

0.7-6GHz, Gain:53dB, Psat:50dBm

Feature:

- Ultra Wide Band: 0.7-6 GHz
- Gain: 53 dB Min
- Psat Output Power: 50 dBm 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	0.7-6			GHz
小信号增益 Small Signal Gain	53	56		dB
增益平坦度 Gain Flatness		±4	±6	dB
饱和输出功率 Output Psat	50	51		dBm
杂散 Supurious			-60	dBc
谐波抑制 Harmonic			-10	dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current	22			A
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

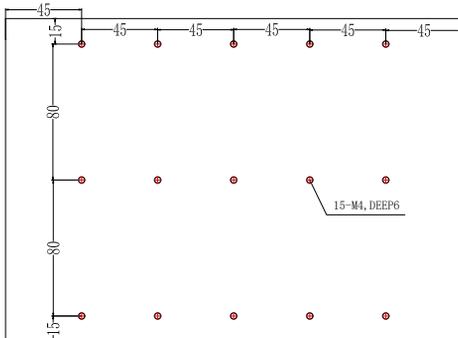
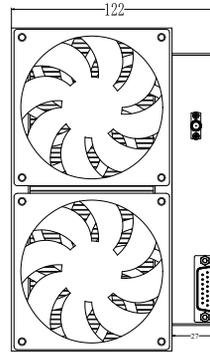
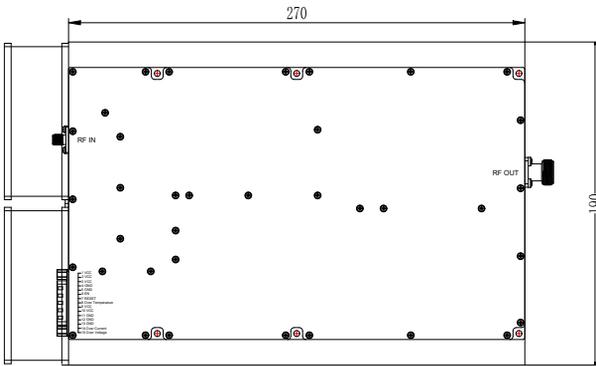
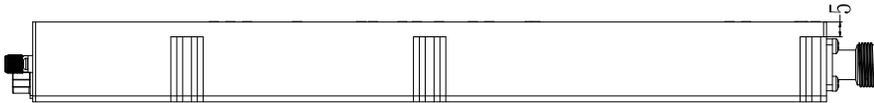
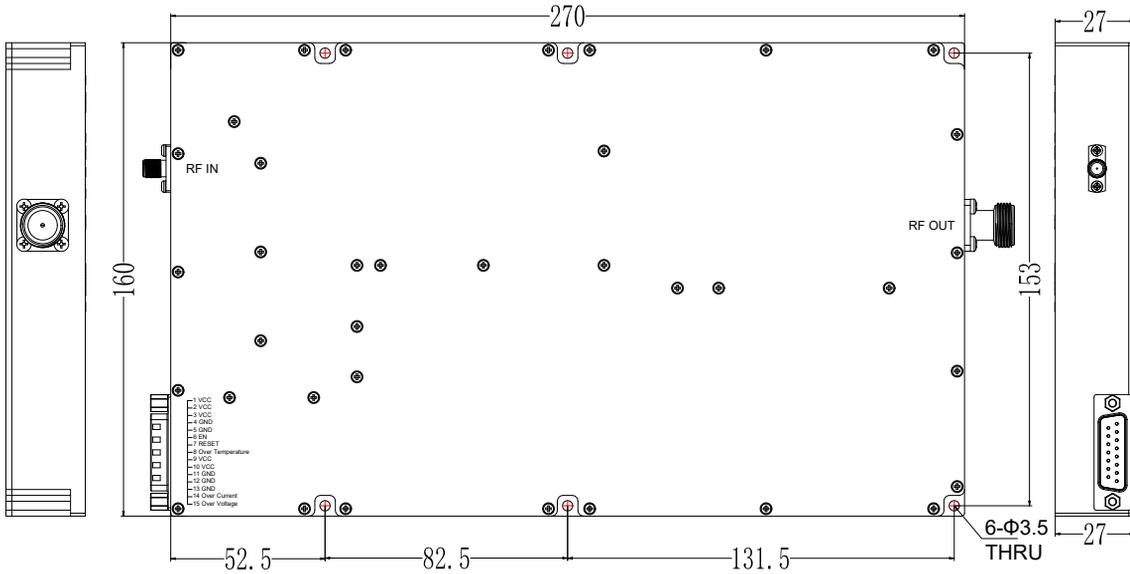
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/N Female	
直流偏置 DC Bias	D-SUB-15	
尺寸 Size	270*160*27	mm
重量 Weight	/	g

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
输入功率 RF Input Power	+3 dBm



Unit: mm



Pin #	Name	Function
1	VCC	+26.0-30.0VDC
2	VCC	+26.0-30.0VDC
3	VCC	+26.0-30.0VDC
4	GND	Ground
5	GND	Ground
6	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High)
7	RESET	Resets PA when logic LOW is applied and released (Internally Pulled-High)
8	Over Temperature	When the temperature of the case exceeds 70 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 60 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
9	VCC	+26.0-30.0VDC
10	VCC	+26.0-30.0VDC
11	GND	Ground
12	GND	Ground
13	GND	Ground
14	Over Current	Current FAULT:(TTL High= Fault, TTL Low =Normal)
15	Over Voltage	Voltage FAULT:(TTL High= Fault, TTL Low =Normal)

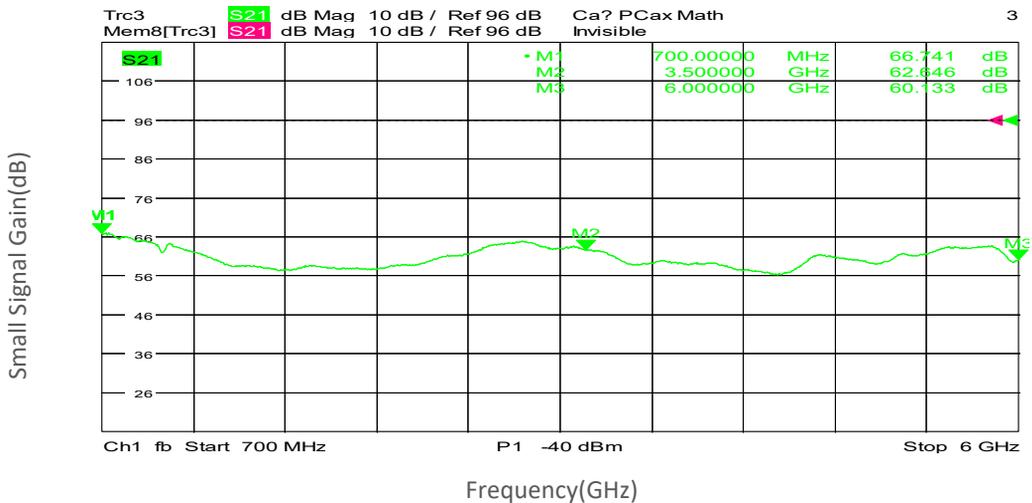
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+70	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号Revision
TLPA0.7G6G-53-50	Power amplifier 0.7-6GHz,Gain:53dB,Psat:50dBm, +28V DC,Without Heatsink	Rev.1.0
TLPA0.7G6G-53-50 -HS	Power amplifier 0.7-6GHz,Gain:53dB,Psat:50dBm, +28V DC,With Heatsink	Rev.1.0

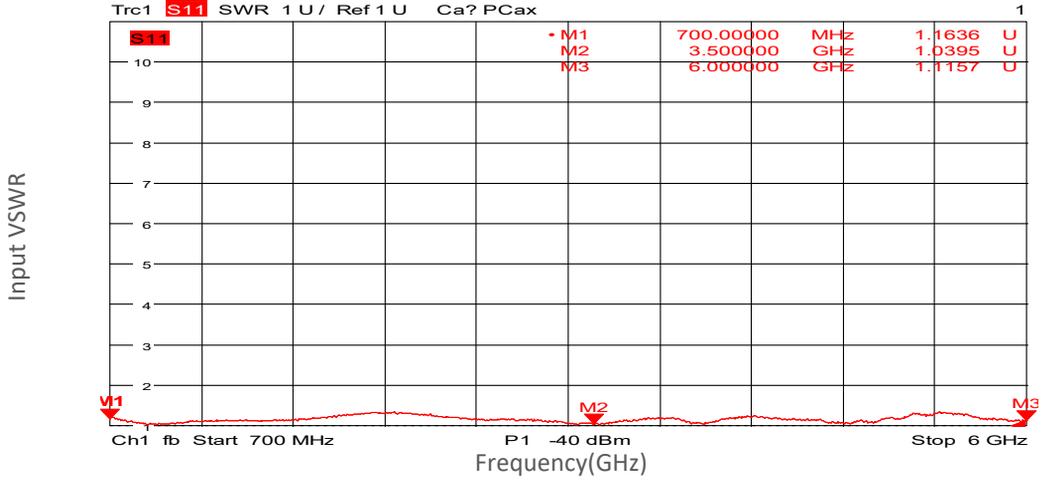
典型曲线 Typical Performance Data:

Small Signal Gain vs Frequency

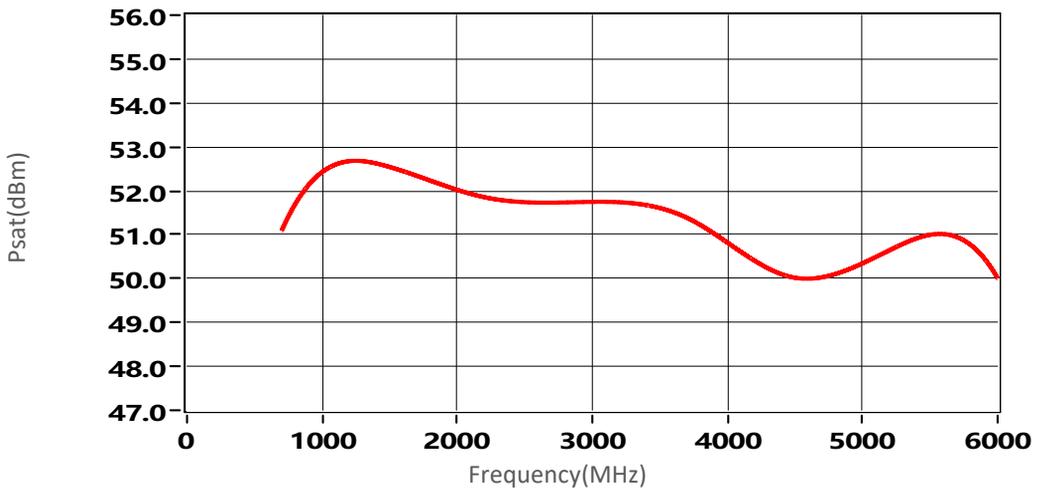


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

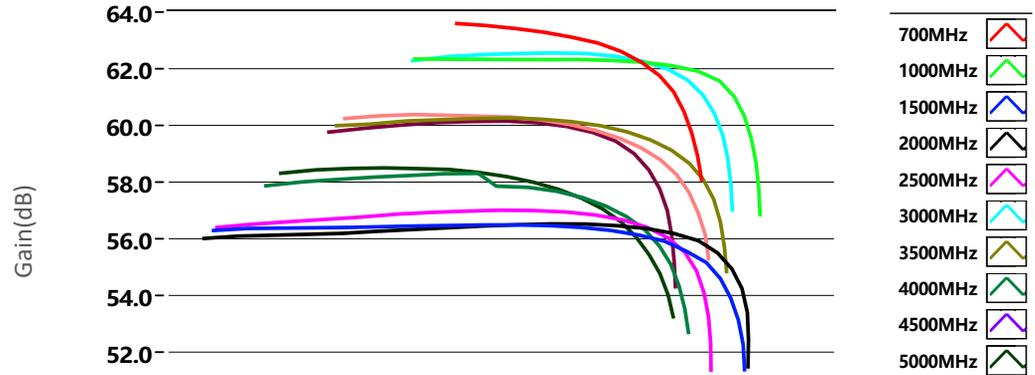
Input VSWR vs Frequency



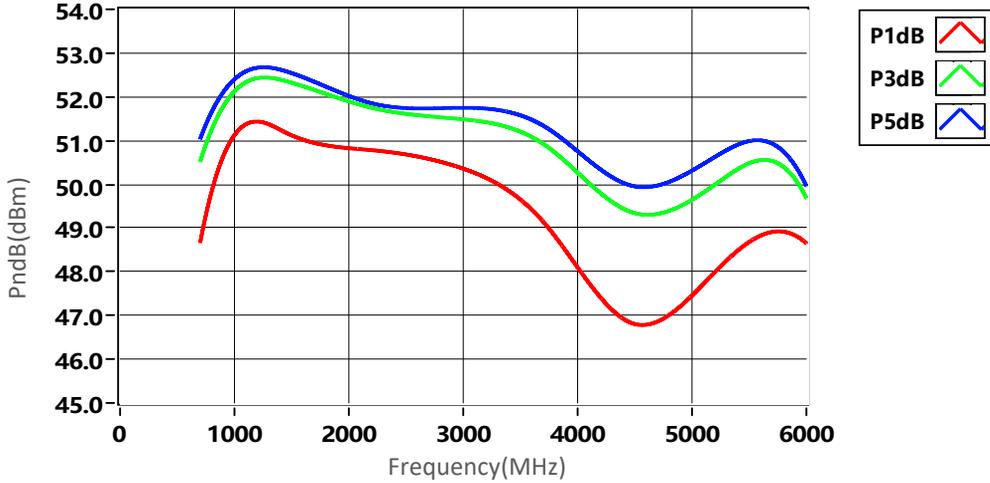
Psat vs Frequency



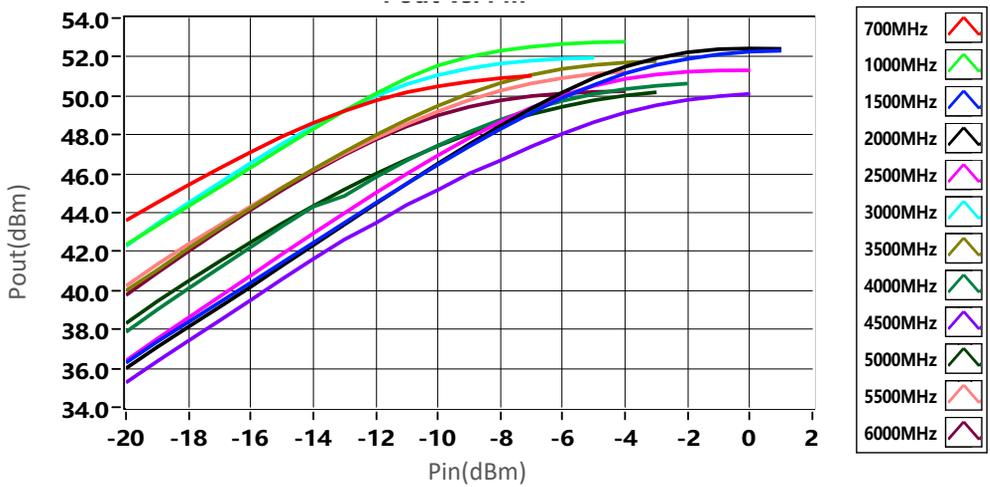
Gain vs Output Power



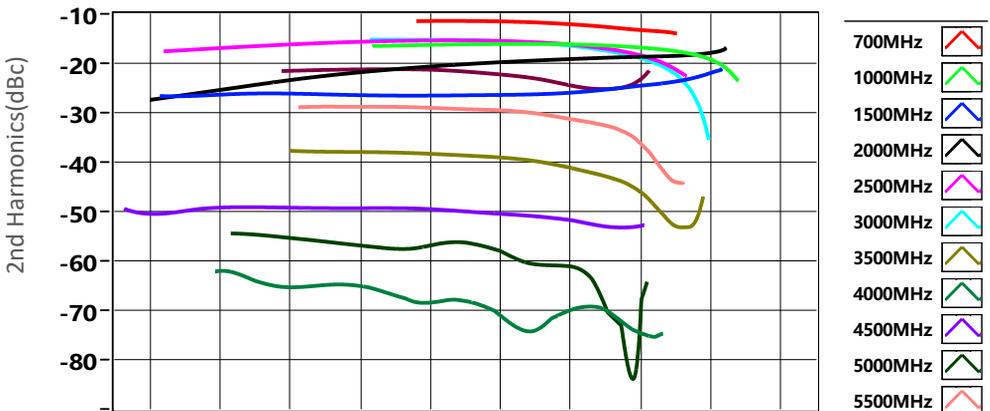
PndB vs Frequency

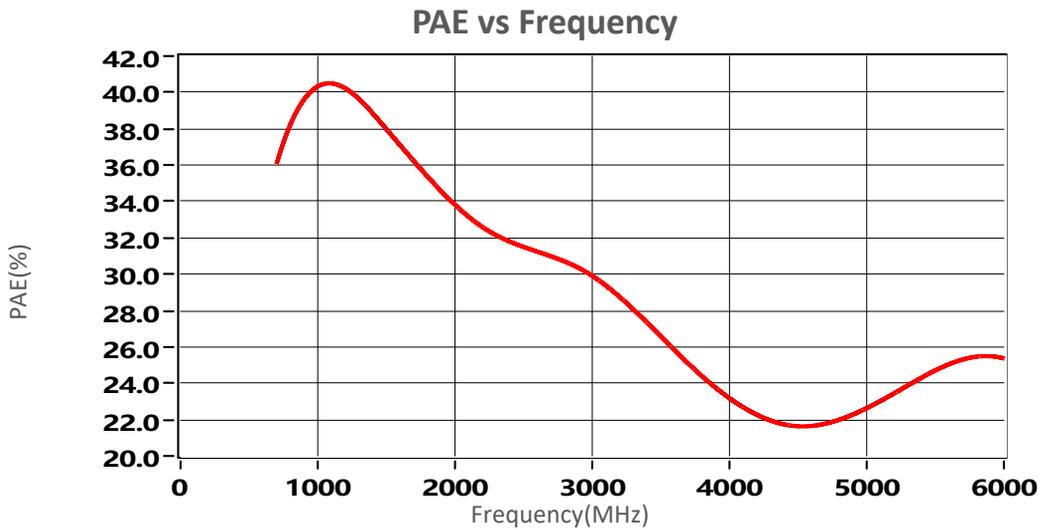
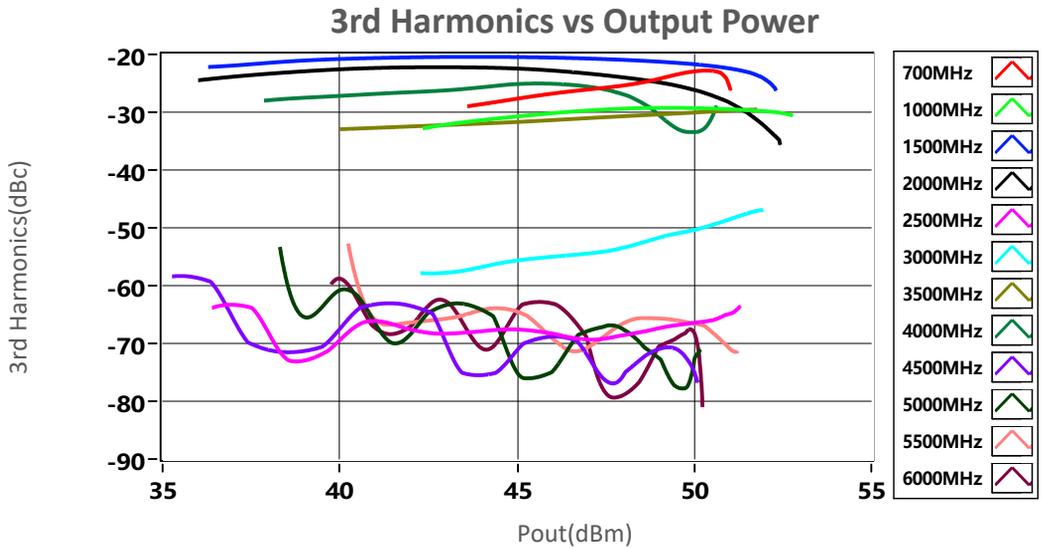


Pout vs Pin



2nd Harmonics vs Output Power





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.