Power Amplifier

Model: PA-47G-52G-60mW

47-52GHz 60mW CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 47-52GHz
- Input 1 dB Gain Compression Point, 60mW Min.
- High gain, 20dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-47G-52G-60mW is a power amplifier with a minimum gain of 20 dB and a minimum P1dB of 60mW across the frequency range of 47 to 52GHz. The DC power requirement for the amplifier is +12 VDC/0.7 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	47		52	GHz
Gain	20			dB
Output P1dB	18			dBm
Spurious			-50	dBc
DC Voltage		+12		V DC
DC Supply Current			0.7	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	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
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*65*11	mm
Weight	500	g

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

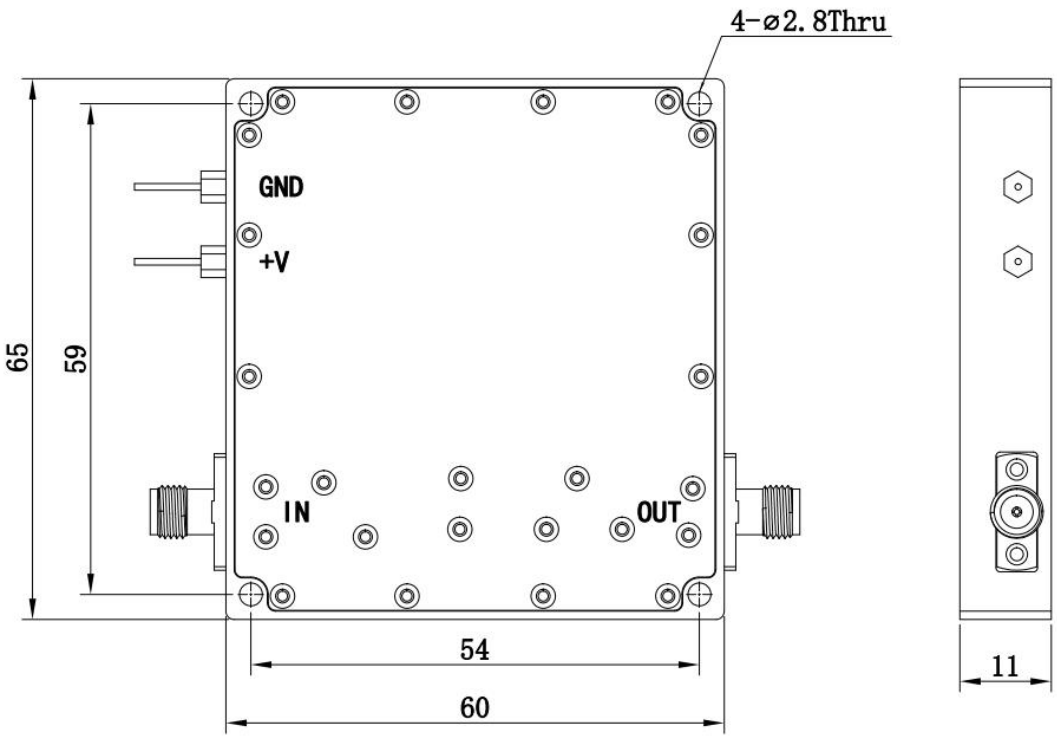
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-47G-52G-60mW

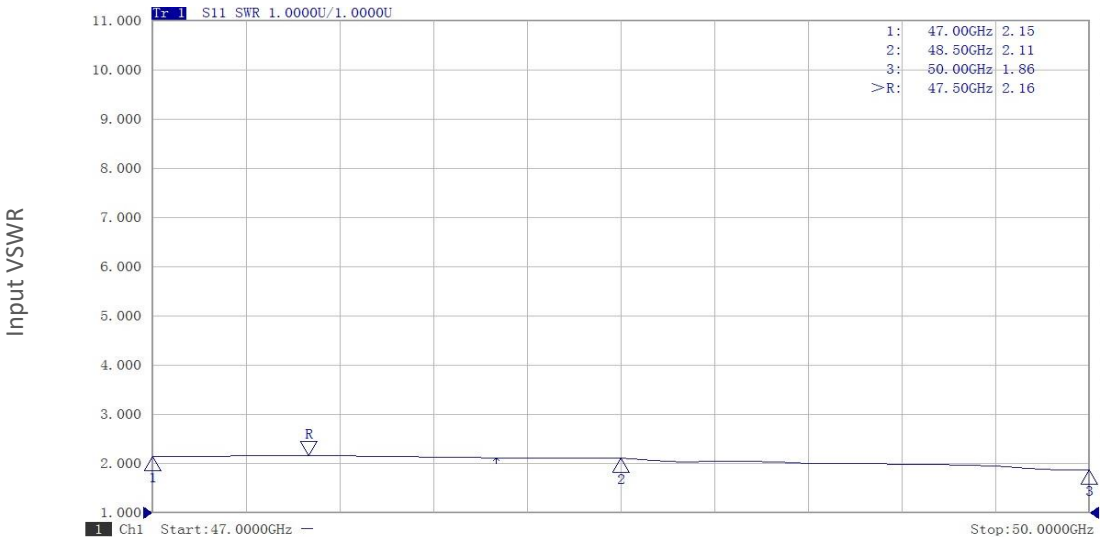


Ordering Information:

Base Number	Description	Optional
PA-47G-52G-60mW	Power Amplifier,47-52GHz, Gain:20dB,P1dB:60mW,+12V DC	Without Heatsink
PA-47G-52G-60mW-HS	Power Amplifier,47-52GHz, Gain:20dB,P1dB:60mW,+12V DC	With Heatsink

Typical Performance Data:

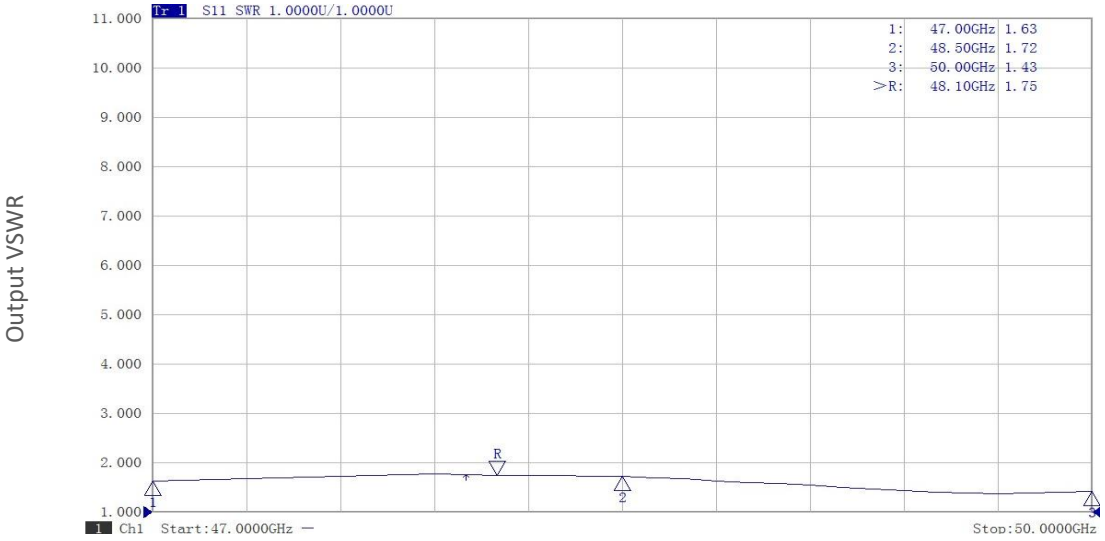
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Output VSWR vs Frequency

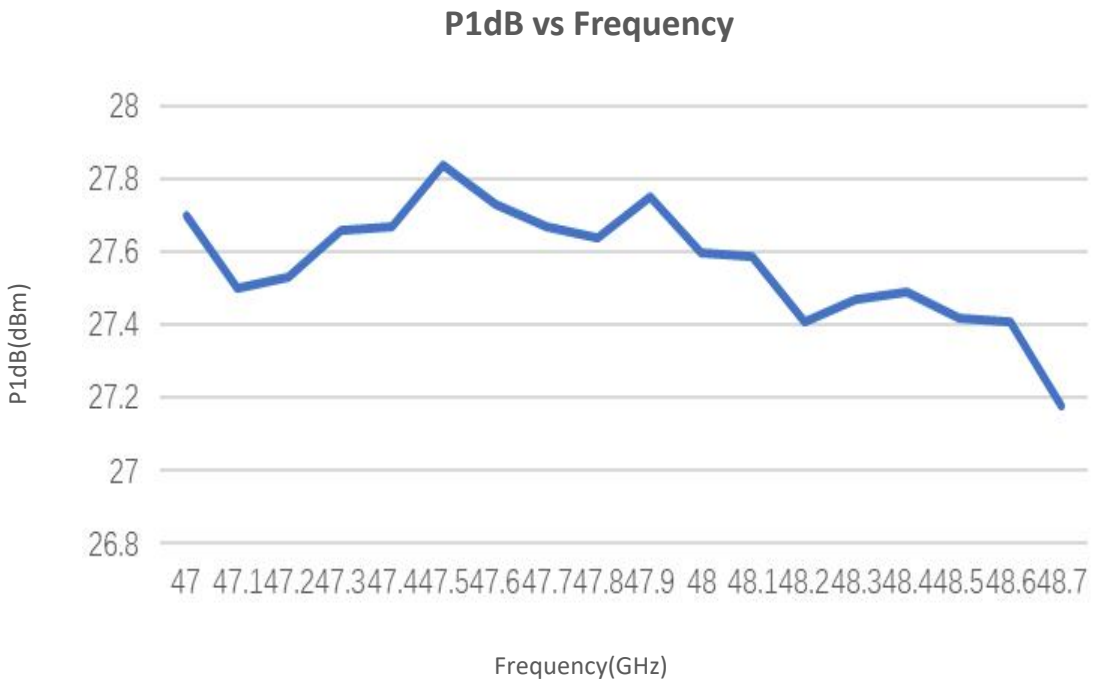


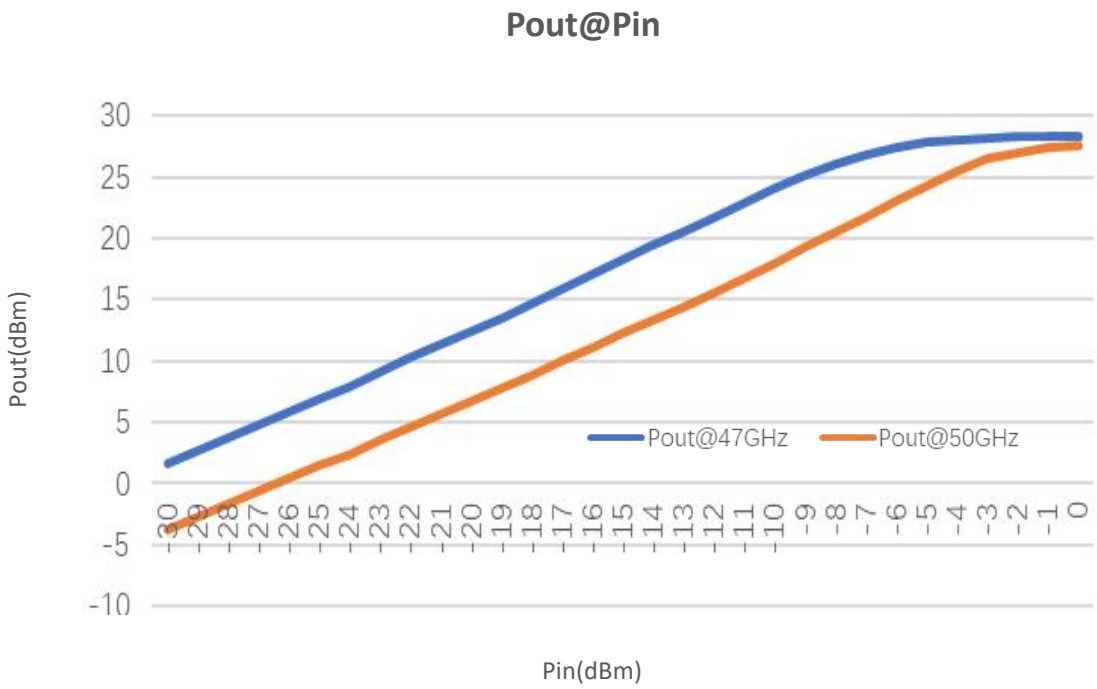
Output VSWR

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:





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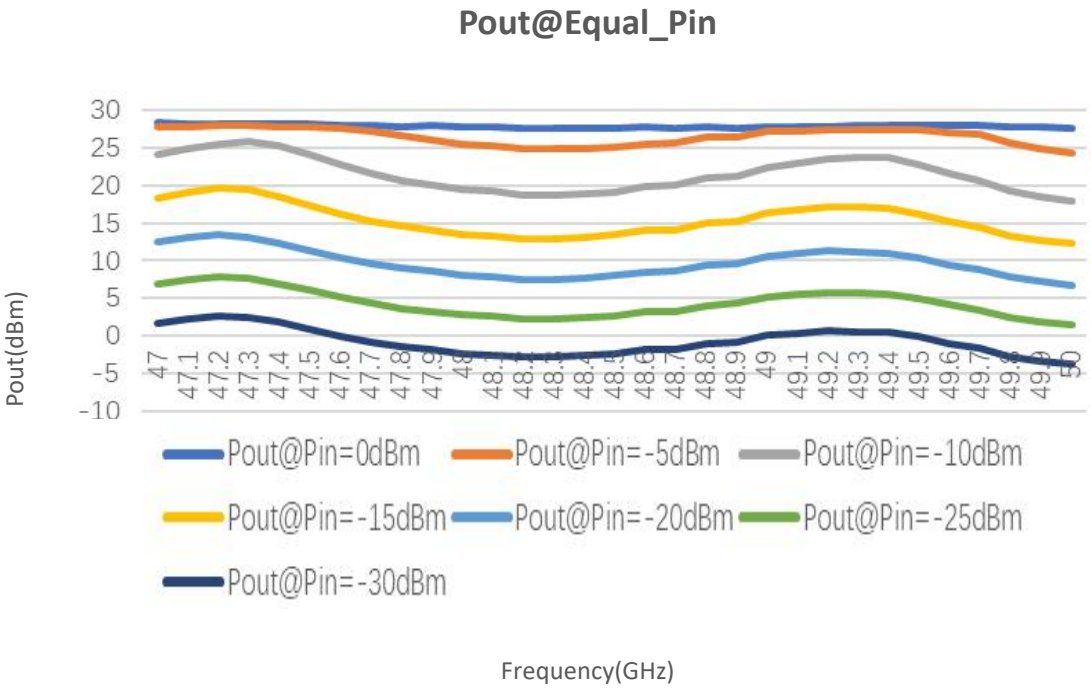

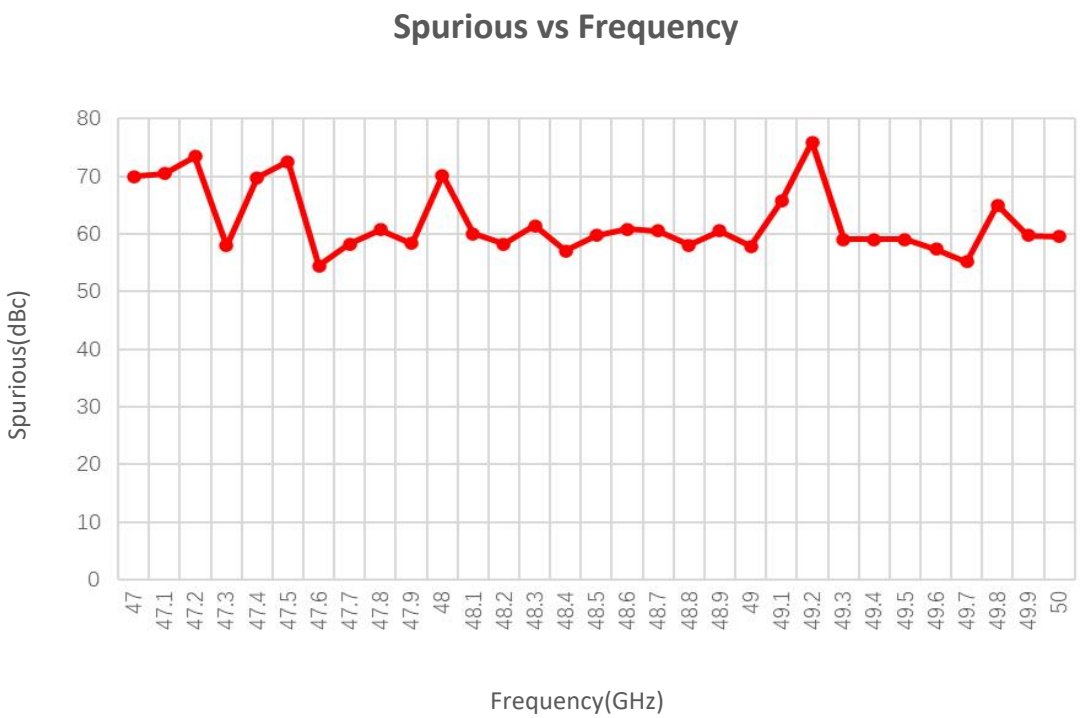

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