

Model: TLP A20G50G-35-23
Power Amplifier
20-50GHz, Gain: 35dB, P1dB: 23dBm
Feature:

- Ultra Wide Band: 20-50GHz
- Gain: 35 dB Typ
- P1 Output Power: 23 dBm Typ
- 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		20-50		GHz
小信号增益 Small Signal Gain		35		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB		23		dBm
输入驻波 Input VSWR		2.0		:1
输出驻波 Output VSWR		2.0		:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		0.4		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	2.4mm Female/2.4mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	38*58.5*12.5	mm
重量 Weight	200	g

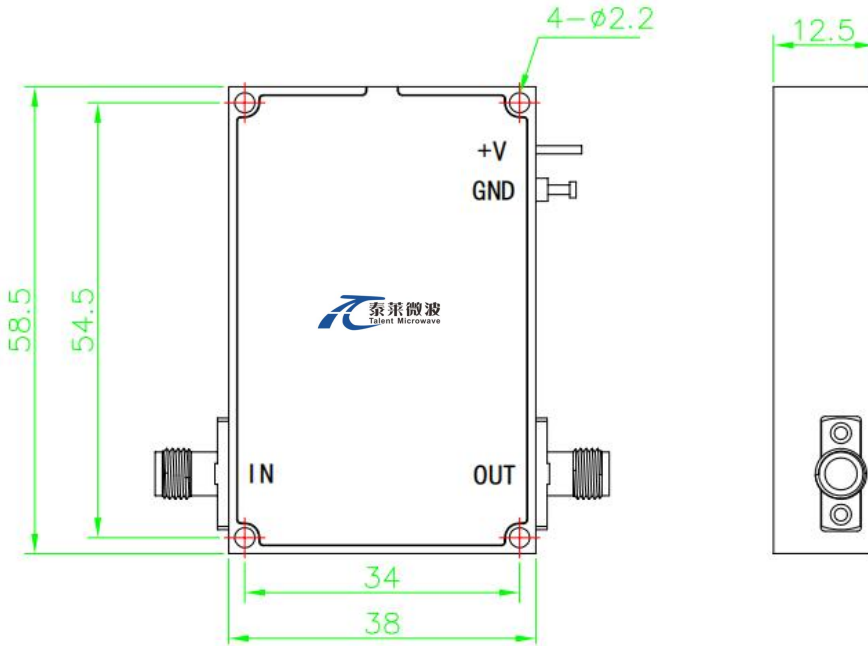
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+18 V
输入功率 RF Input Power	+15 dBm
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**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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*	-50		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

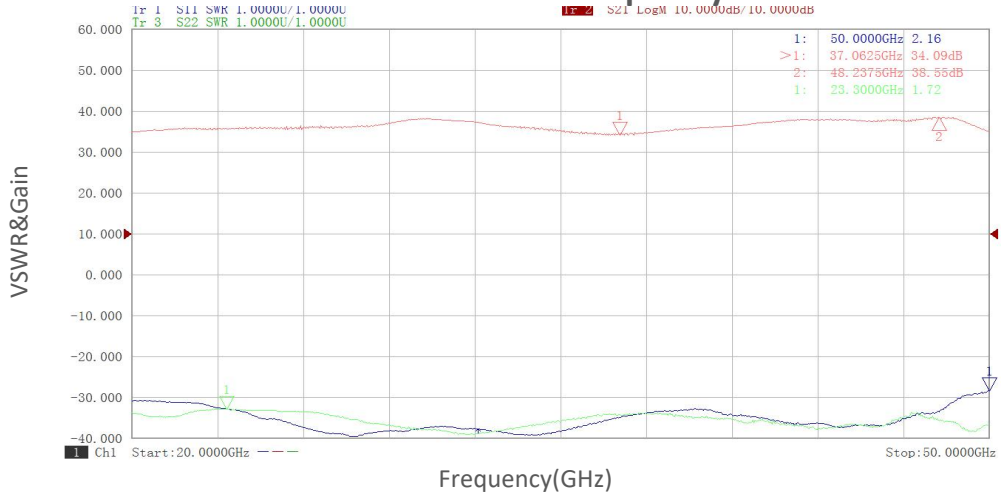
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

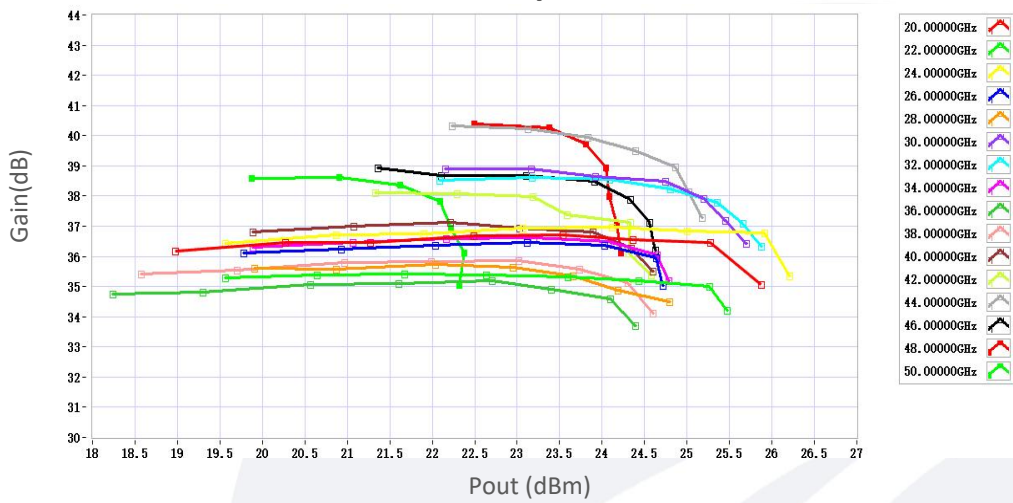
标准型号 Part Number	描述 Description	版本号 Revision
TLPA20G50G-35-23	Power amplifier 20-50GHz, Gain:35dB, Psat:23dBm, +12V DC, Without Heatsink	Rev.1.1
TLPA20G50G-35-23-HS	Power amplifier 20-50GHz, Gain:35dB, Psat:23dBm, +12V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

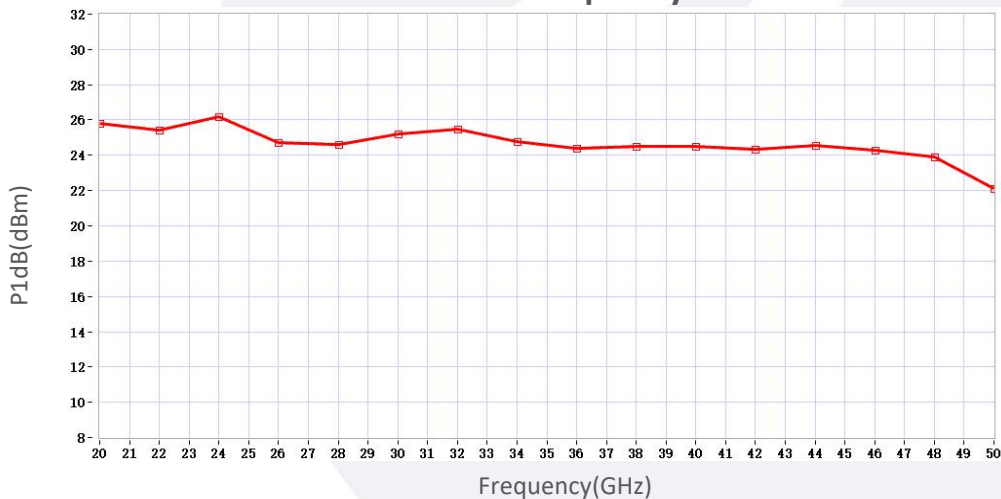
VSWR&Gain vs Frequency



Gain vs Output Power



P1dB 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.