Power Amplifier

Model: PA-2G-18G-100-HS

2-18GHz 100W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 2-18GHz
- High output power at saturation, 100W Min.
- High gain, 50 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-2G-18G-100-HS is a power amplifier with a minimum power gain of 50 dB and a minimum Psat of 100W across the frequency range of 2 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/1800 W. The input port configurationofferscoax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	2		18	GHz
Power Gain	50			dB
Power Gain Flatness		±4.5	±5	dB
Output Psat	50			dBm
Spurious@Pout=51dBm			-60	dBc
Harmonic@Pout=51dBm			-10	dBc
Input VSWR			2.0	:1
DC Voltage		+28		V DC
Power Consumption			1800	W
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-20℃ to +50℃	
Non-operating Temperature*	-30℃ to +60℃	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/N Female	
DC Bias	SUB-5W5	
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	340*330*98.5	mm
Weight	25	Kg

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

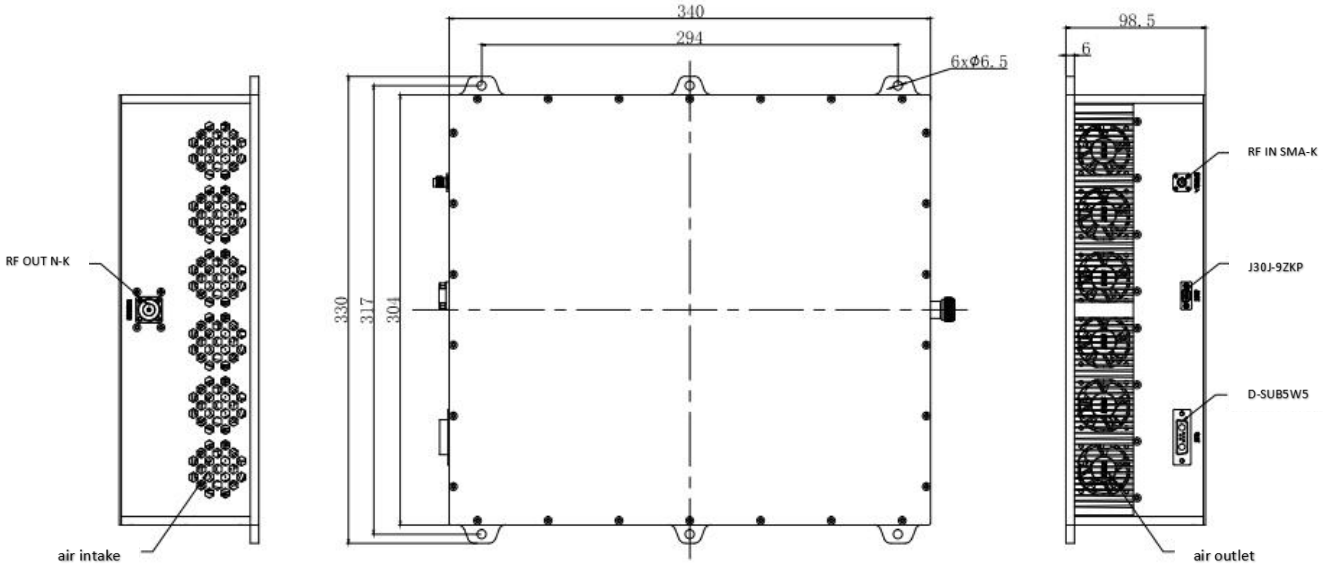
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-2G-18G-100-HS



SUB-5W5 Define:

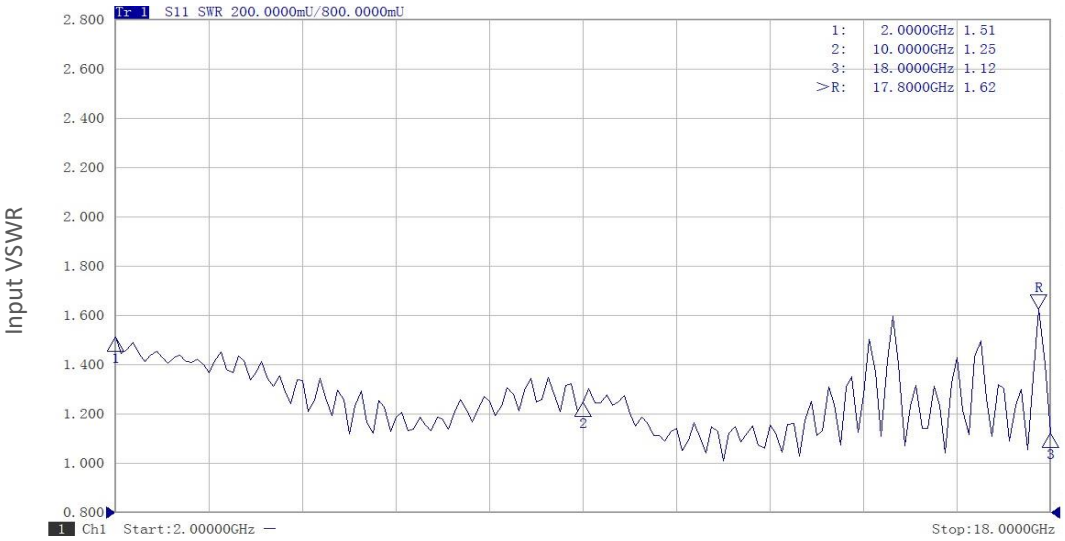
Pin	Function
A1-A2	+28 V
A3-A5	GND

Ordering Information:

Base Number	Description	Optional
PA-2G-18G-100-HS	Power Amplifier, 2-18GHz, Gain:50dB,Psat:100W,+28V DC	With Heatsink

Typical Performance Data:

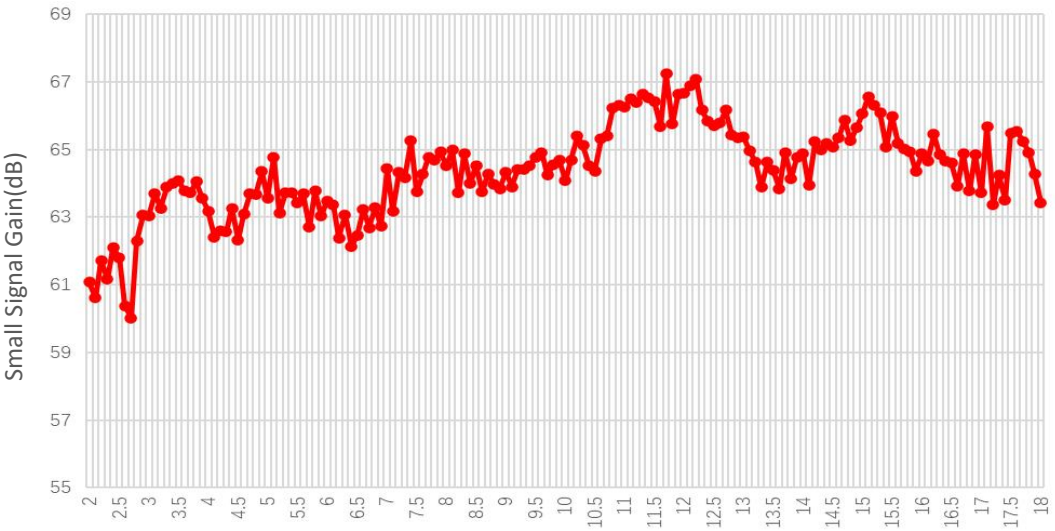
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Small Signal Gain vs Frequency



Small Signal 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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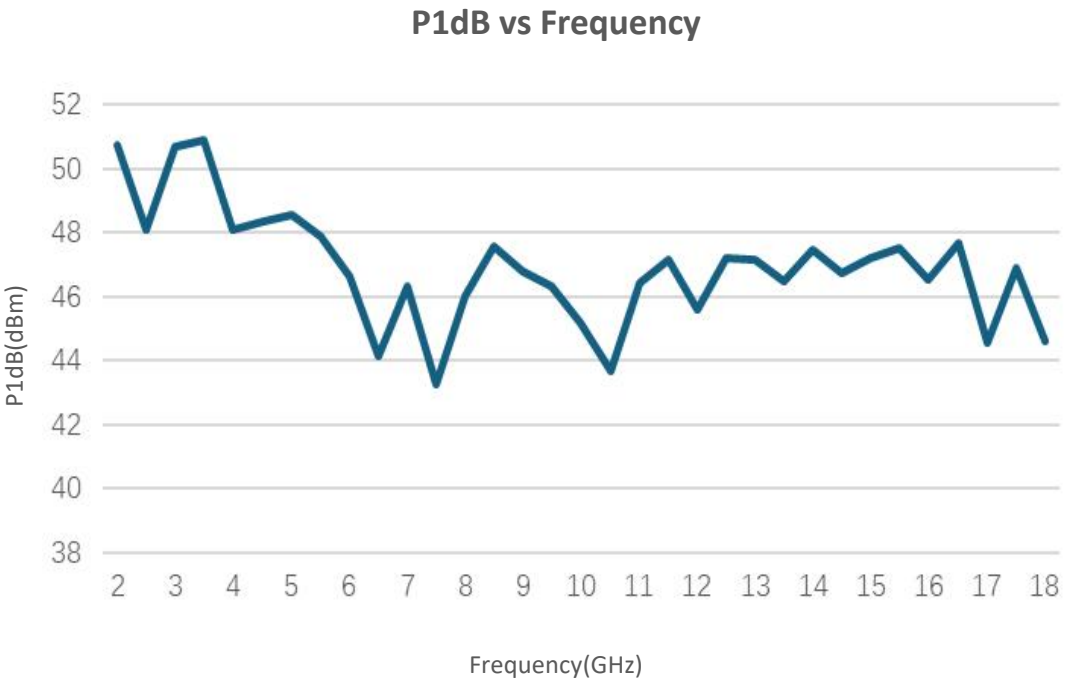

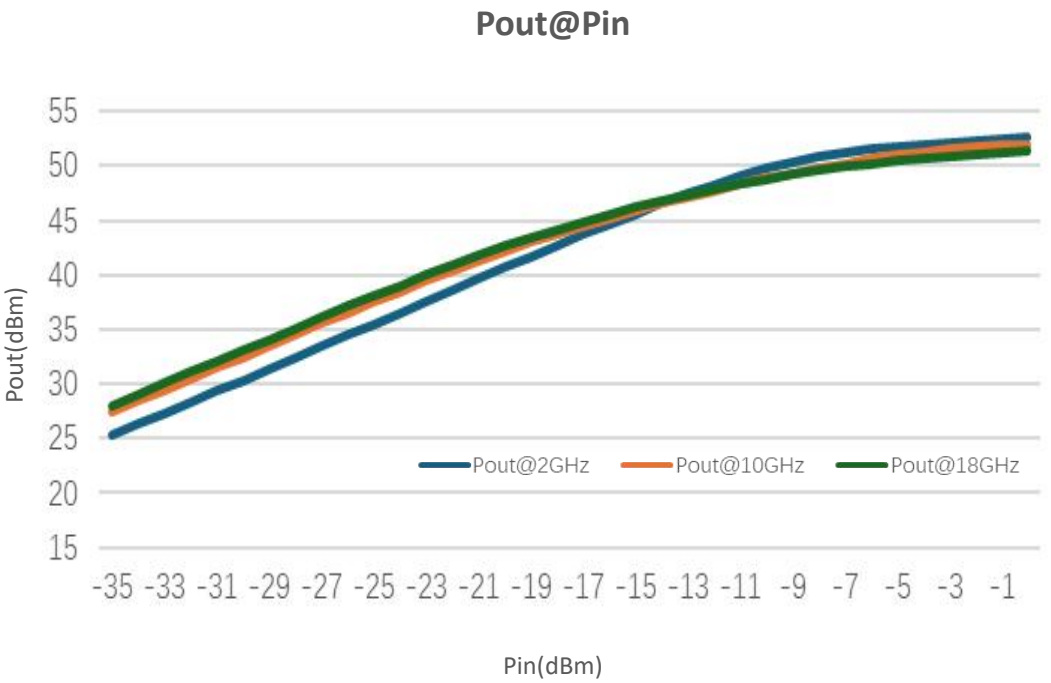

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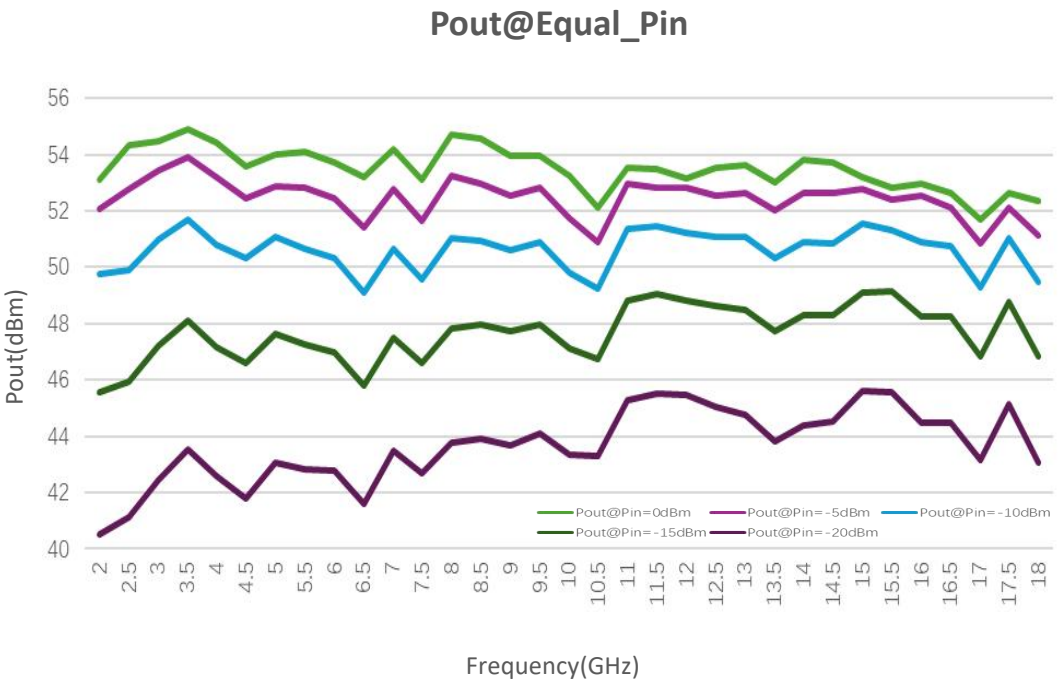

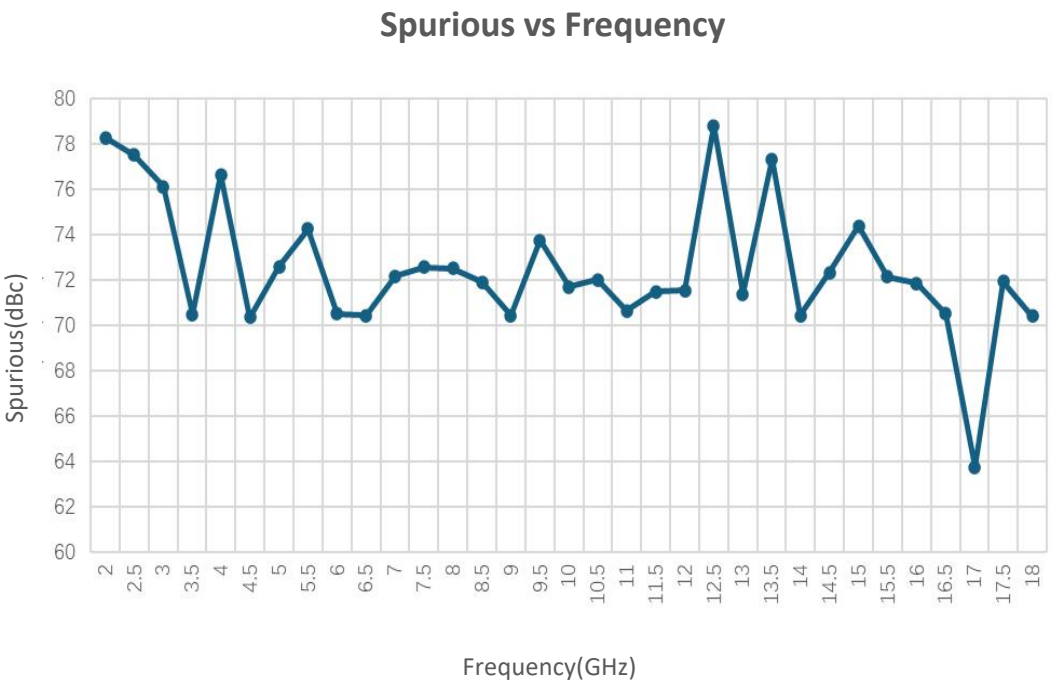

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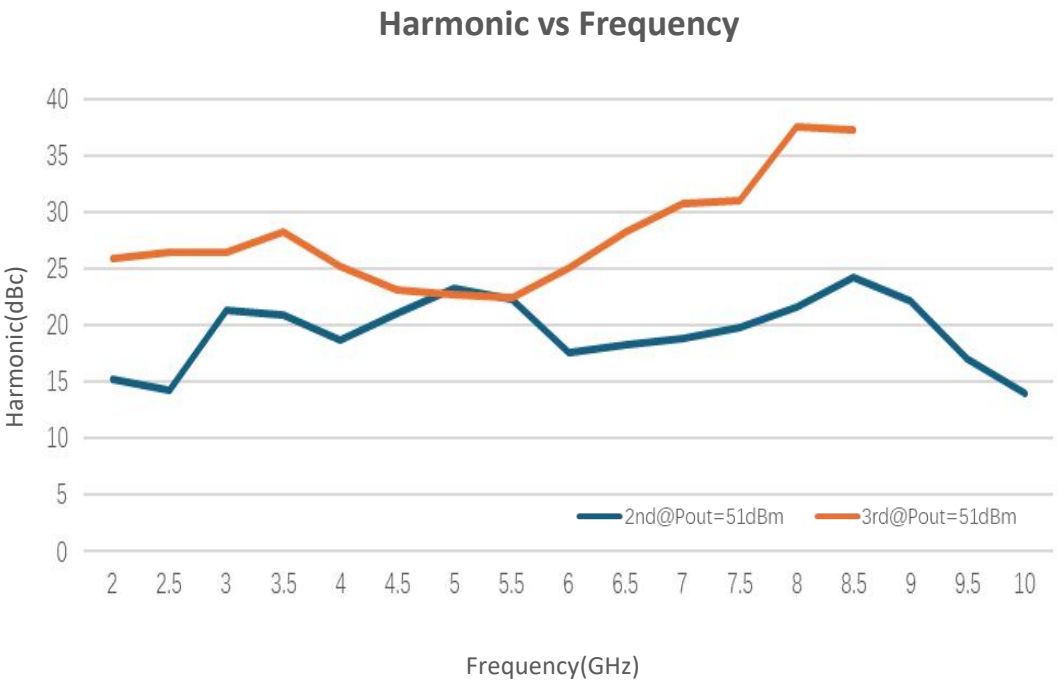

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