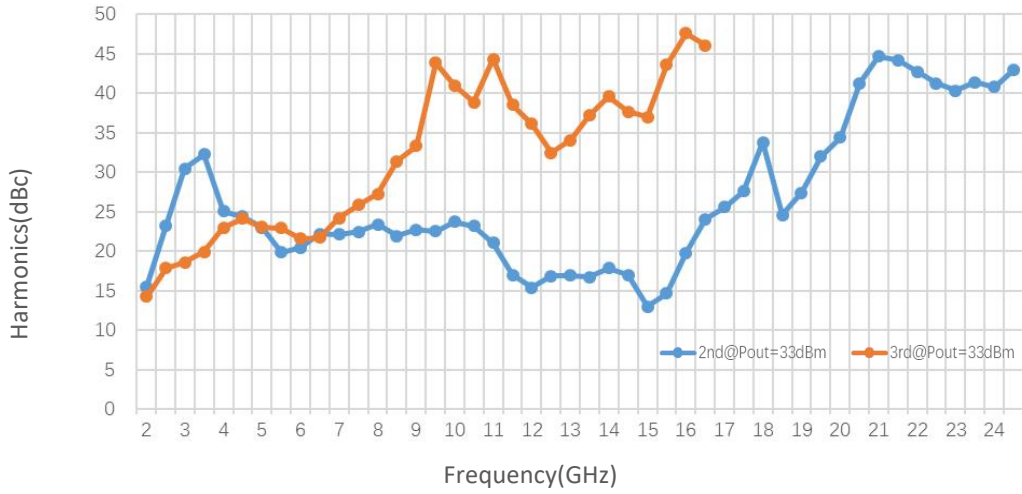


Pout@Equal\_Pin



典型曲线 Typical Performance Data:

Harmonics vs Frequency



Spurious vs Frequency

