Power Amplifier

Model: PA-6G-18G-5

6-18GHz 5W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 6-18GHz
- High output power at saturation, 5W Min.
- High gain, 37 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-6G-18G-5 is a power amplifier with a minimum small signal gain of 37 dB and a minimum Psat of 5W across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/2 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	6		18	GHz
Small Signal Gain	37			dB
Output Psat	37			dBm
Spurious			-50	dBc
Harmonic			-10	dBc
Input VSWR		2		:1
DC Voltage		+28		V DC
DC Supply Current		2	2.5	A
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	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.

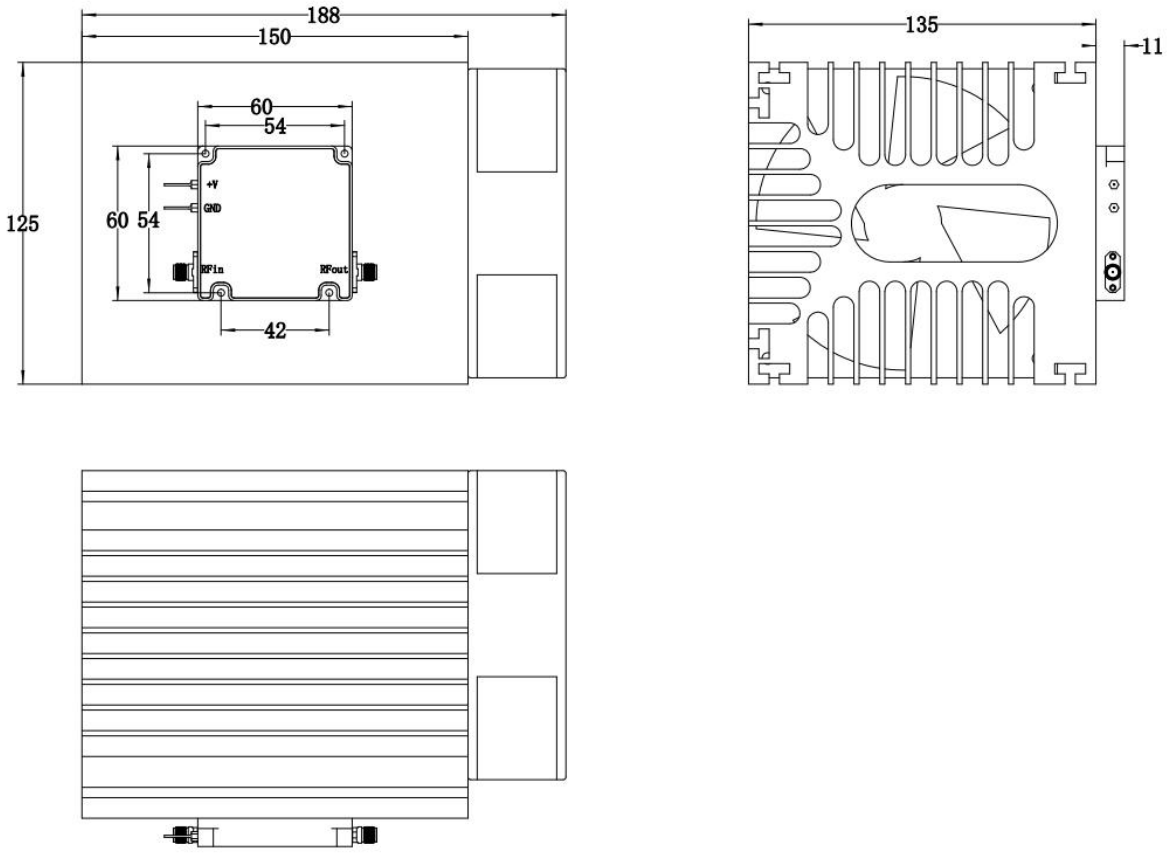
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-6G-18G-5-HS

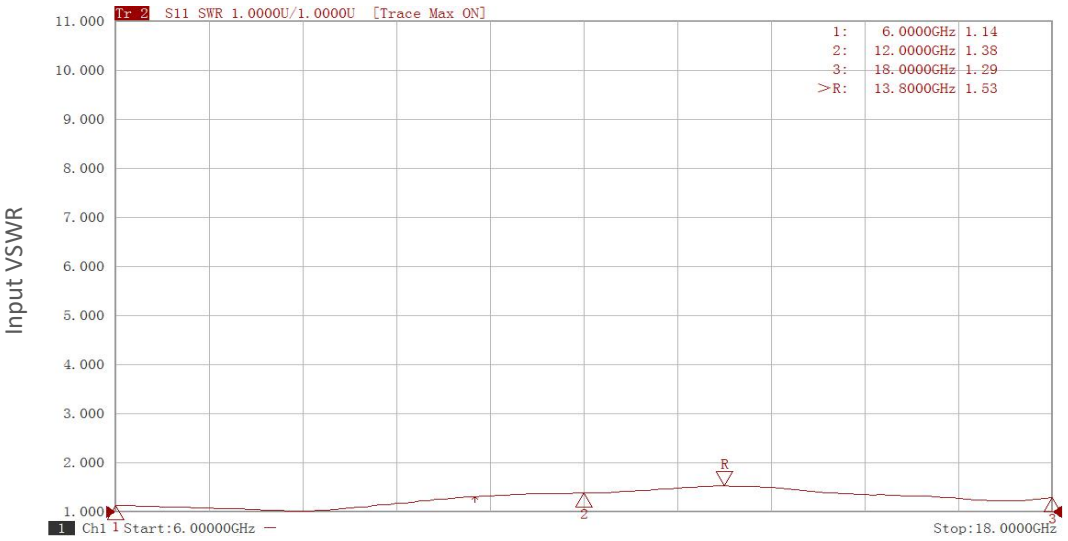


Ordering Information:

Base Number	Description	Optional
PA-6G-18G-5	Power Amplifier, 6-18GHz, Gain:37dB,Psat:5W,+28V DC	Without Heatsink
PA-6G-18G-5-HS	Power Amplifier, 6-18GHz, Gain:37dB,Psat:5W,+28V DC	With Heatsink

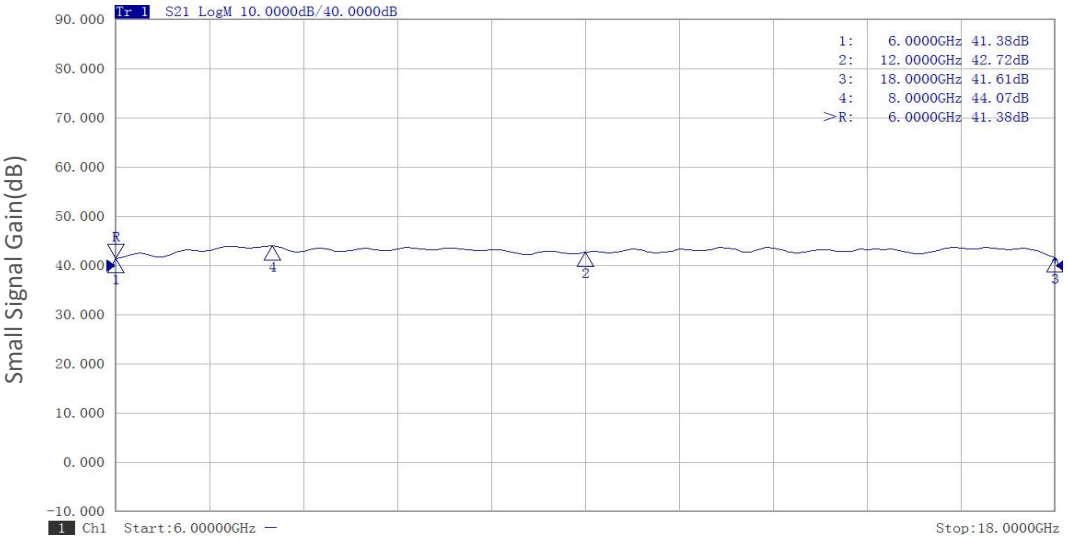
Typical Performance Data:

Input VSWR vs Frequency



Frequency(GHz)

Small Signal Gain vs Frequency



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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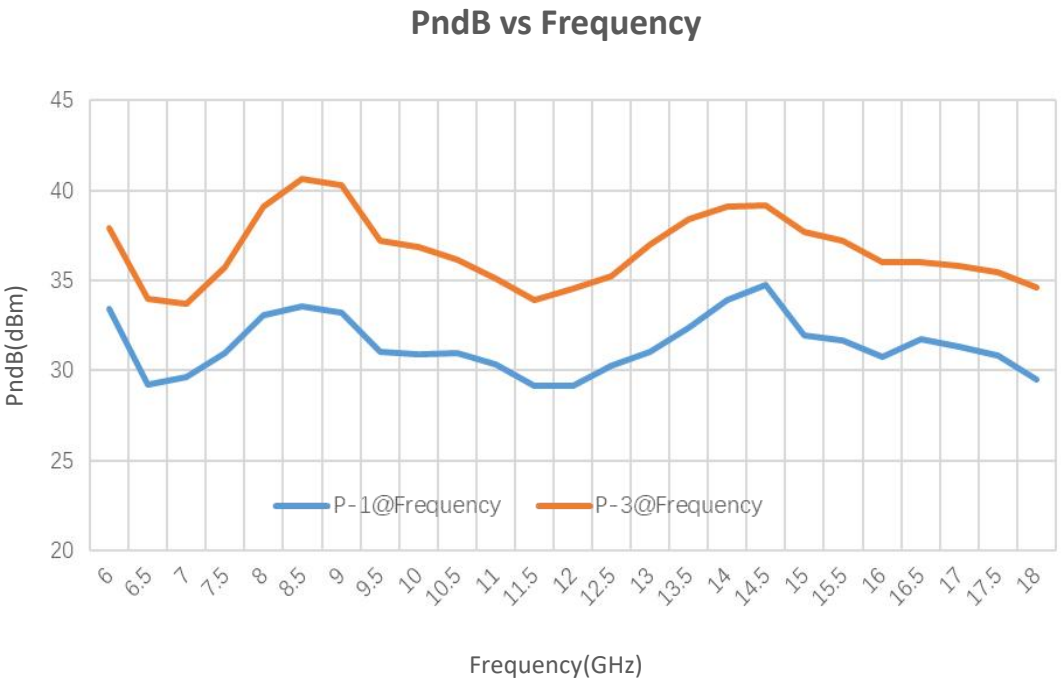

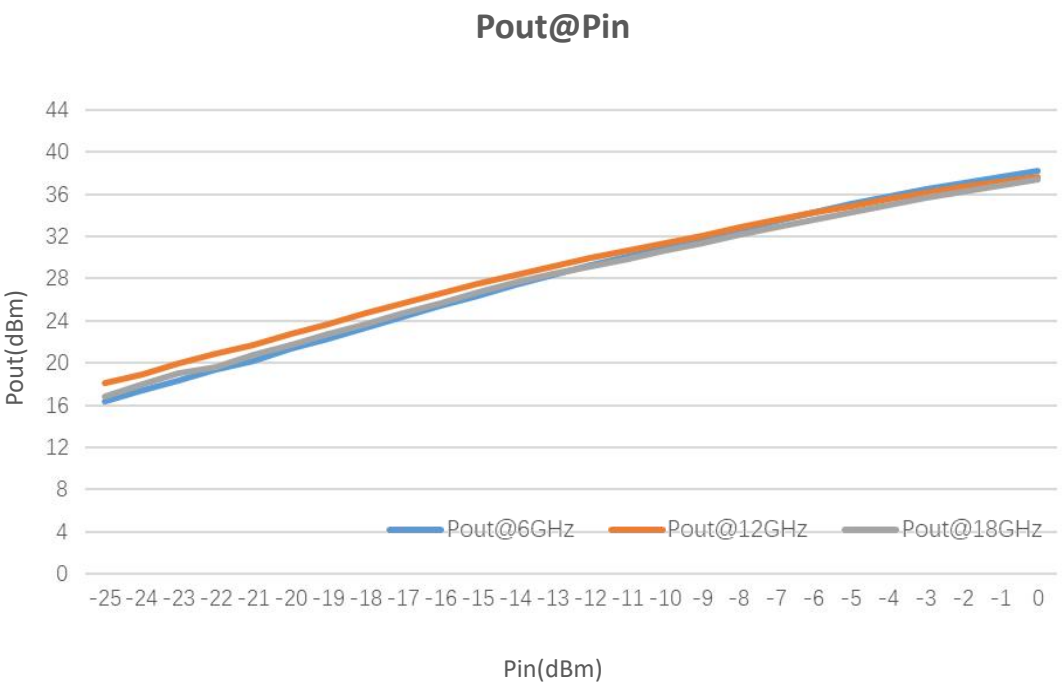

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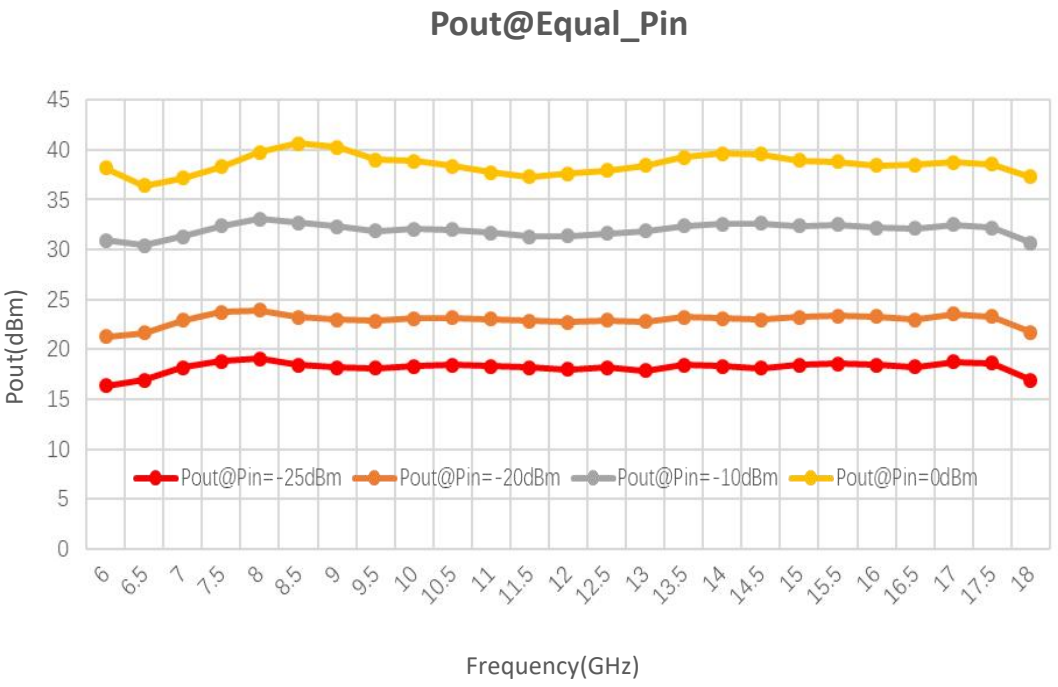

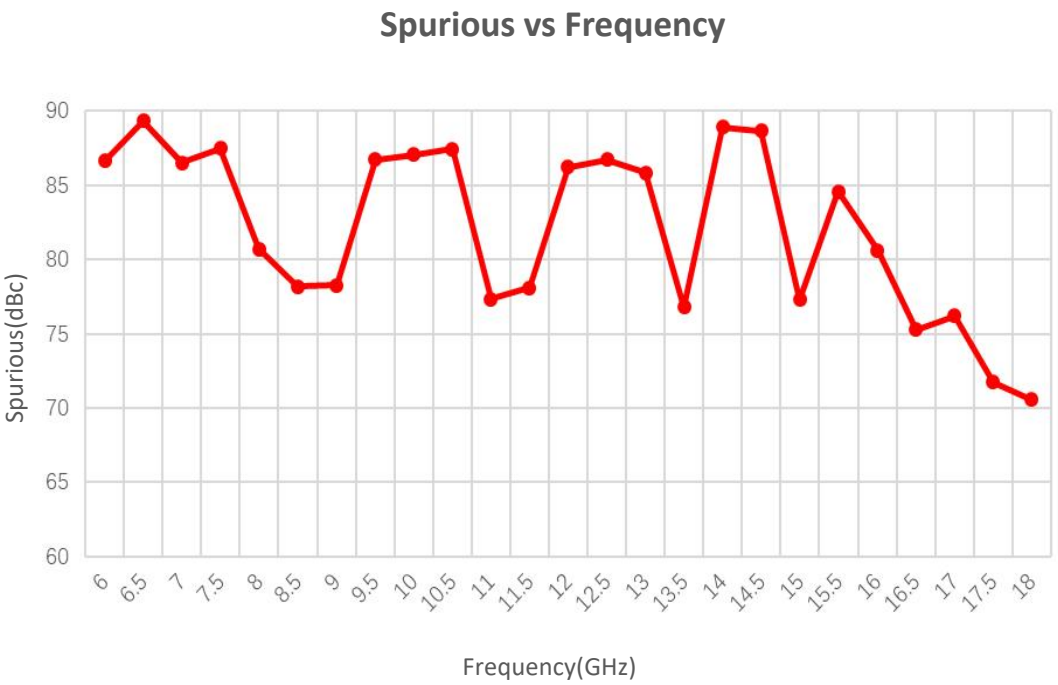

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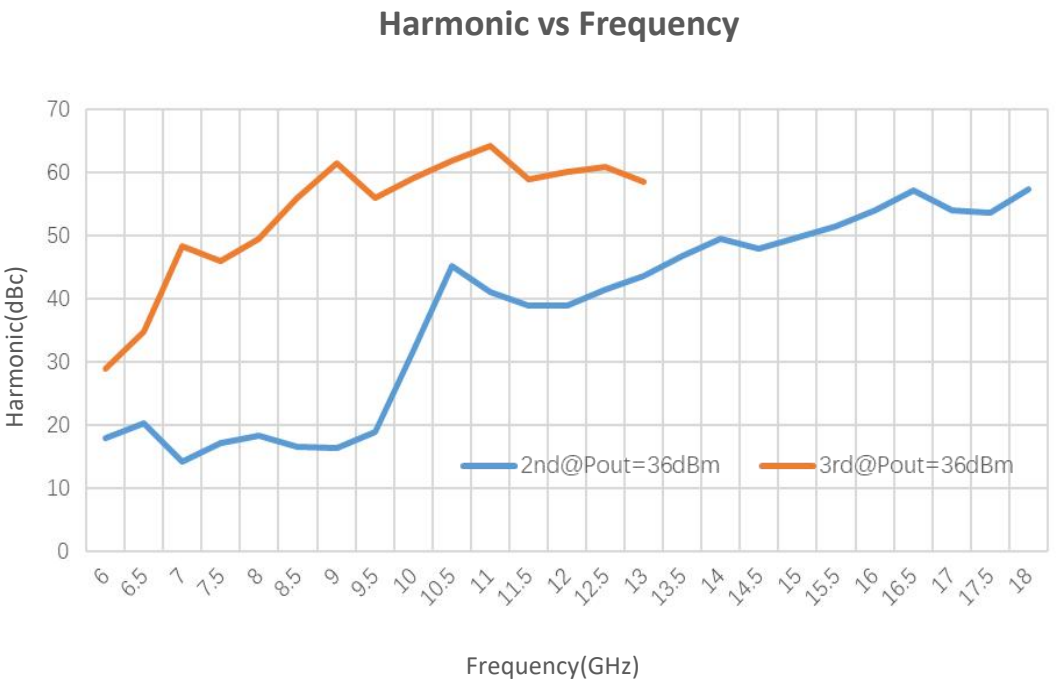

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