



Power Amplifier

Model: PA-2G-6G-100

2-6GHz 100W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 2-6GHz
- High output power at saturation, 100W Min.
- High gain, 52 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-2G-6G-100 is a power amplifier with a typical small signal gain of 52 dB and a minimum P_{sat} of 100W across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/3 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	2		6	GHz
Small Signal Gain	50	52		dB
Gain Flatness		±3	±5	dB
Output P1dB	47			dBm
Output Psat	50			dBm
Harmonic		-12		dBc
Input VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		3	22	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-30°C to +60°C	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	DSUB-9	Pin1~5:+28V Pin6~9:GND
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	220*140*25	mm
Weight	250	g

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

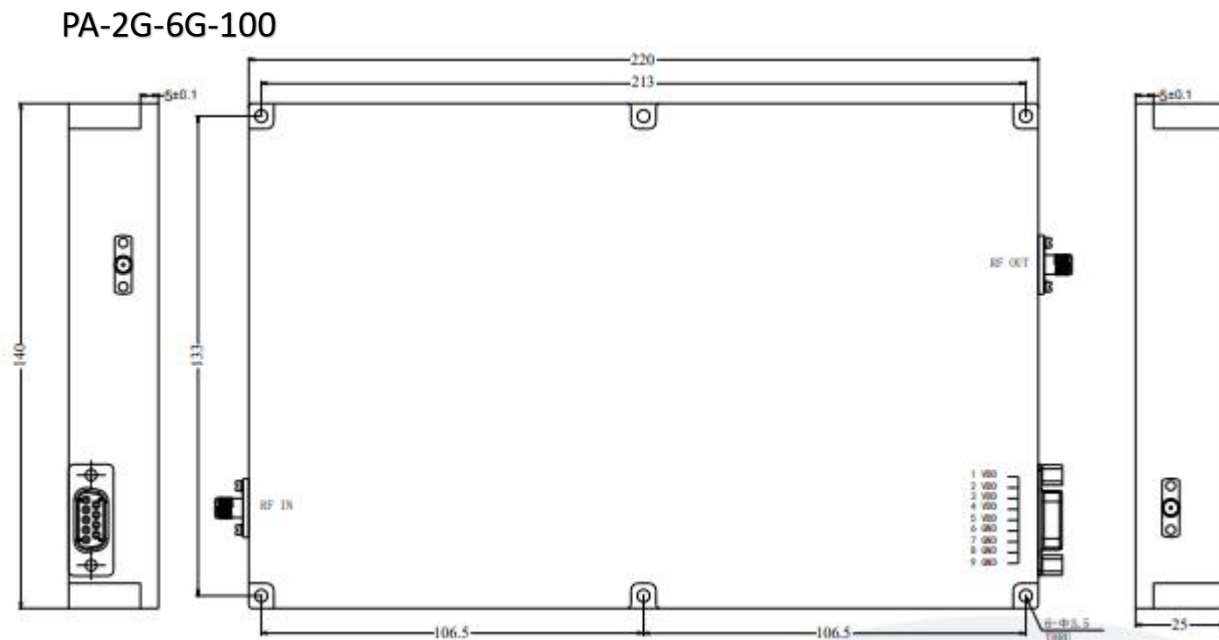
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm



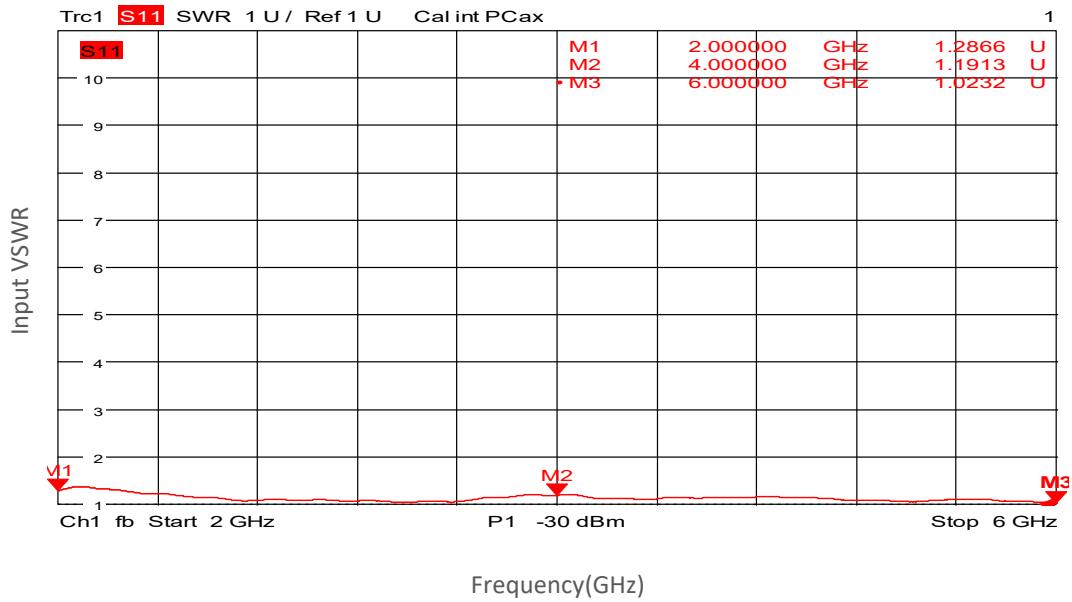
Ordering Information:

Base Number	Description	Optional
PA-2G-6G-100	Power Amplifier, 2-6GHz, Gain:52dB,Psat:100W,+28V DC	Without Heatsink
PA-2G-6G-100-HS	Power Amplifier, 2-6GHz, Gain:52dB,Psat:100W,+28V DC	With Heatsink

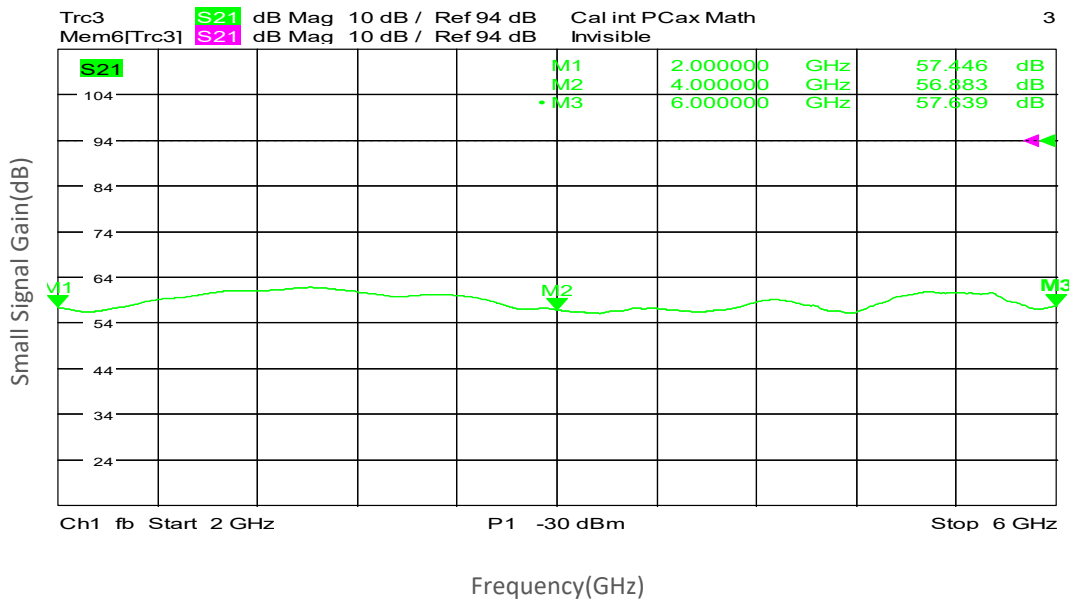


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

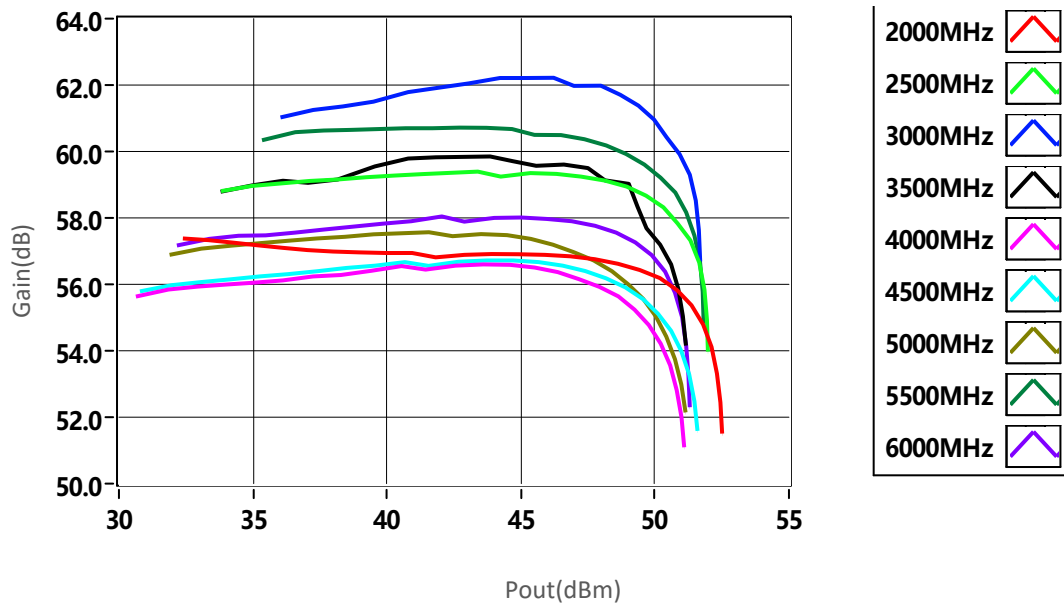


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

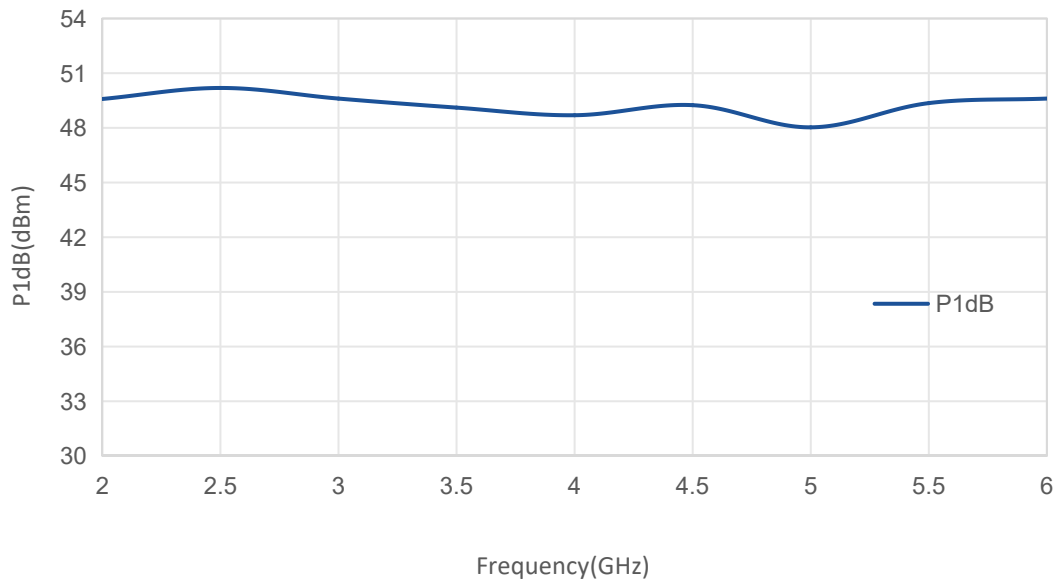


Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency

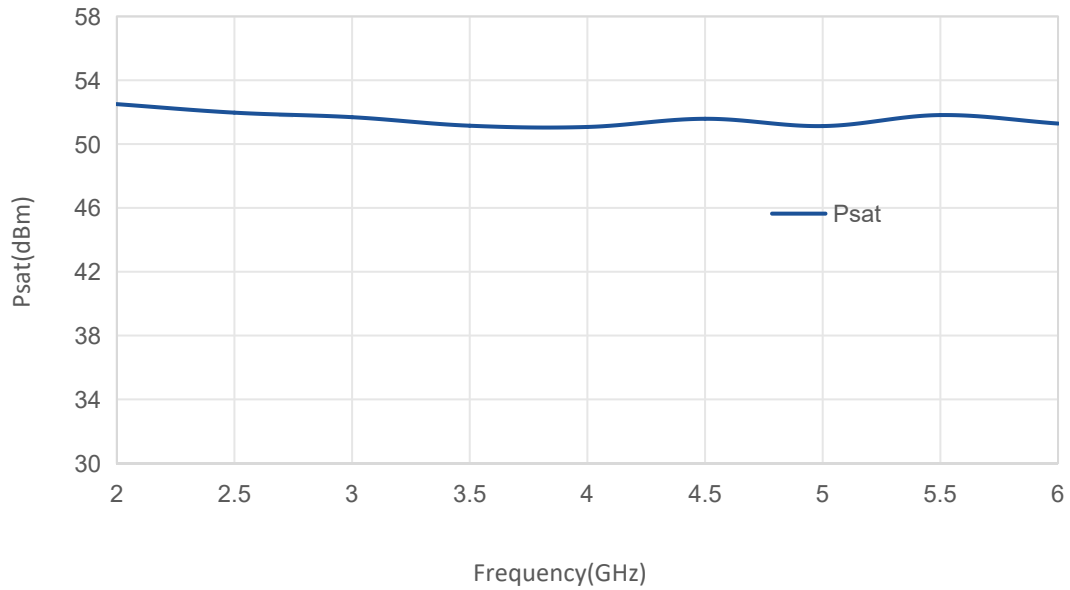


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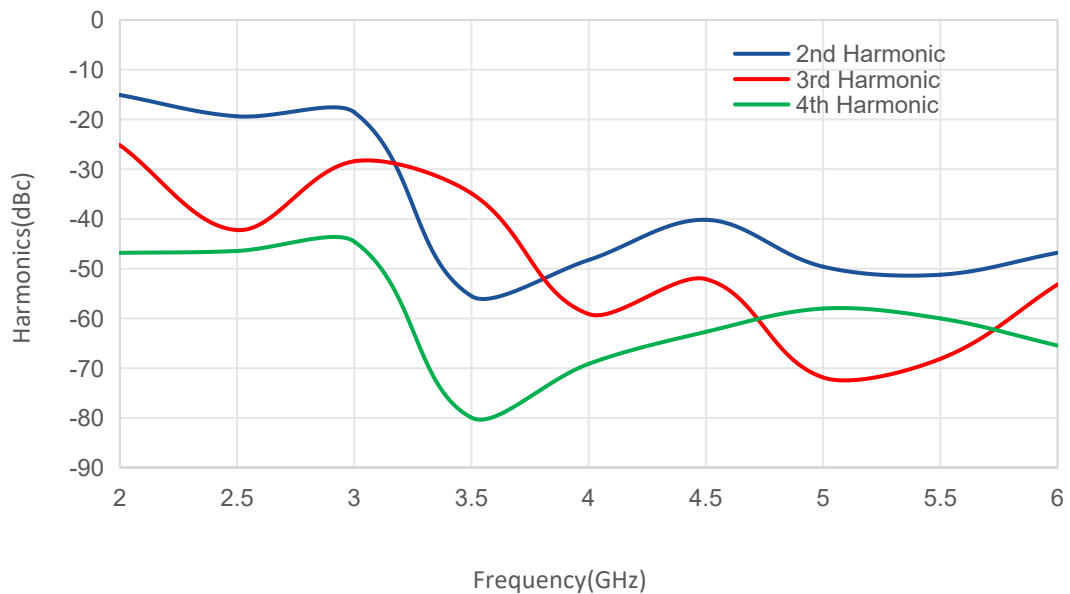


Typical Performance Data:

Psat vs Frequency



Harmonics VS Frequency



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