

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



Electrical Specifications:

Parameter	Symbo	Min	Typ	Max	Units
Frequency range	BW	12-20			GHz
Gain	GP	33			dB
Gain adjust range	Δ GR		31.5		dB
Gain adjust step	Δ GS		0.5		dB
Output Psat	Psat	33			dBm
Spurious	Spur			-60	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption	Pdiss	60@Max			Watts
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

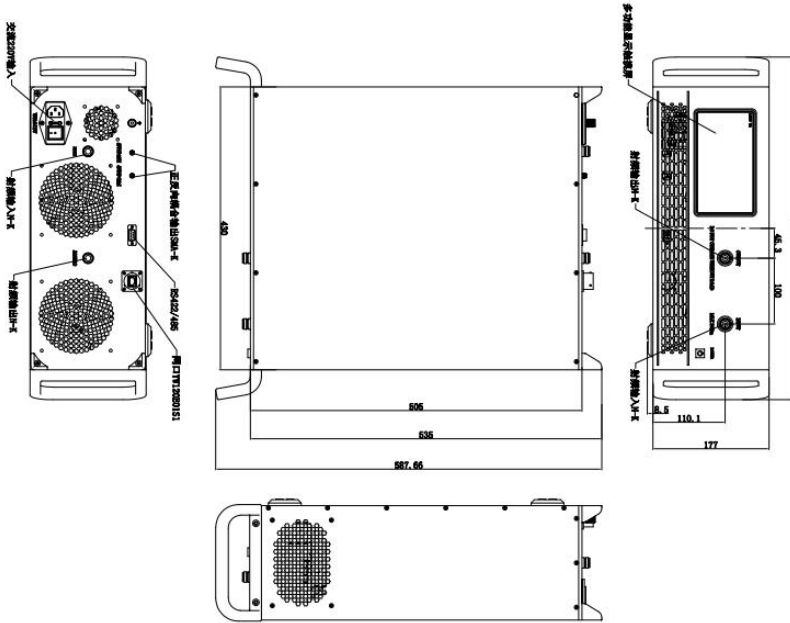
Parameter	Value	Units
Input/Output Connector	SMA Female/SMA Female	
DC Power Interface	Y50X-1203	
Communication Interfaces	J30J-9ZKP	
Size	/	mm
Weight	7.5	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Key Features:

Parameter	Advantages
Control	LNA
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Control functions	1,Power setting On/Off 2,ALC
Cooling system	Built in Cooling system,forced air cooling

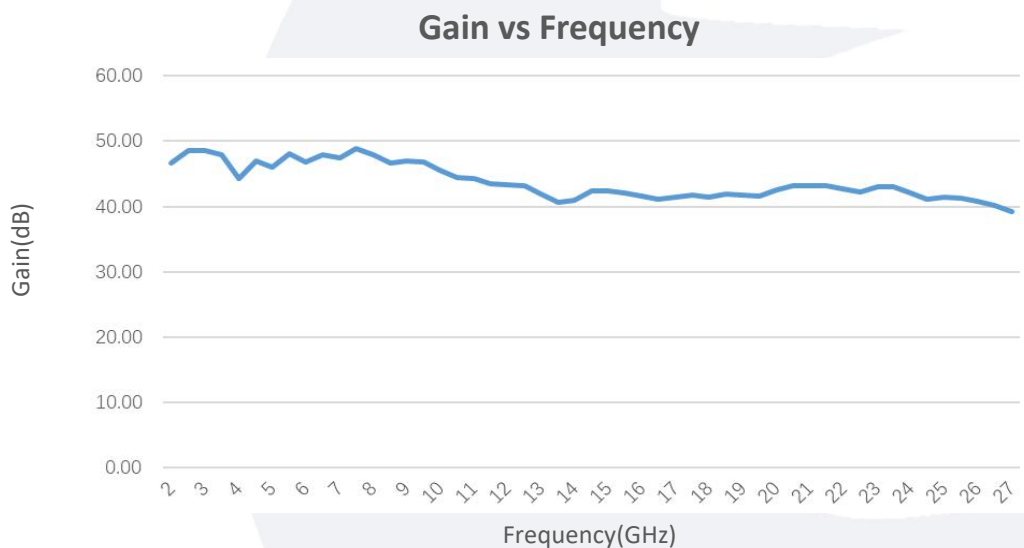
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-45		+65	°C
Relative humidity		95		%
Altitude	50000			feet
Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

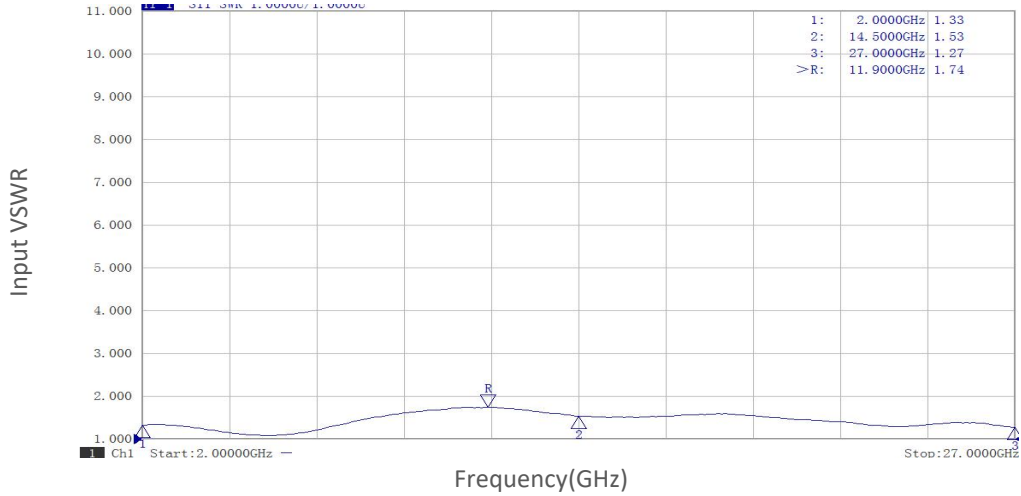
Part Number	Description	Revision
TLPA12G20G-33-33-BC	Solid State High Power Amplifier Systems 12-20GHz,Gain:33dB,Psat:33dBm,220V AC,Built in Fan Cooling	Rev.1.0

Typical Performance Data:

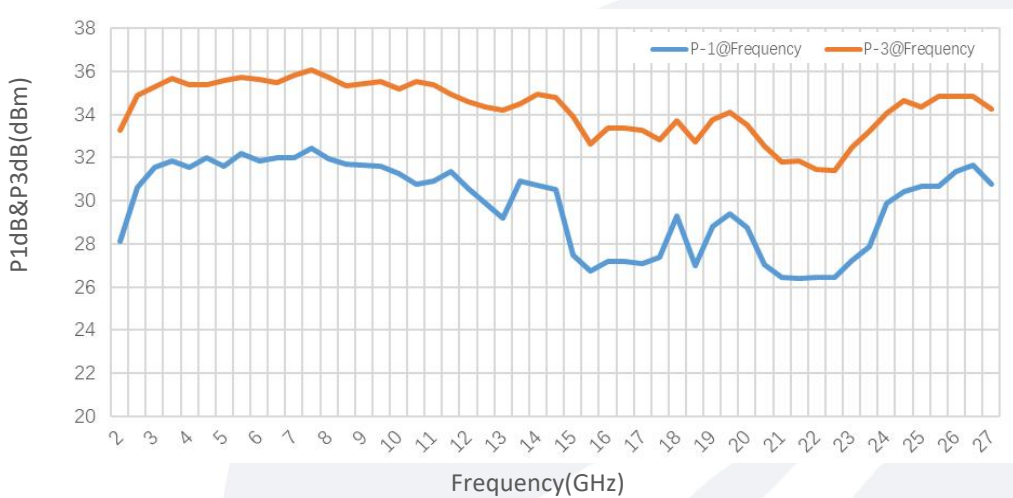


Typical Performance Data:

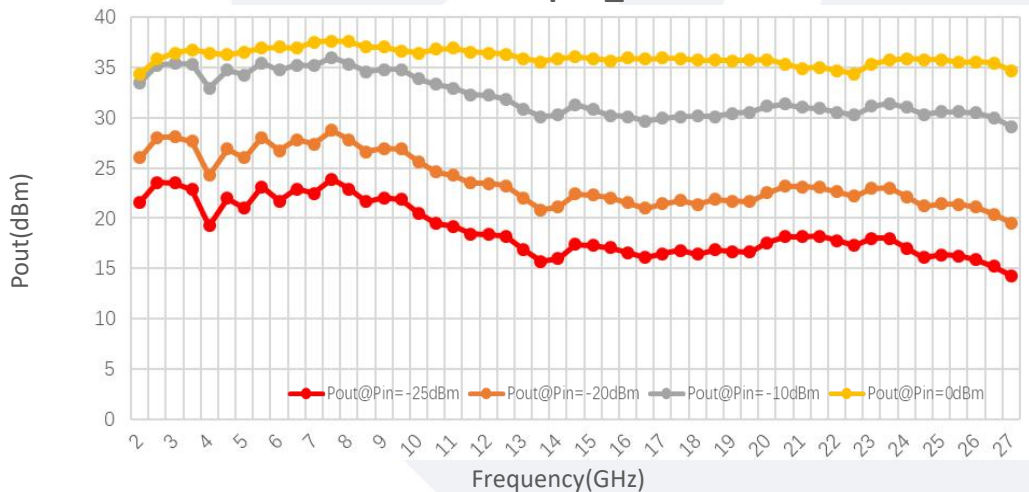
Input VSWR vs Frequency



P1dB&P3dB vs Frequency

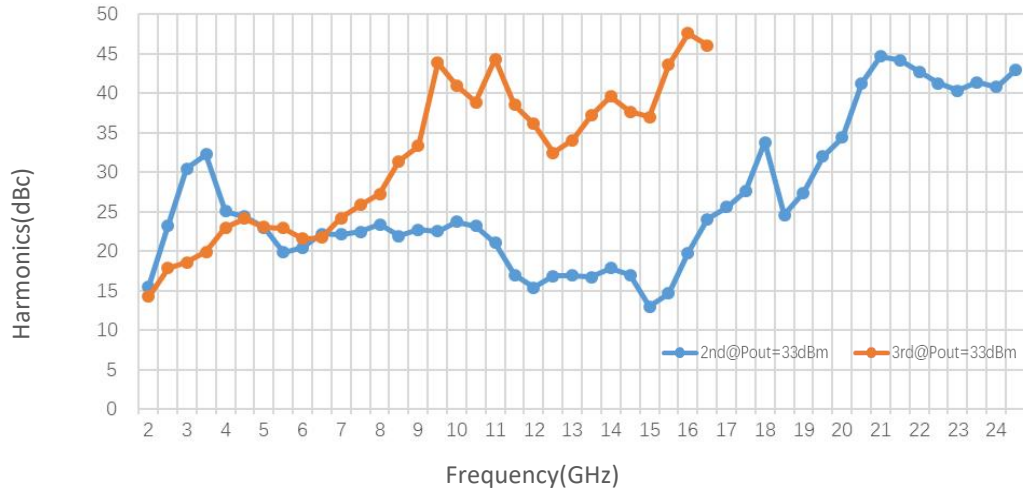


Pout@Equal_Pin



Typical Performance Data:

Harmonics vs Frequency



Spurious vs Frequency

