Power Amplifier

Model: PA-2G-27G-2

2-27GHz 2W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 2-27GHz
- High output power at saturation, 2W Min.
- High gain, 40dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-2G-27G-2 is a power amplifier with a typical -power gain of 40 dB and a minimum Psat of 2W across the frequency range of 2 to 27GHz. The DC power requirement for the amplifier is +18 VDC/2 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	2		27	GHz
Power Gain	33			dB
Small-signal Gain@2-8G		40		dB
Power Gain Flatness		±3		dB
Output P1dB		30		dBm
Output Psat	33	34		dBm
Nosie Figure		4		dB
Spurious			-60	dBc
Harmonic			-10	dBc
Input VSWR			2.0	:1
Output VSWR		2.0		:1
DC Voltage		+18		V DC
DC Supply Current			2	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	2.92mm Female/2.92mm Female	
DC Power Interface	J30J-9ZKP	
Altitude	50,000	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	500	g

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

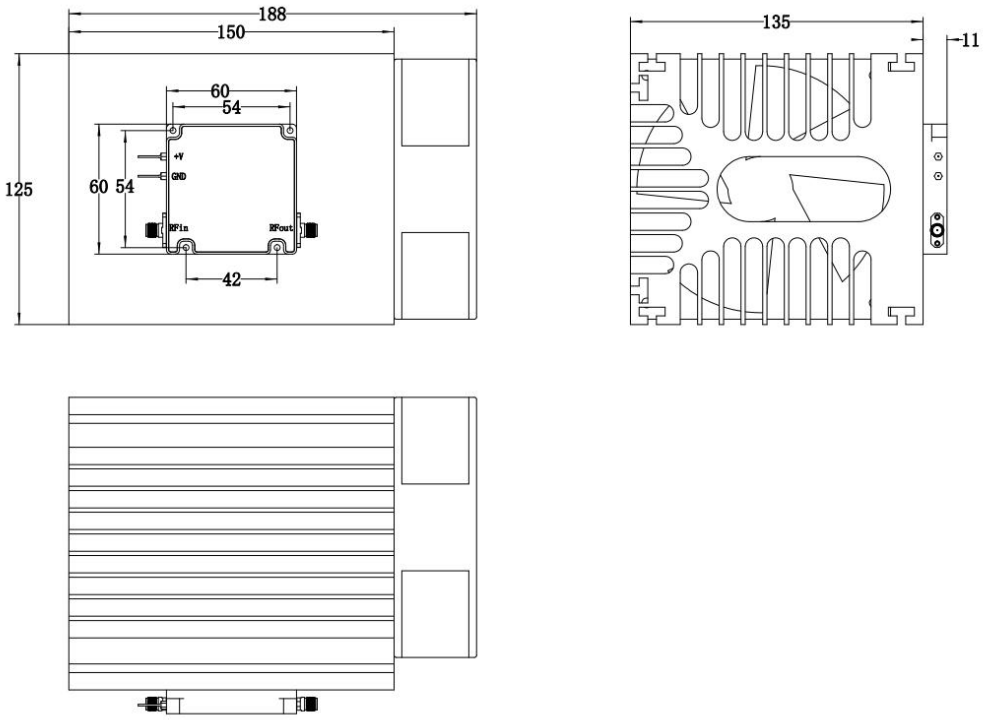
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

PA-2G-27G-2

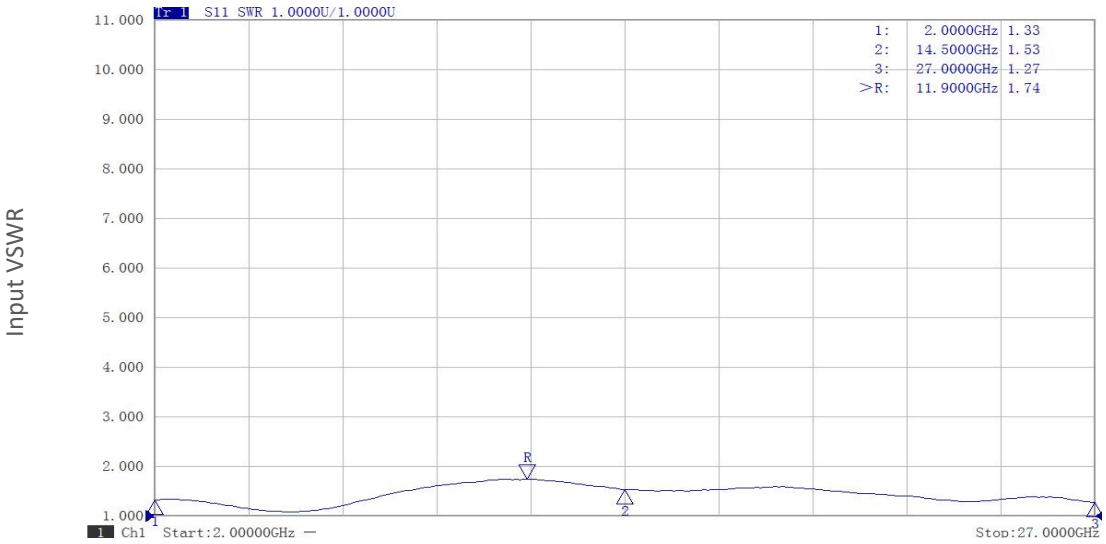


Ordering Information:

Base Number	Description	Optional
PA-2G-27G-2	Power Amplifier, 2-27GHz, Gain:33dB,Psat:2W,+18V DC	Without Heatsink
PA-2G-27G-2-HS	Power Amplifier, 2-27GHz, Gain:33dB,Psat:2W,+18V DC	With Heatsink

Typical Performance Data:

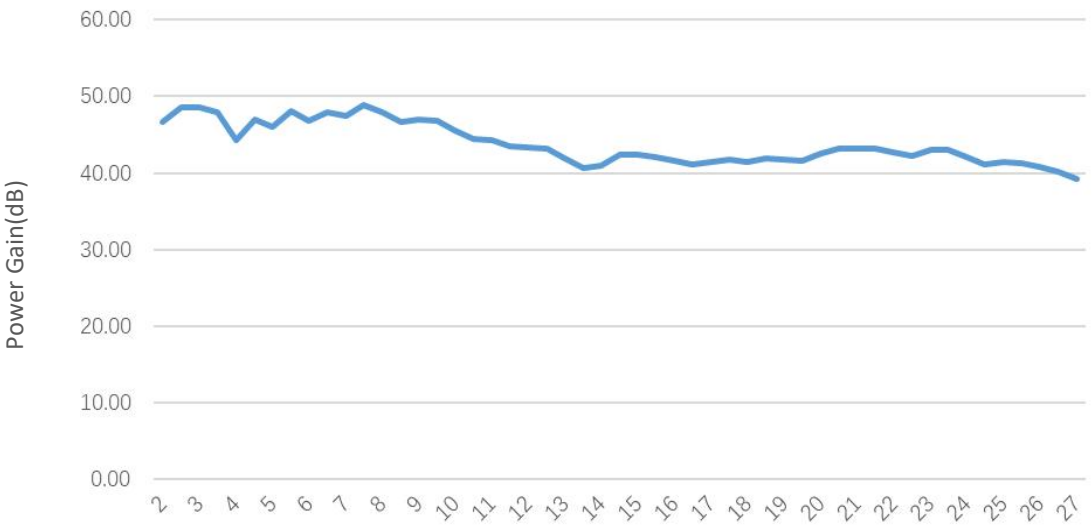
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Power Gain vs Frequency



Power 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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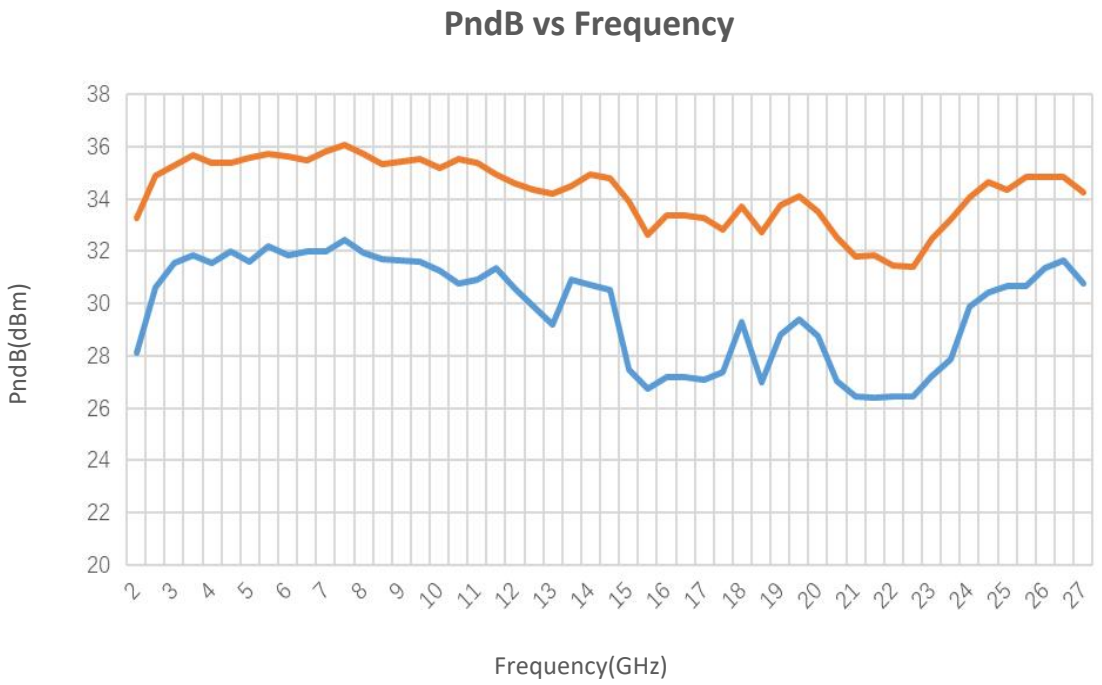

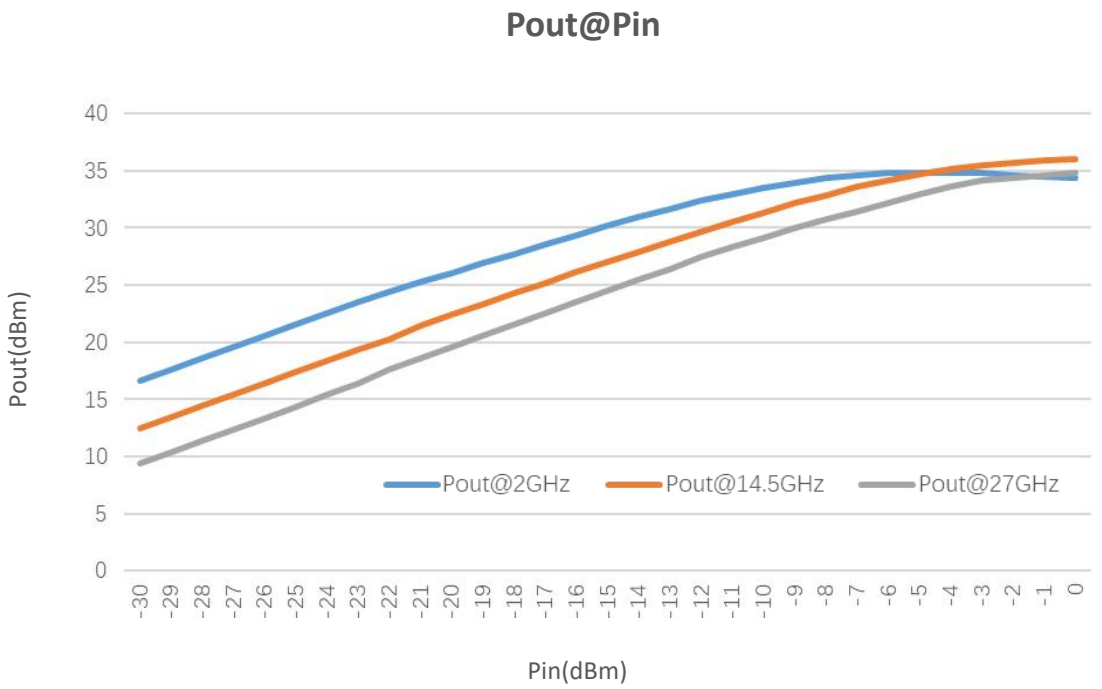

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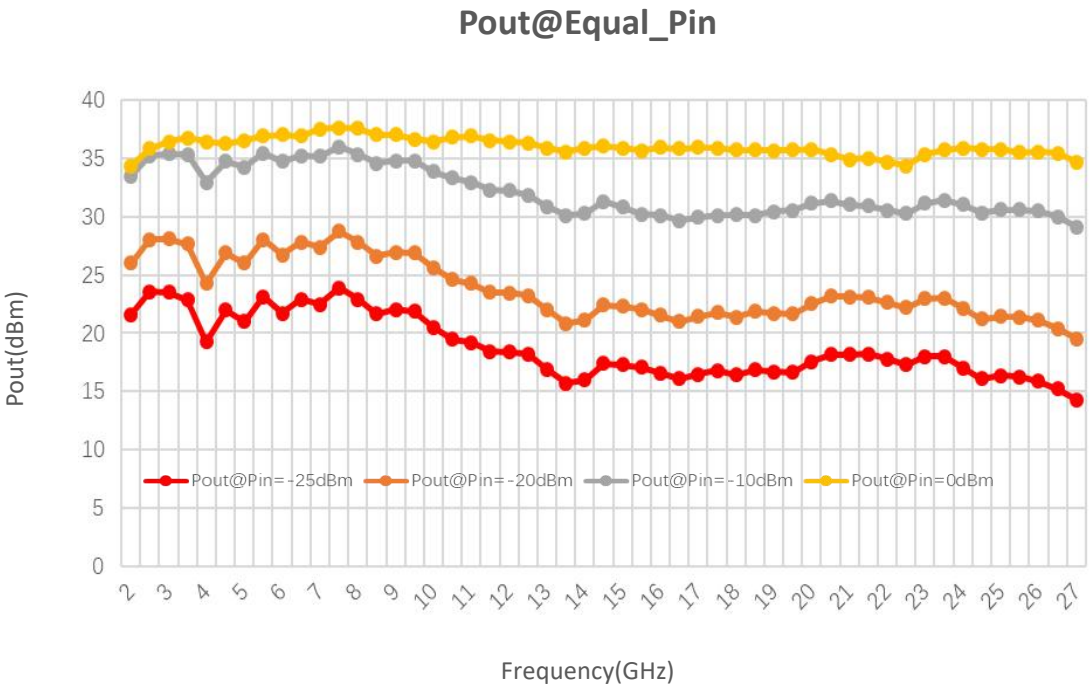

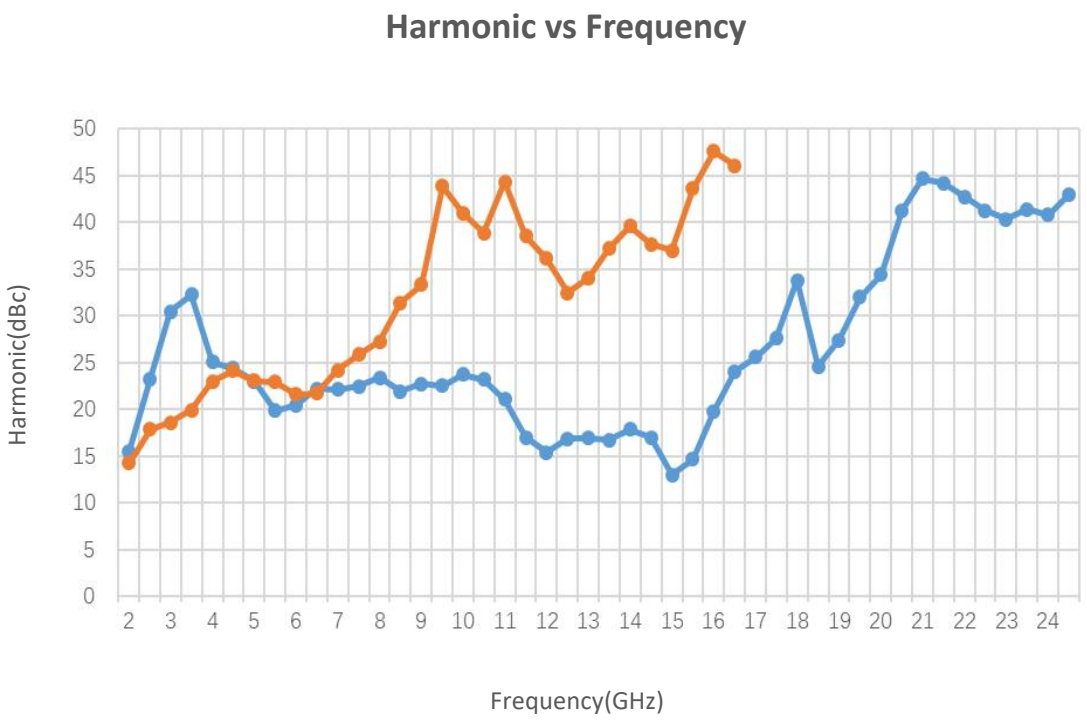

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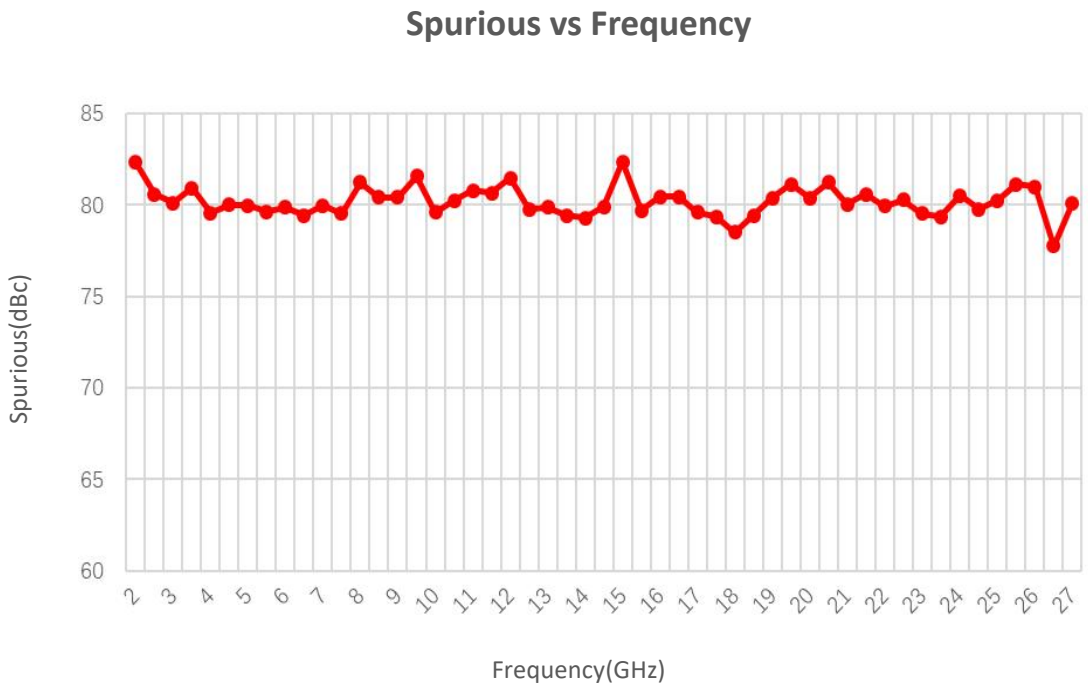

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