

**Model: TLPA15G44G-25-20**
**Power Amplifier**  
**15-44GHz, Gain: 25dB, P1dB: 20dBm**
**Feature:**

- Ultra Wide Band: 15-44GHz
- Gain: 25dB Typ
- P1dB Output Power: 20dBm 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	15-44			GHz
增益 Gain		25		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB	20			dBm
输入驻波 Input VSWR			2.5	:1
输出驻波 Output VSWR			2.5	:1
直流电压 DC Voltage	+10	+12	+13	V DC
直流电流 DC Supply Current		500		mA
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	2.4 Female/2.4 Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44*36*12	mm
重量 Weight	/	g

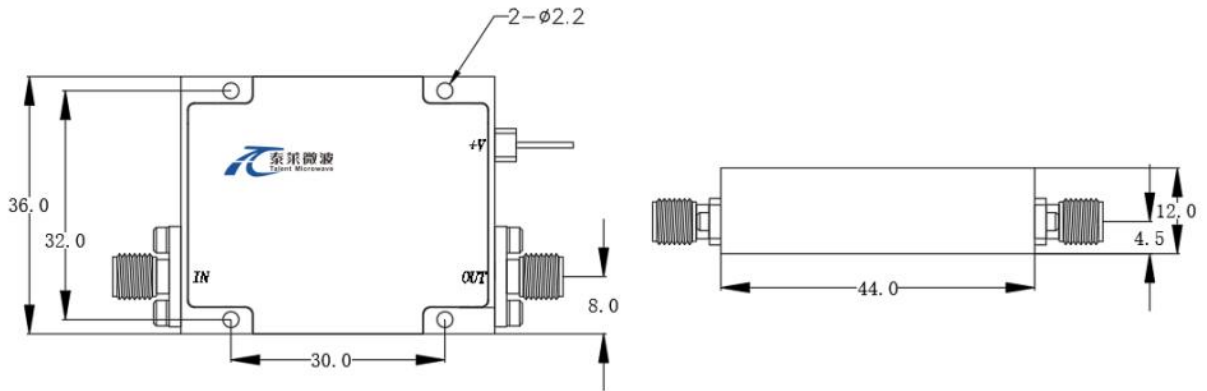
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15V
输入功率 RF Input Power	20dBm
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

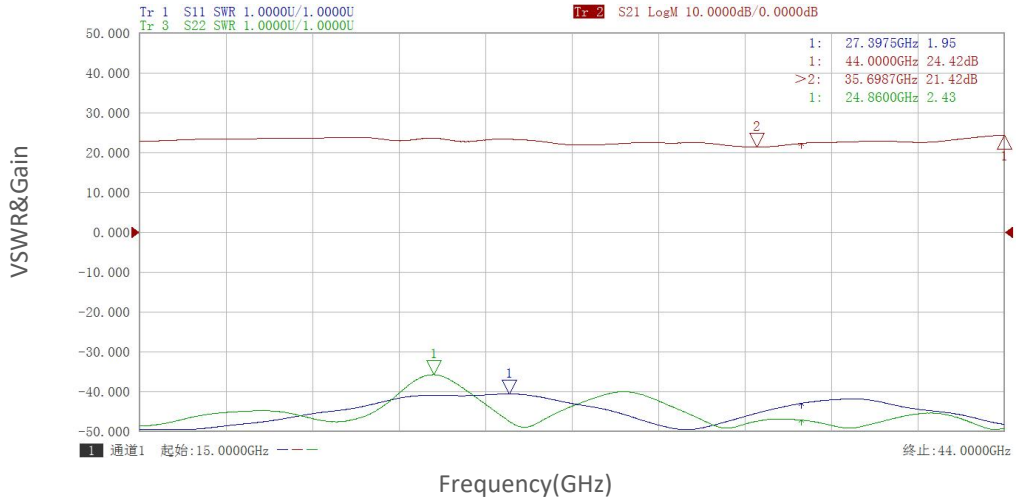
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

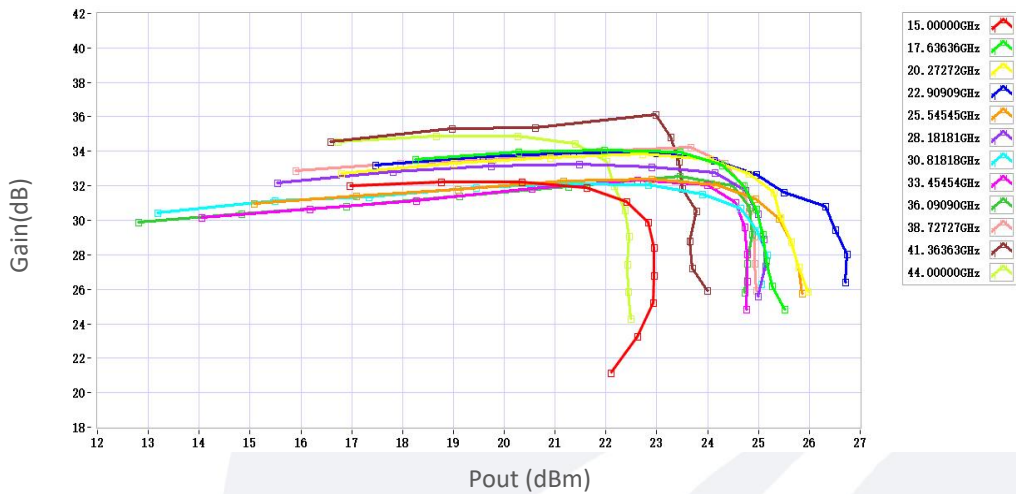
标准型号 Part Number	描述 Description	版本号Revision
TLPA15G44G-25-20	Power amplifier 15-44GHz,Gain:25dB,P1dB:20dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA15G44G-25-20-HS	Power amplifier 15-44GHz,Gain:25dB,P1dB:20dBm,+12V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

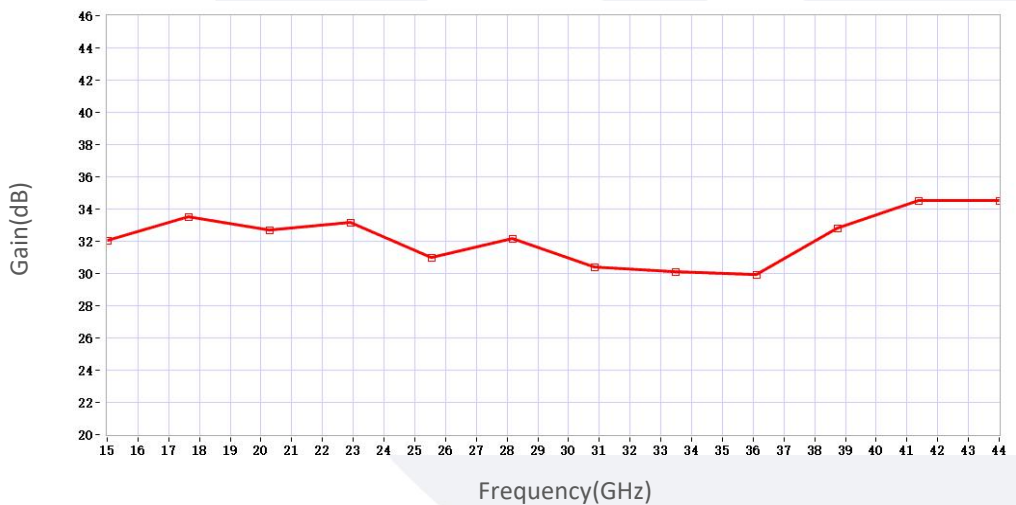
**VSWR&Gain vs Frequency**



**Gain vs Output Power**

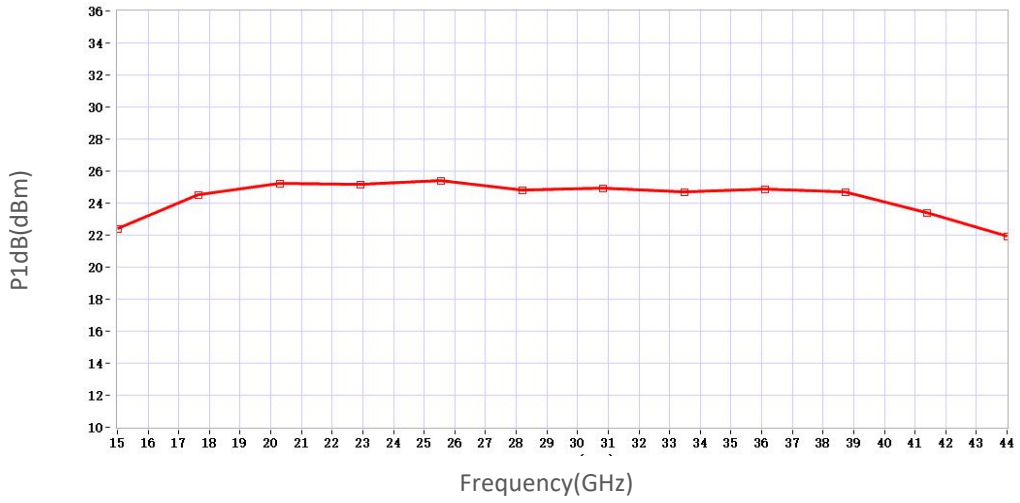


**Gain vs Frequency**



典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

