Power Amplifier

Model: PA-2G-6G-50

2-6GHz 50W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 2-6GHz
- High output power at saturation, 50W Typ.
- High gain, 45 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-2G-6G-50 is a power amplifier with a typical power gain of 45 dB and a nominal Psat of 50W across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/9 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	2		6	GHz
Power Gain	43	45		dB
Gain Flatness		±3		dB
Output P1dB		45		dBm
Output Psat		47		dBm
Harmonic		-15	-13	dBc
Input VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		9		A
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/SMA Female	
DC Bias	Solder Pin	
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	1500*90*20	mm

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

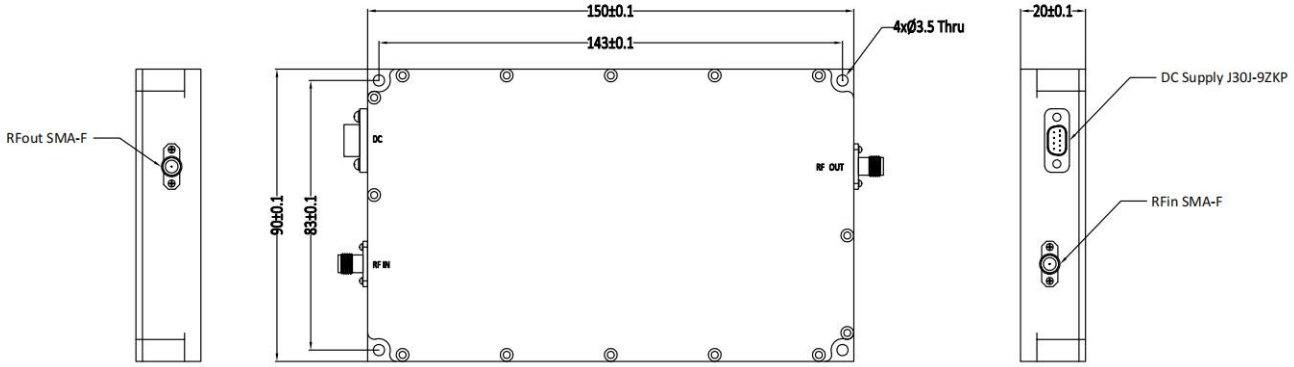
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-2G-6G-50

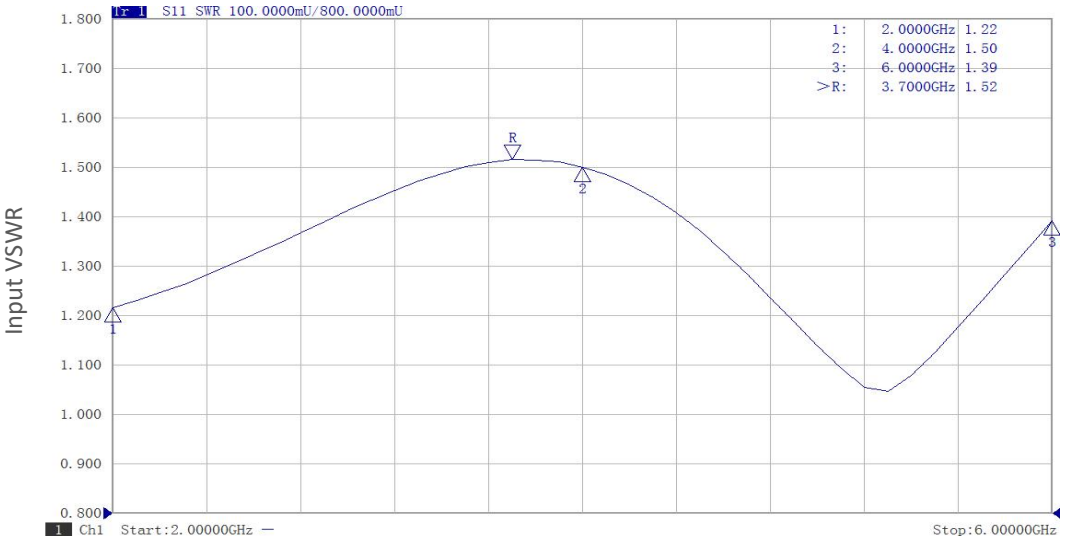


Ordering Information:

Base Number	Description	Optional
PA-2G-6G-50	Power Amplifier, 2-6GHz, Gain:45dB,Psat:50W,+28V DC	Without Heatsink
PA-2G-6G-50-HS	Power Amplifier, 2-6GHz, Gain:45dB,Psat:50W,+28V DC	With Heatsink

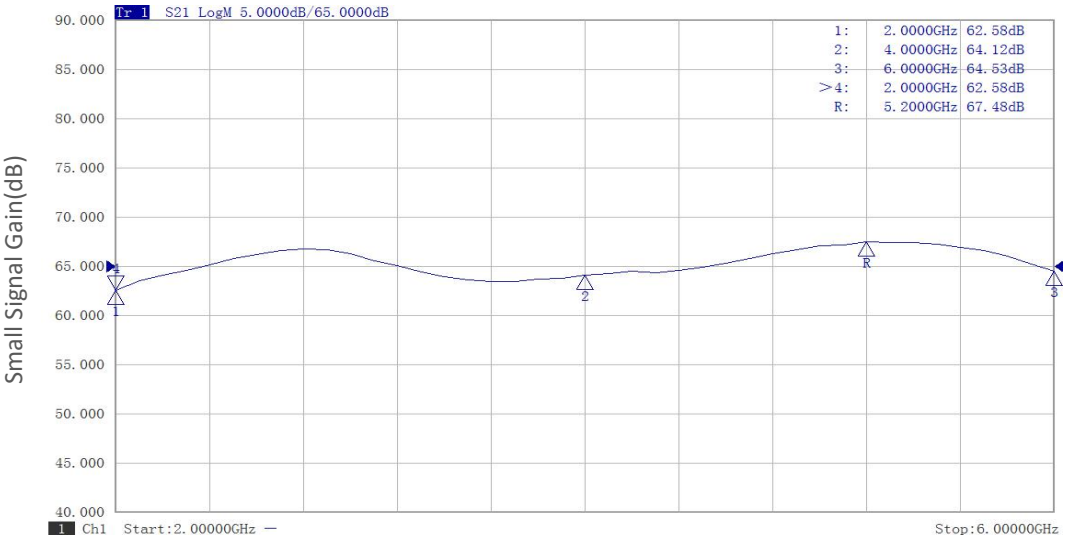
Typical Performance Data:

Input VSWR vs Frequency



Frequency(GHz)

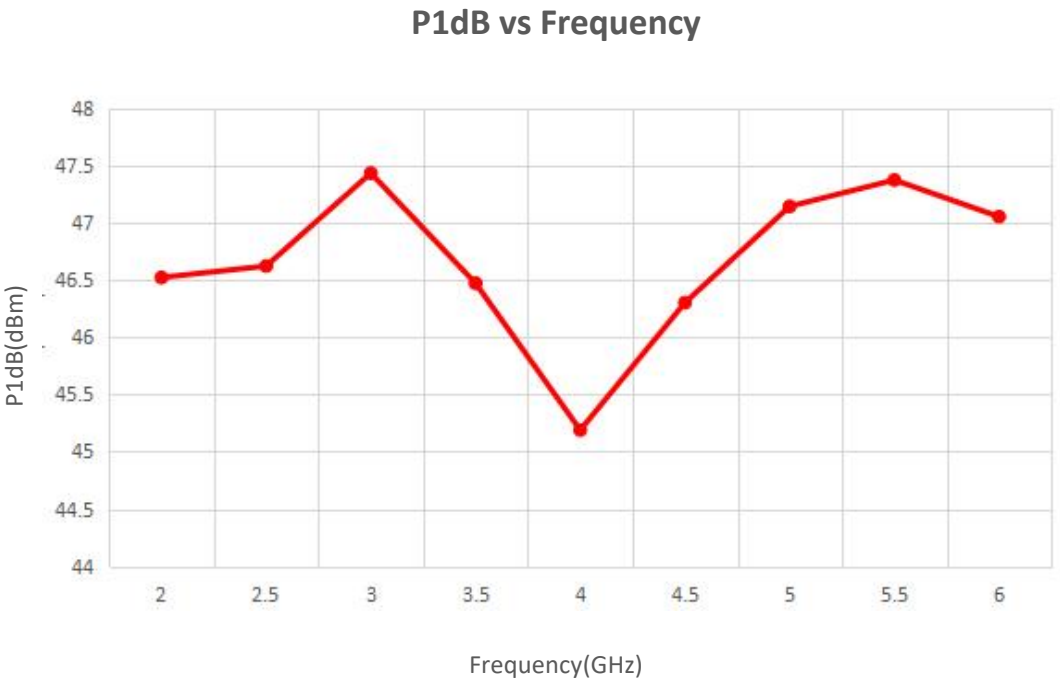
Small Signal Gain vs Frequency

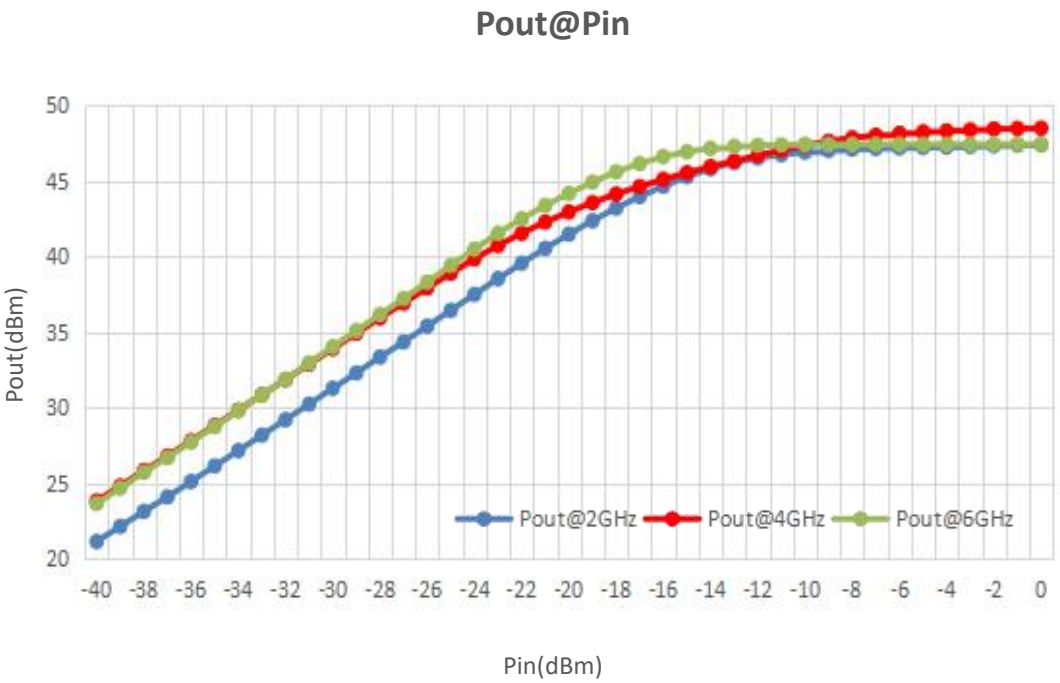


Frequency(GHz)

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.

Typical Performance Data:

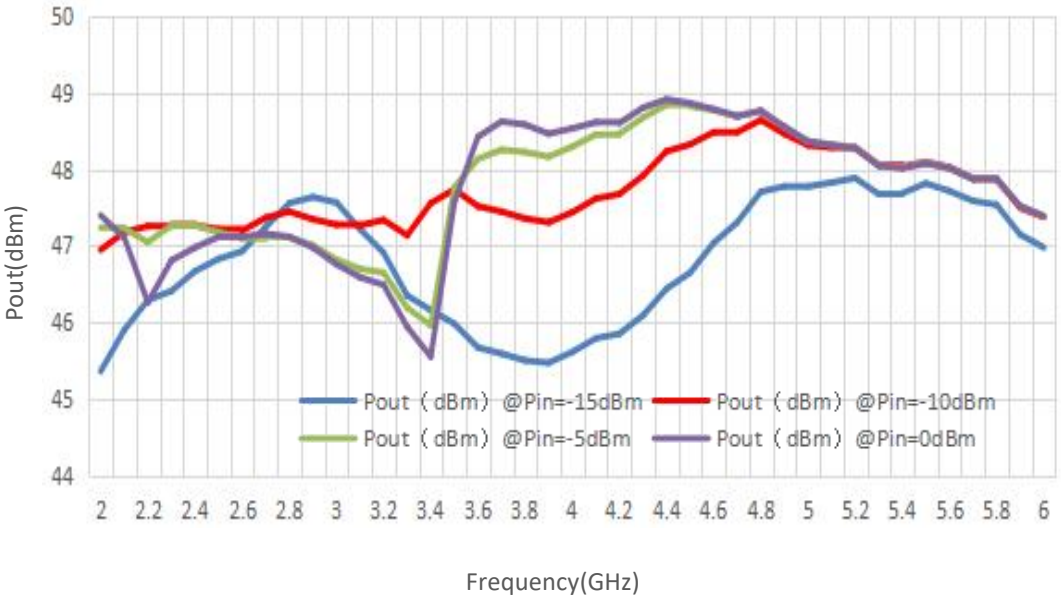




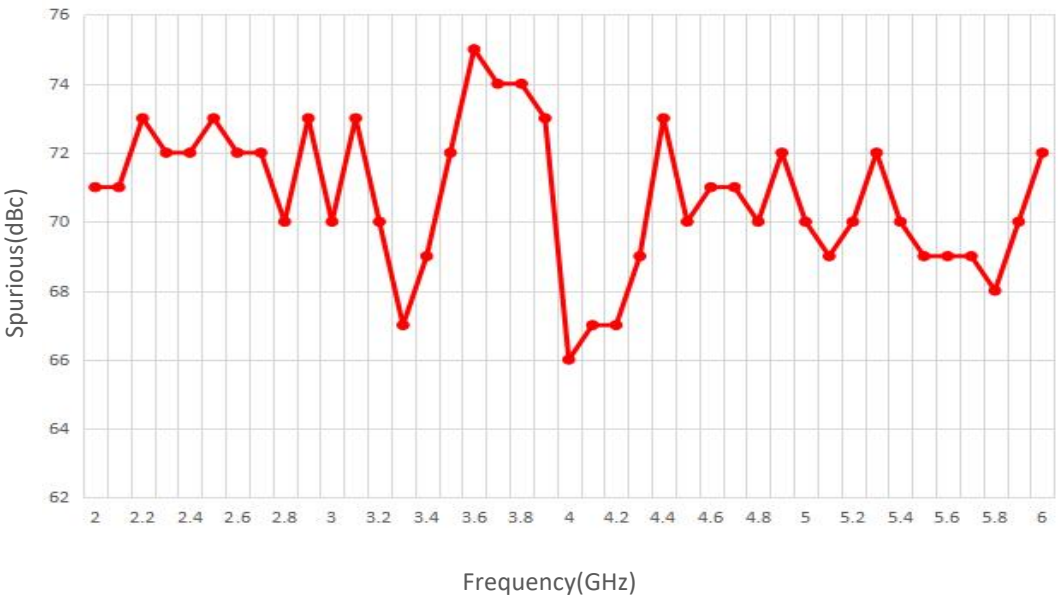
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Pout@Equal_Pin

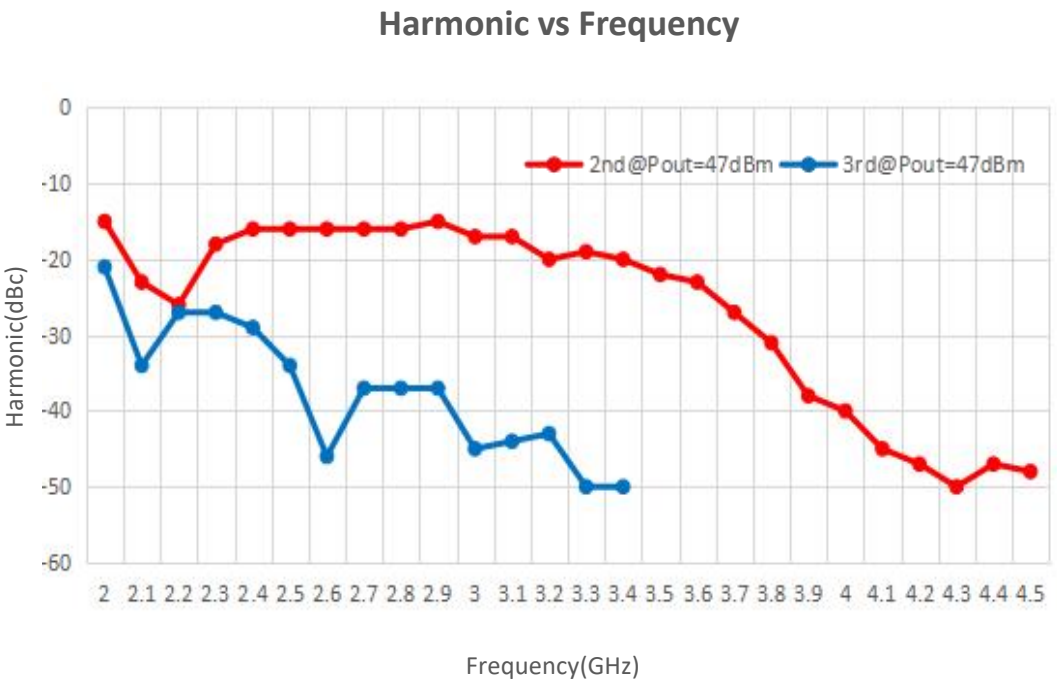


Spurious vs Frequency



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