Power Amplifier

Model: PA-0G5-6G-20

0.5-6GHz 20W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 0.5-6GHz
- High output power at saturation, 20W Min.
- High gain, 43 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-0G5-6G-20 is a power amplifier with a minimum power gain of 43 dB and a minimum Psat of 20W across the frequency range of 0.5 to 6GHz. The DC power requirement for the amplifier is +36 VDC/3 A. The input and output port configuration offers coax adapter structure with SMA female.

Electrical Specifications at 25℃:

Parameter		Min	Typ	Max	Units
Frequency range		0.5		6	GHz
Power Gain		43			dB
Power Gain Flatness			±3.5		dB
Output Psat		43			dBm
Spurious				-50	dBc
Harmonic	@0.5-0.7GHz			-5	dBc
	@0.7-6GHz			-10	dBc
Input VSWR				1.8	:1
DC Voltage			+36		V DC
DC Supply Current			3		A
Impedance			50		Ohms

Mechanical Specifications:

ParameterKg	Value	Notes
Operating Temerature*	-40℃ to +50℃	
Non-operating Temperature*	-50℃ to +60℃	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Feedthru capacitors	
Altitude	10,000	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	
Dimensions W x H x D	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

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

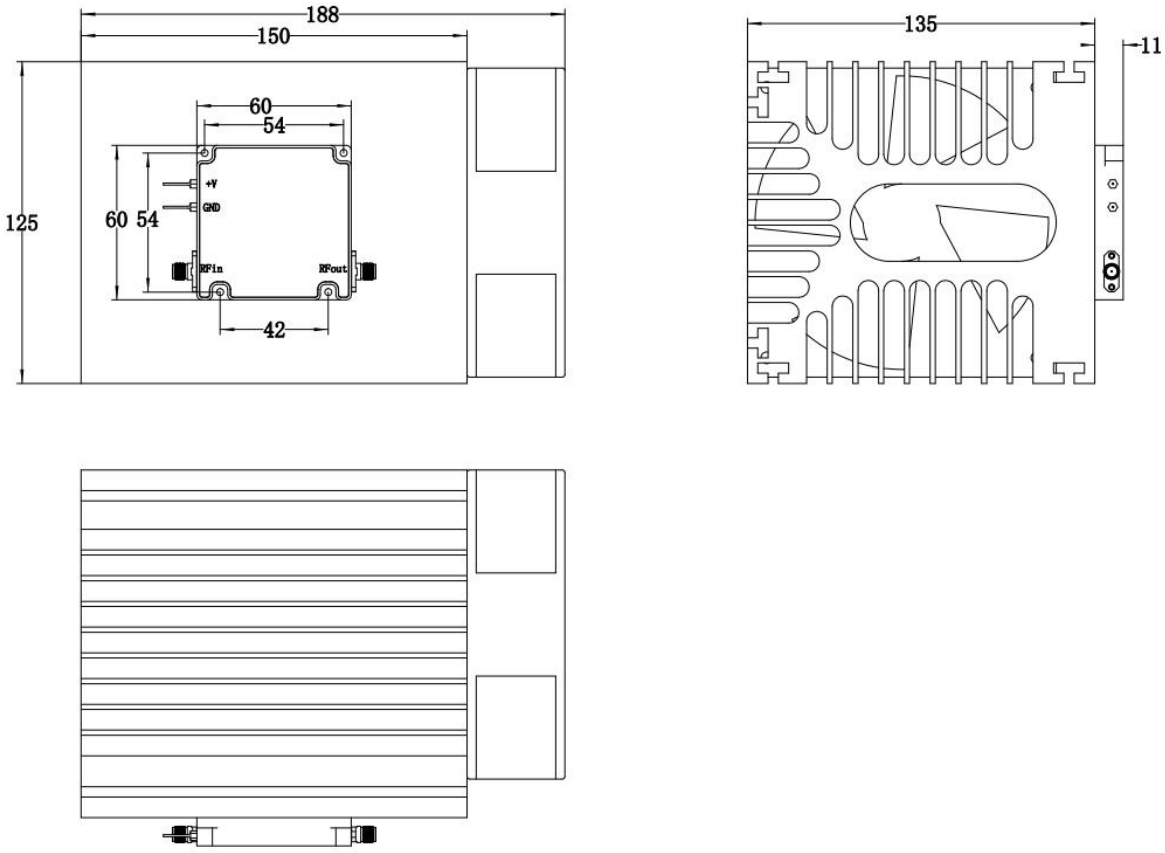
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+39 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-0G5-6G-20-HS

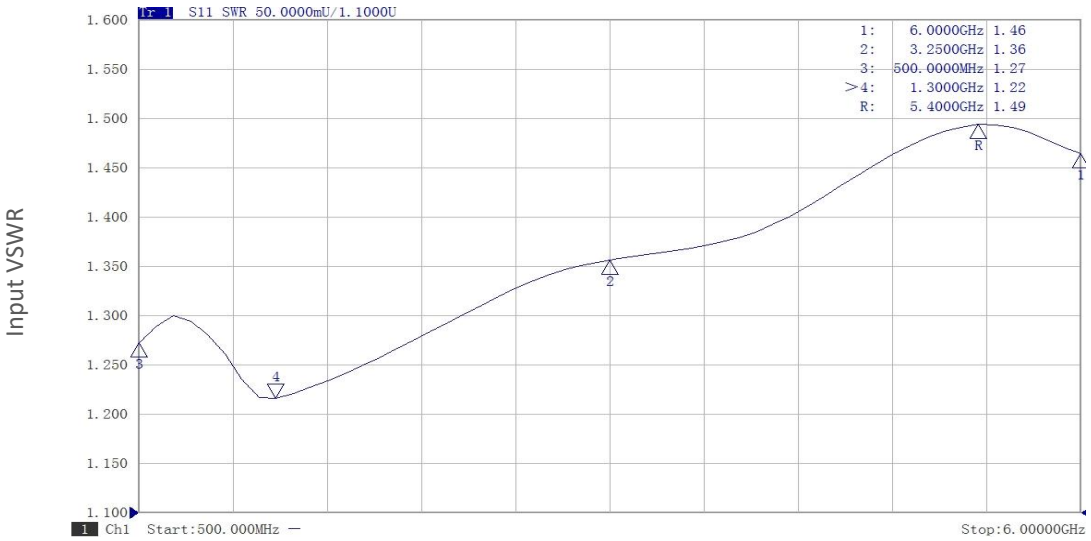


Ordering Information:

Base Number	Description	Optional
PA-0G5-6G-20	Power Amplifier,0.5-6GHz, Gain:43dB,Psat:20W,+36V DC	Without Heatsink
PA-0G5-6G-20-HS	Power Amplifier,0.5-6GHz, Gain:43dB,Psat:20W,+36V DC	With Heatsink

Typical Performance Data:

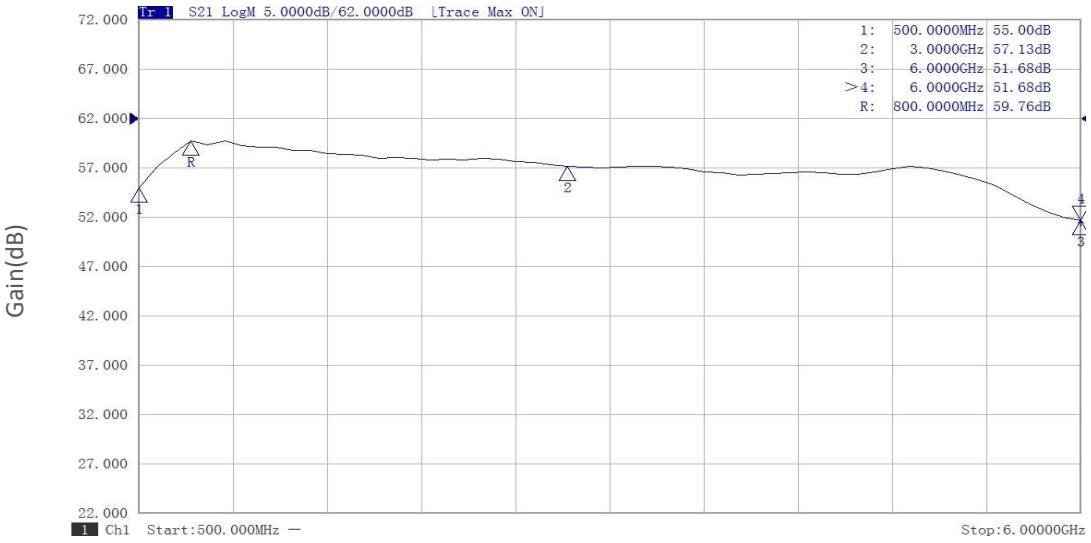
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Small Signal Gain vs Frequency



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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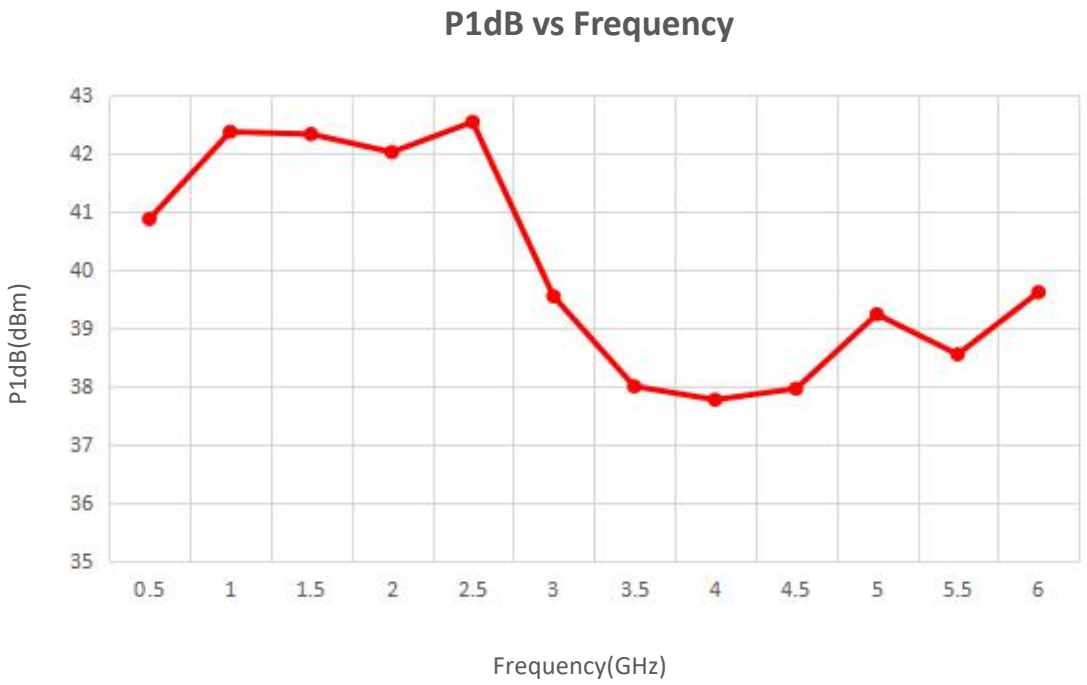

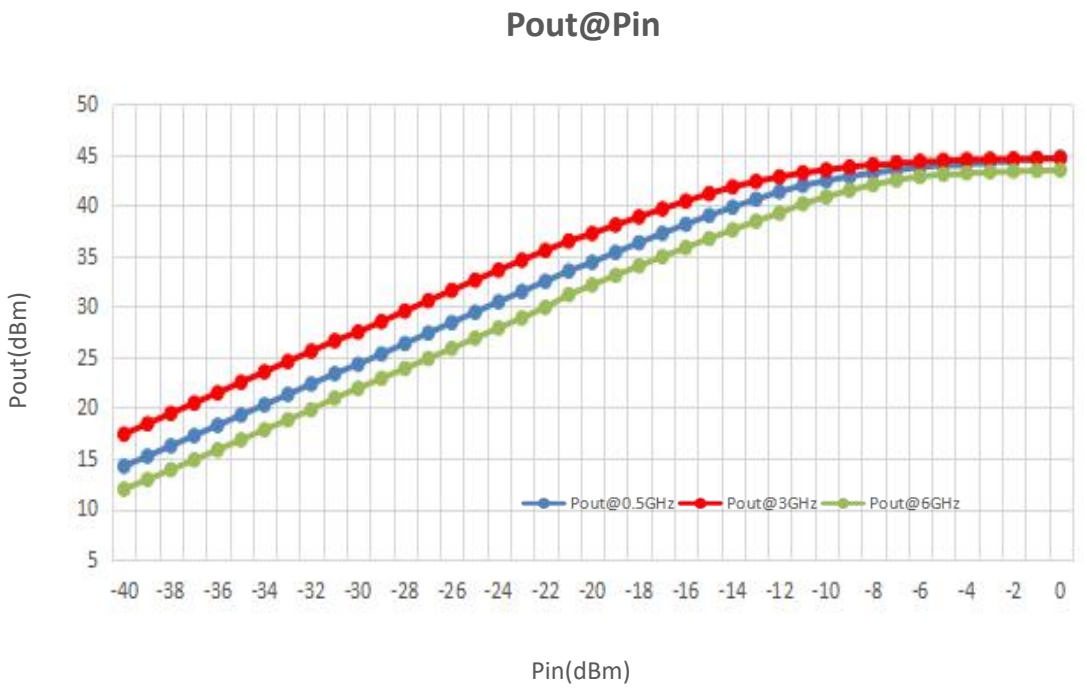

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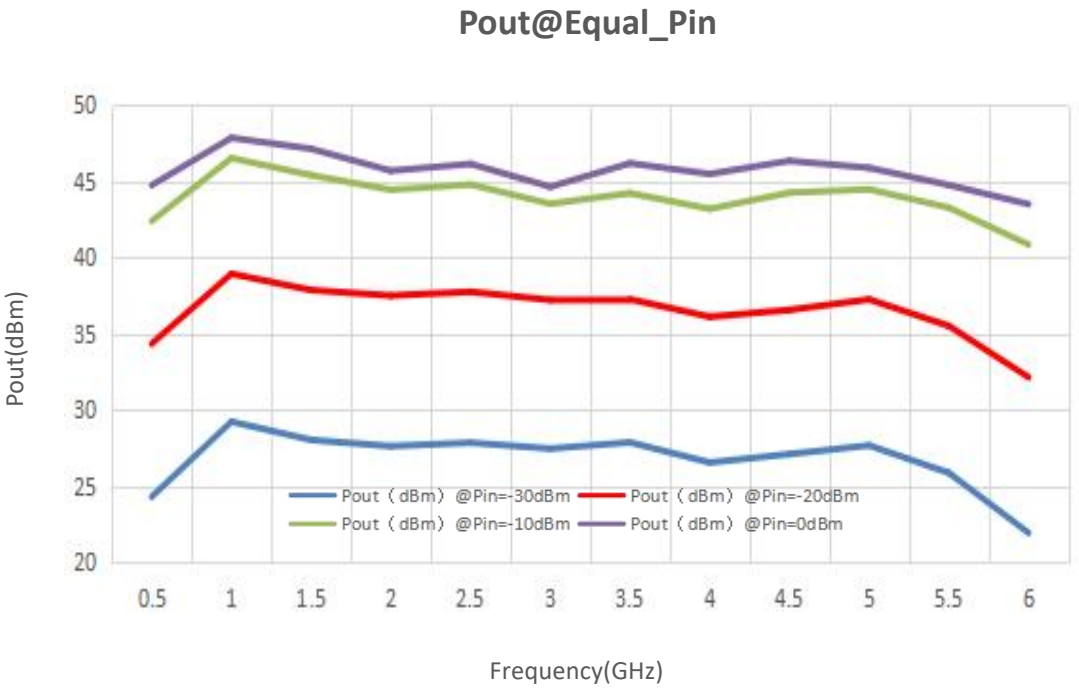

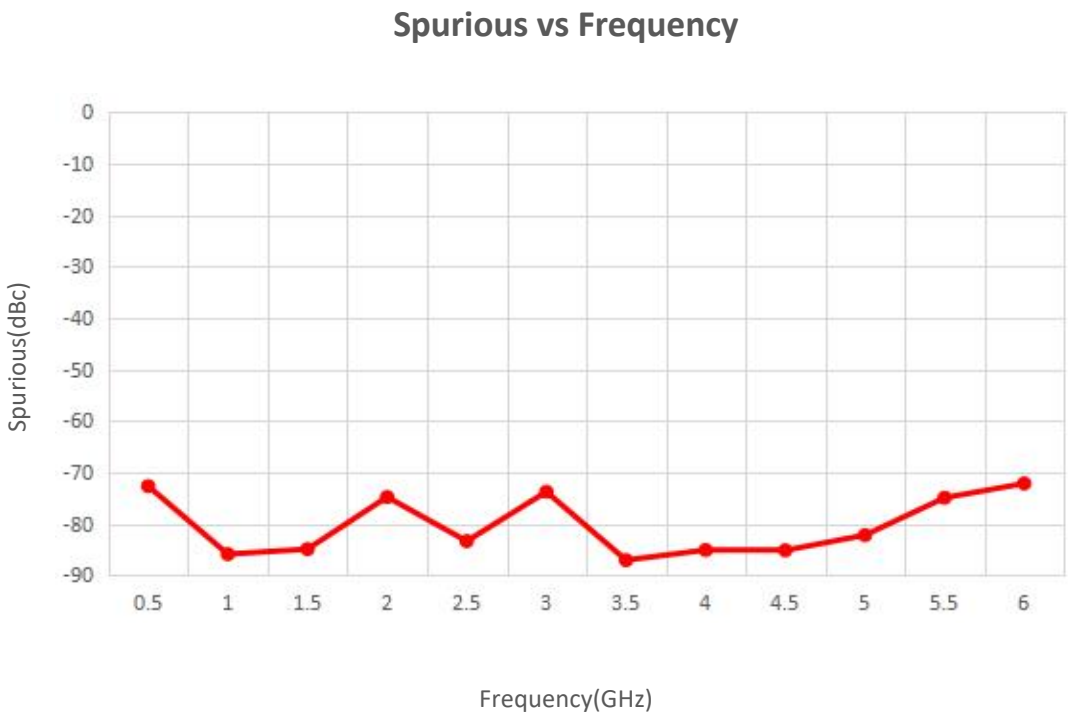

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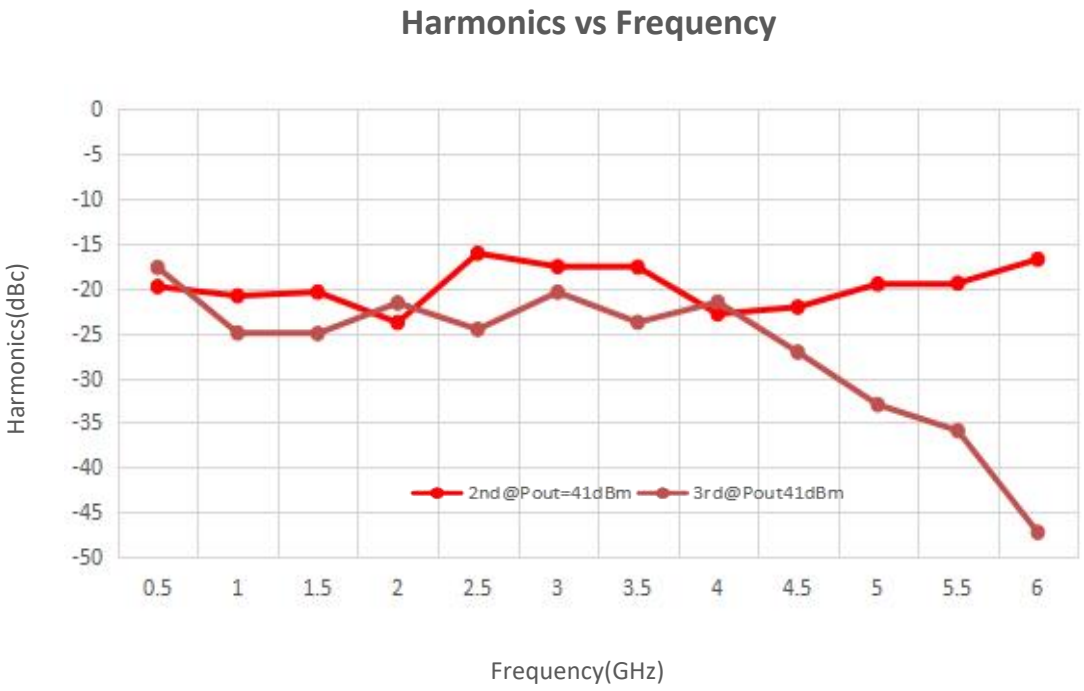

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