Power Amplifier

Model: PA-12G-20G-2

12-20GHz 2W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 12-20GHz
- High output power at saturation, 2W Min.
- High gain, 33 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-12G-20G-2 is a power amplifier with a minimum power gain of 33 dB and a minimum Psat of 2W across the frequency range of 12 to 20GHz. The DC&AC Voltage power requirement for the amplifier is +24 V DC or +220 V AC. The input and output port configuration offers coax adapter structure with SMA female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	12		20	GHz
Power Gain	33			dB
Power Gain Adjust Range/Step		31.5/0.5		dBm
Output Psat	33		-50	dBm
Spurious			-60	dBc
Input VSWR			2.0	:1
DC&AC Voltage		220V AC&24V DC		V
Power Consumption			60	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-40℃ to +60℃	
Non-operating Temperature*	-50℃ to +70℃	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	250*245*100	Inch
Weight	≤7.5	Kg

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

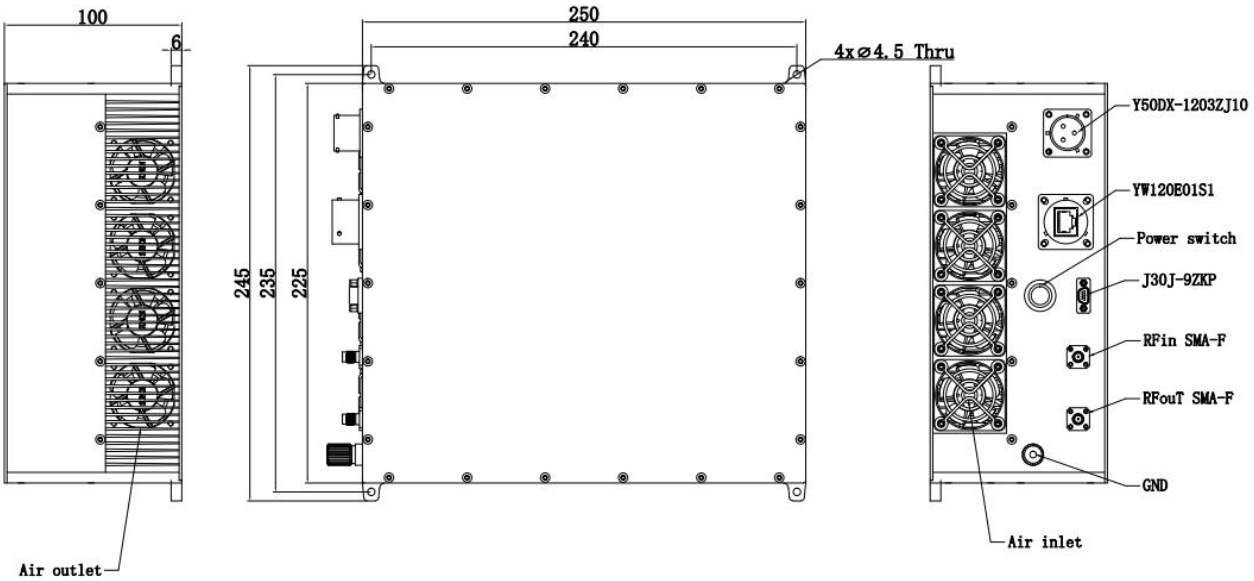
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-12G-20G-2

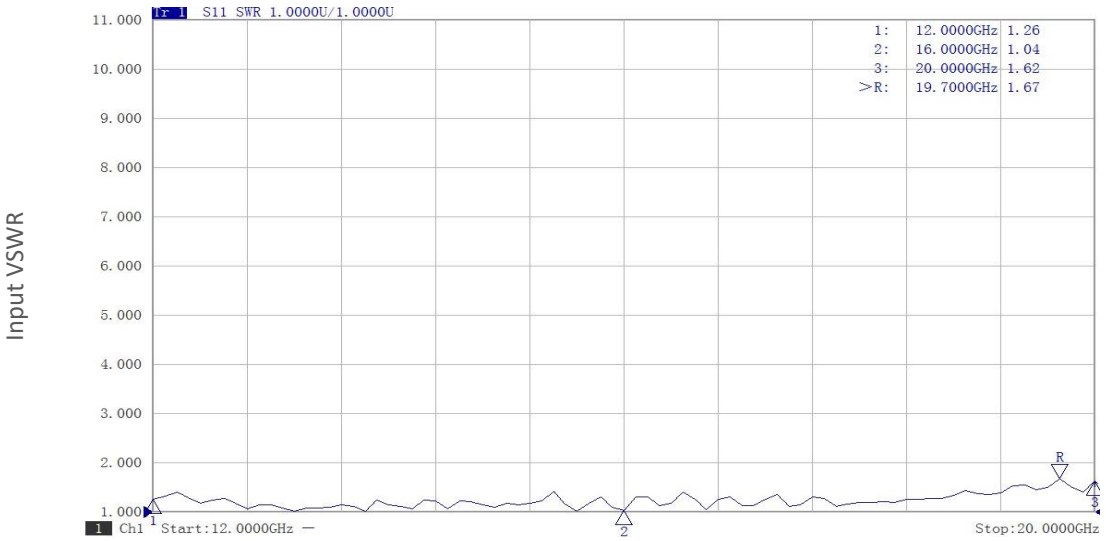


Ordering Information:

Base Number	Description	Optional
PA-12G-20G-2	Power Amplifier,12-20GHz, Gain:33dB,Psat:2W,+24V DC&220V AC	Without Heatsink
PA-12G-20G-2-HS	Power Amplifier,12-20GHz, Gain:33dB,Psat:2W,+24V DC&220V AC	With Heatsink

Typical Performance Data:

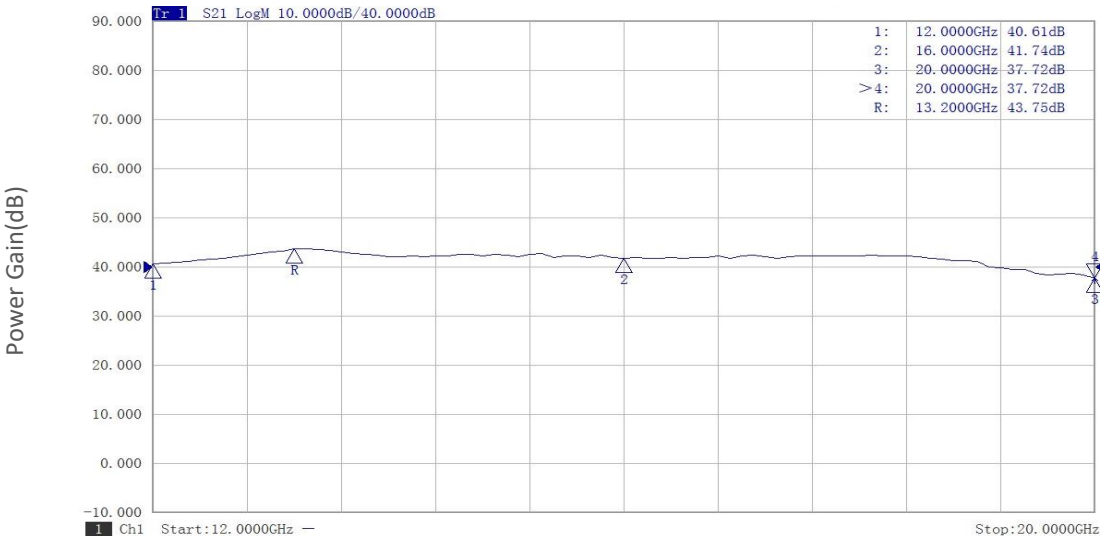
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Power Gain vs Frequency



Power Gain(dB)

Frequency(GHz)

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.

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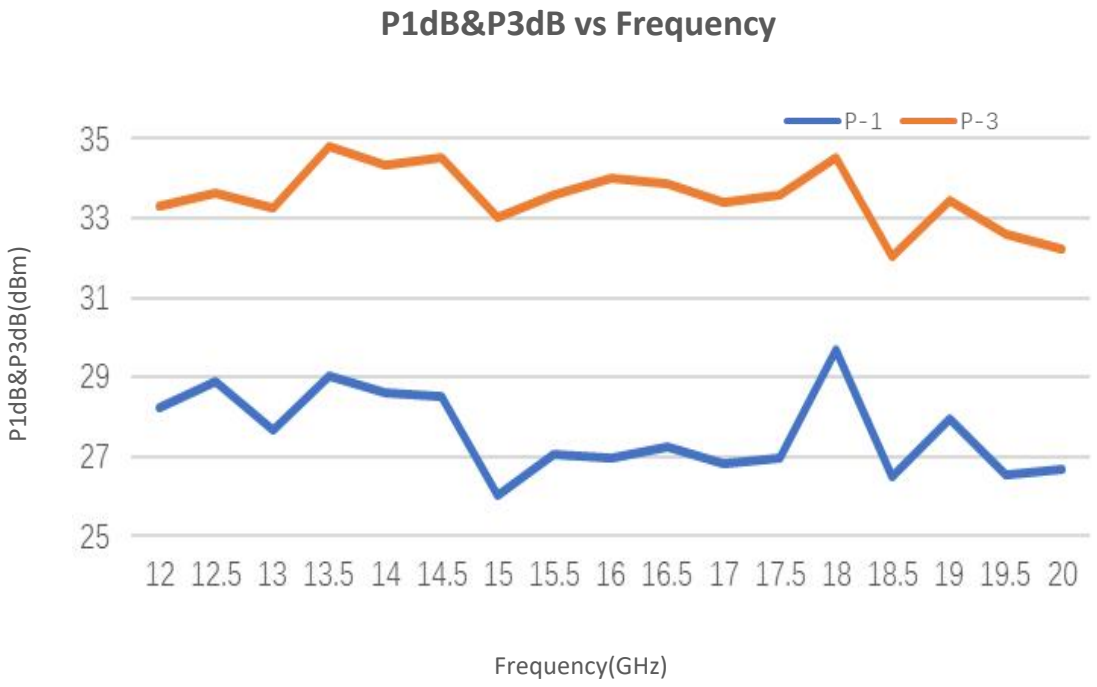

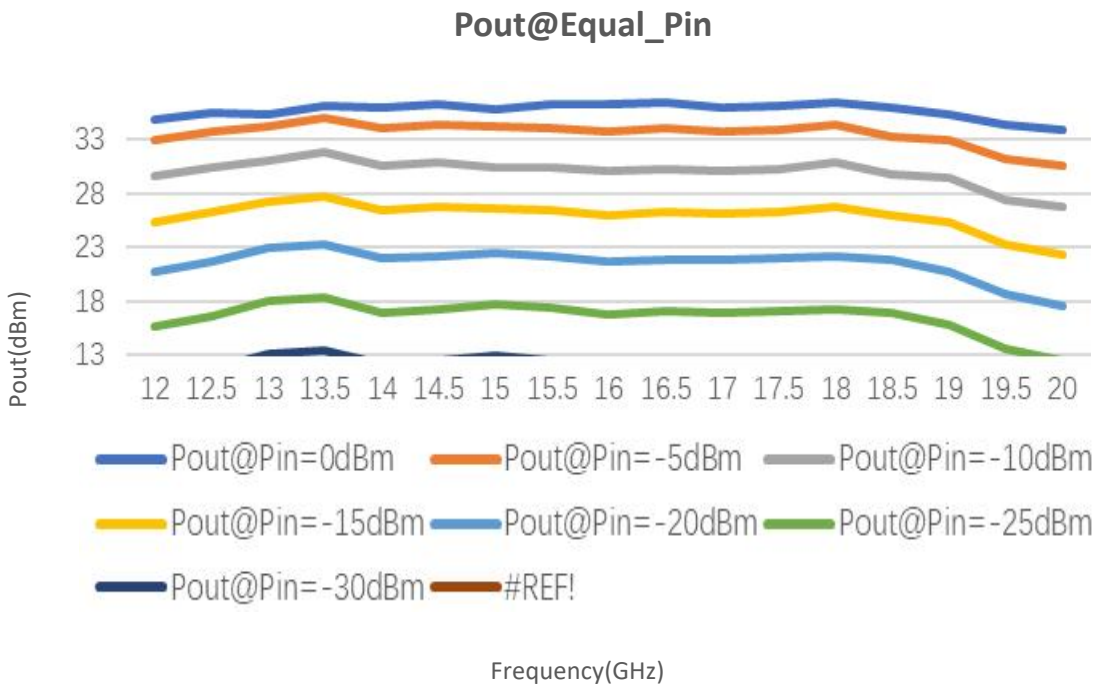

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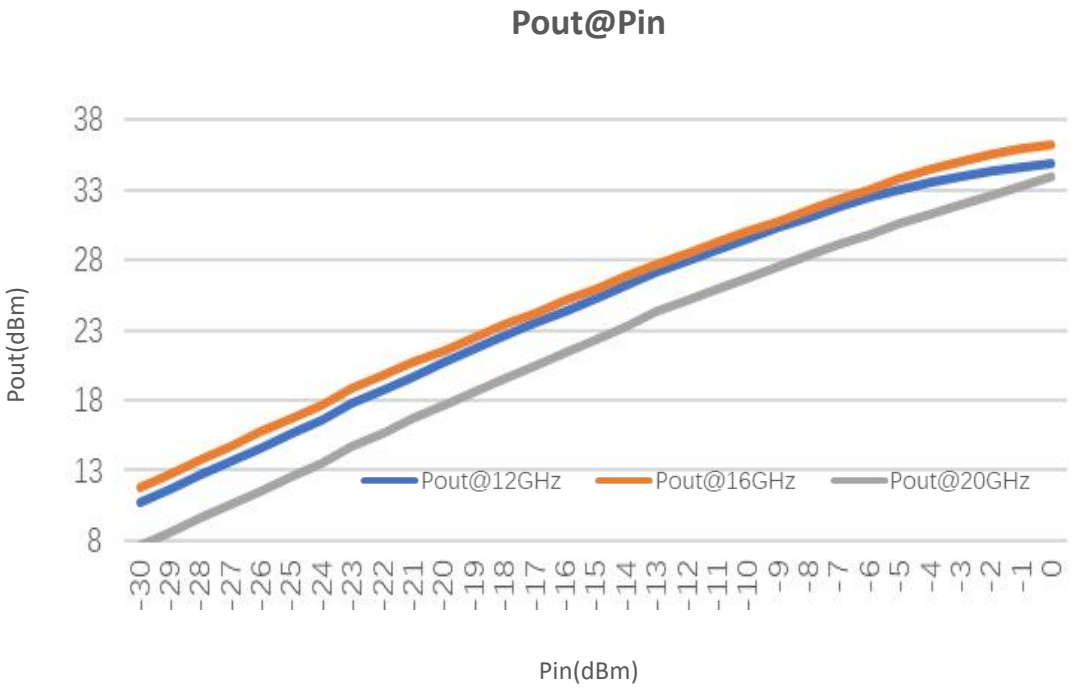

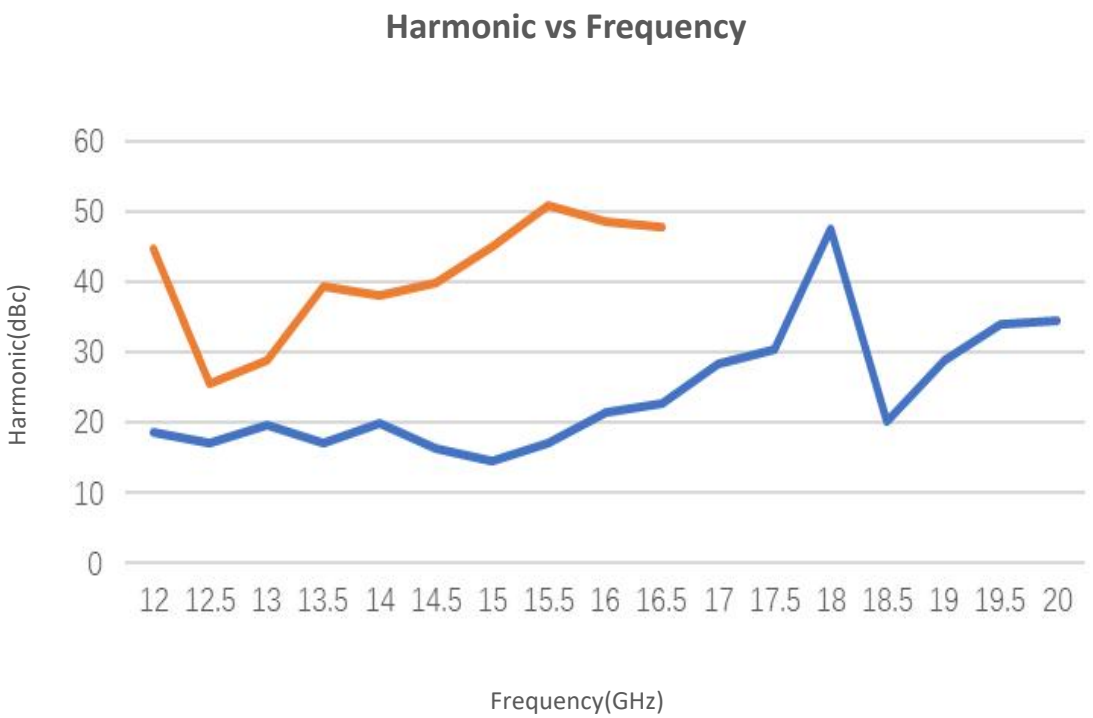

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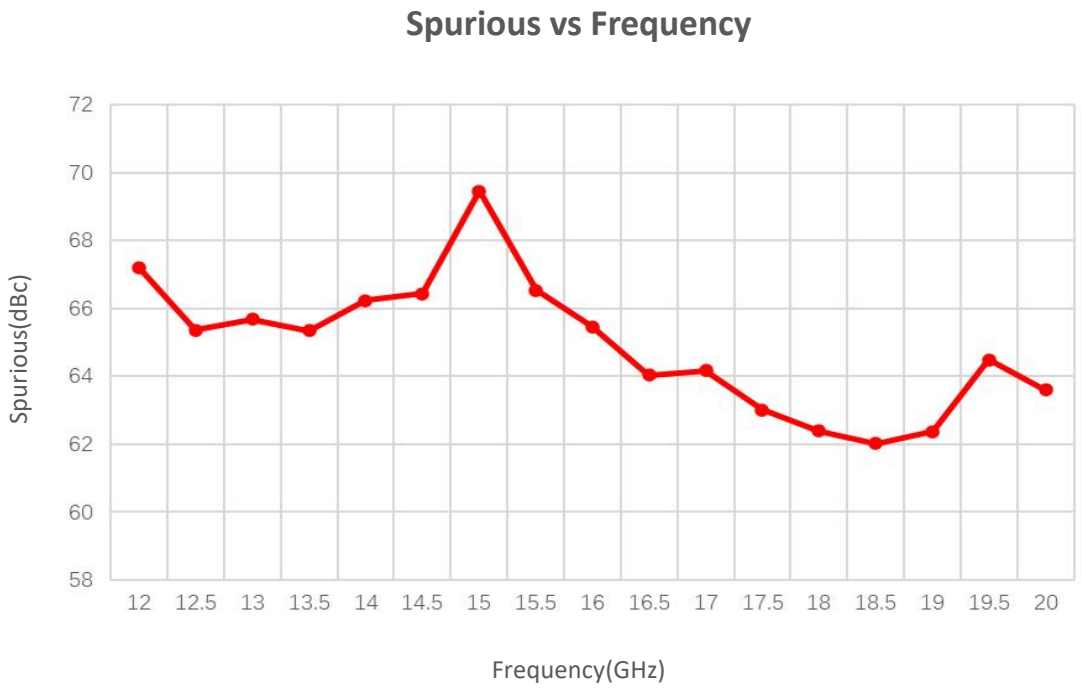

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