



Power Amplifier

Model: PA-6G-18G-2-W

2-27GHz 2W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 6-18GHz
- High output power at saturation, 2W Min.
- High gain, 35dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-6G-18G-2-W is a power amplifier with a minimum small signal gain of 35 dB and a minimum Psat of 2W across the frequency range of 6 to 18GHz. The DC power requirement for the amplifier is +28 V DC/1.1 A. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	6		18	GHz
Small Signal Gain	35			dB
Output Psat	33			dBm
Spurious			-50	dBc
Harmonic			-10	dBc
Input VSWR			2.0	:1
DC Voltage		+28		V DC
DC Supply Current		1.1		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Altitude	30,000	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*11.5(Without heatsink) 150*127*74.5(With heatsink)	mm

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

Absolute Maximum Ratings:

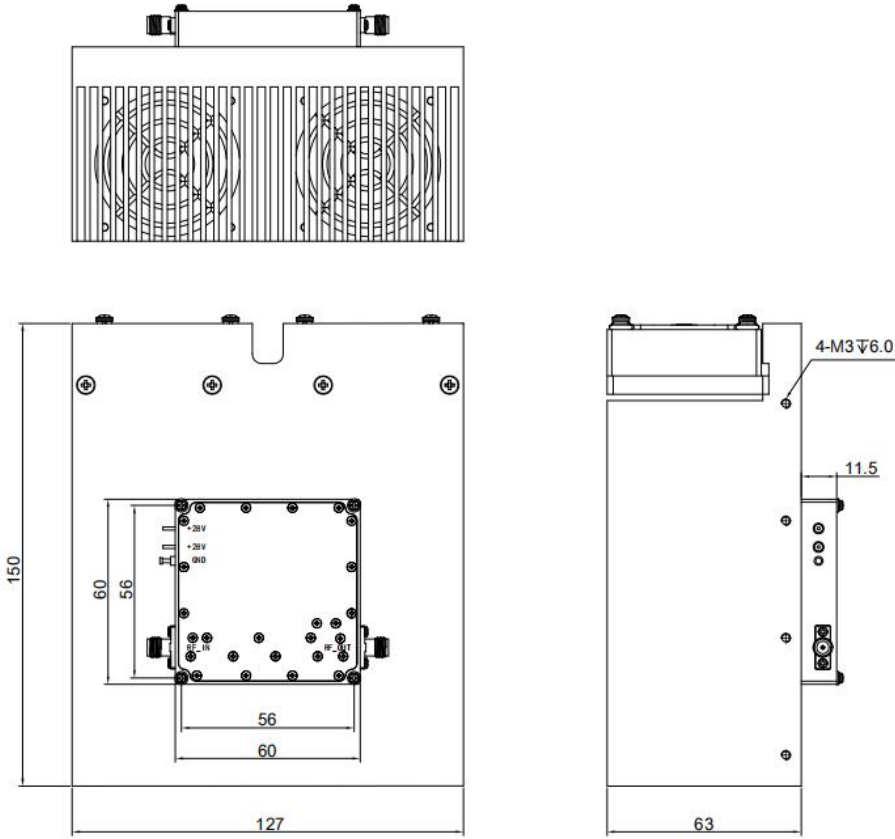
Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-6G-18G-2-W



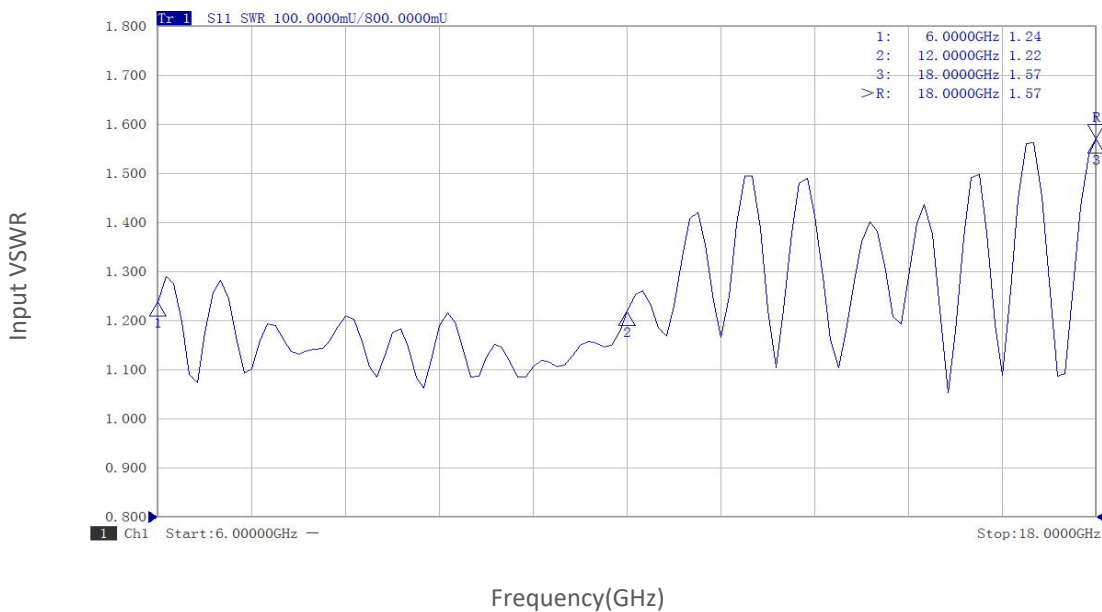
Ordering Information:

Base Number	Description	Optional
PA-6G-18G-2-W	Power Amplifier,6-18GHz, Gain:35dB,Psat:2W,+28V DC	Without Heatsink
PA-6G-18G-2-W-HS	Power Amplifier, 2-27GHz, Gain:35dB,Psat:2W,+28V DC	With Heatsink

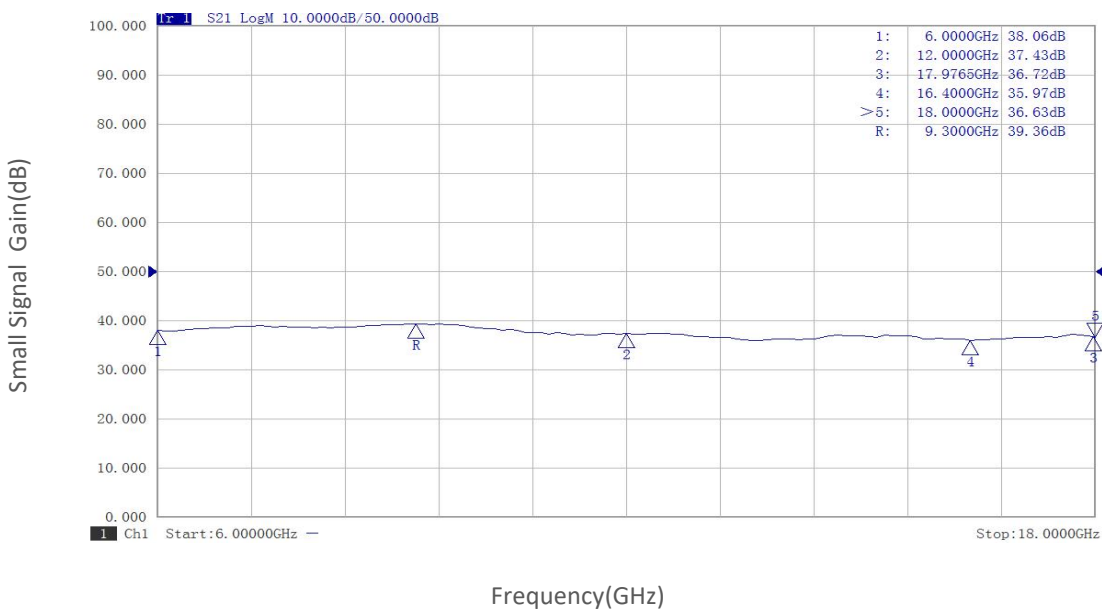


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

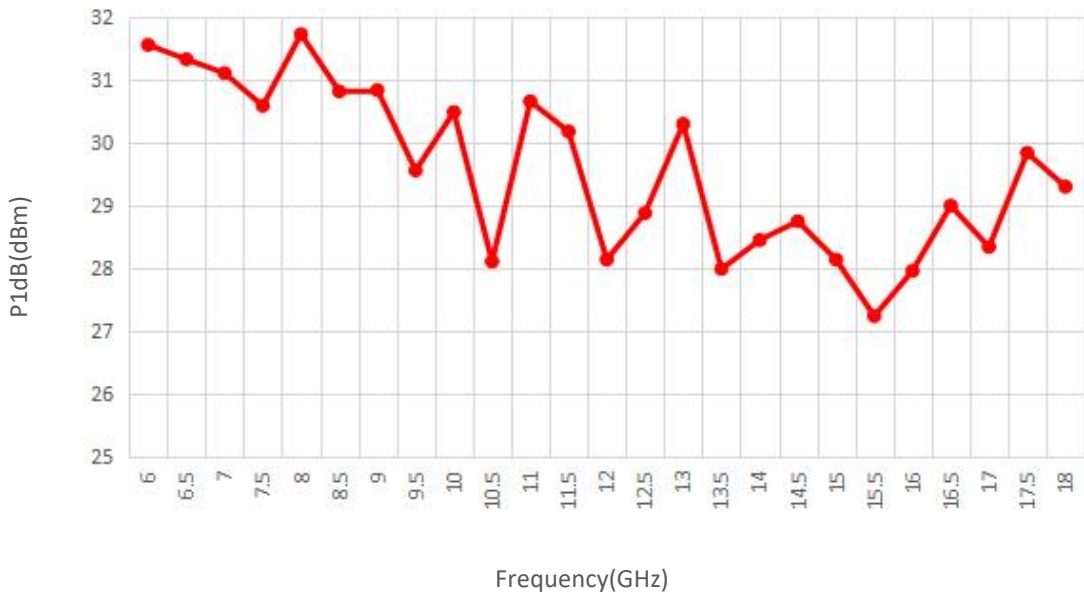


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

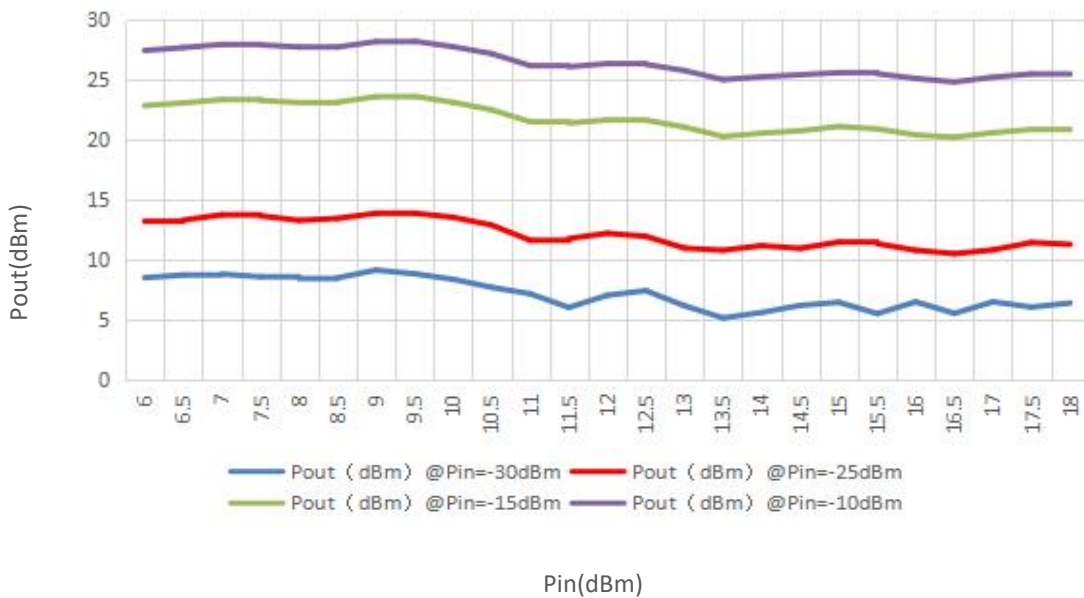


Typical Performance Data:

P1dB vs Frequency



Pout@Equal_Pin

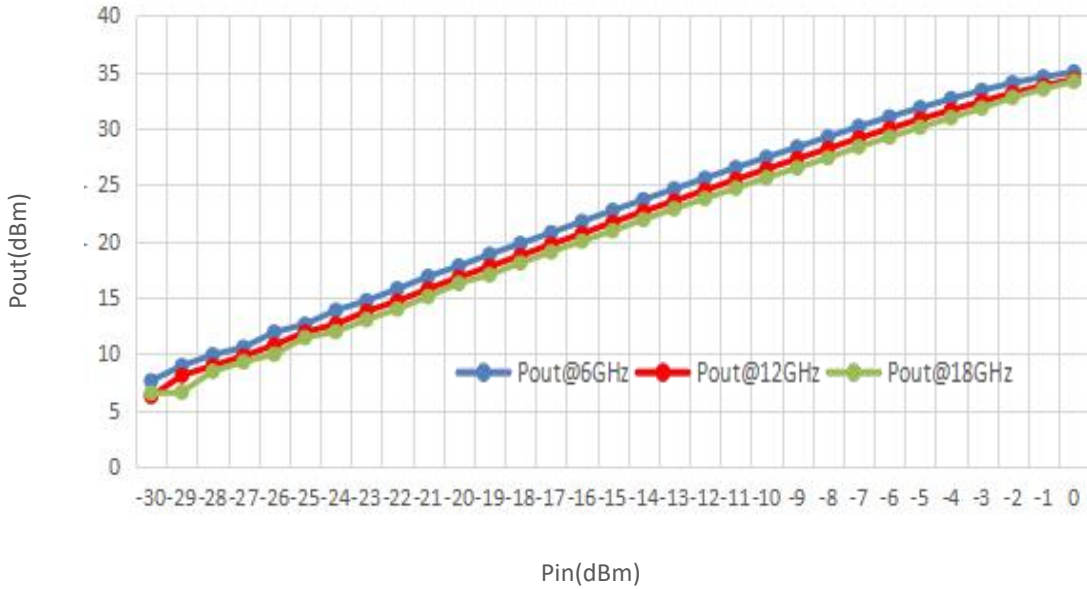


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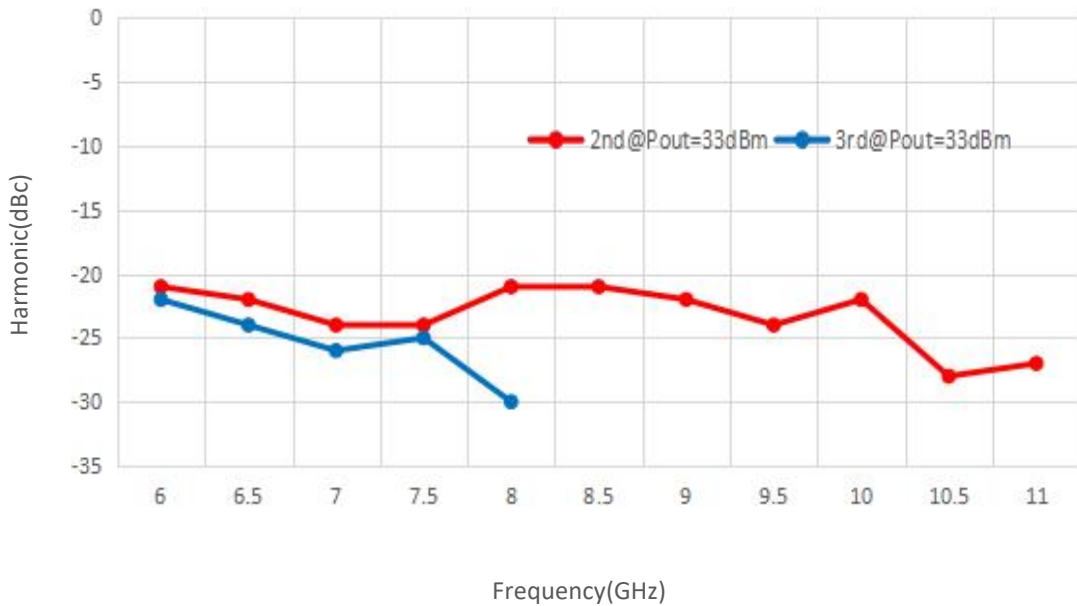


Typical Performance Data:

Pout@Pin



Harmonic vs Frequency

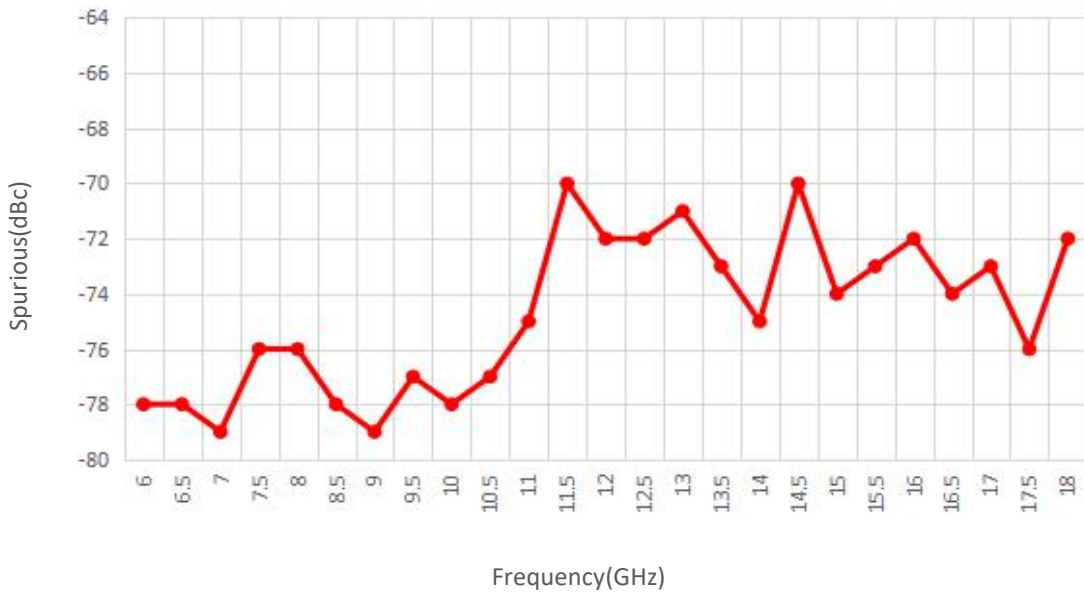


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.



Typical Performance Data:

Spurious vs Frequency



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