



Power Amplifier

Model: PA-18G-26G5-50

18-26.5GHz 50W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 18-26.5GHz
- High output power at saturation, 50W Min.
- High gain, 47 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-18G-26G5-50 is a power amplifier with a minimum power gain of 47 dB and a minimum Psat of 50W across the frequency range of 18 to 26.5 GHz. The DC power requirement for the amplifier is +24 VDC/25 A. The input port configuration offers coax adapter structure with 2.92 mm female and output port is WR42.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	18		26.5	GHz
Power Gain	47	50		dB
Gain Flatness		±3.5		dB
Output Psat	47			dBm
Spurious			-50	dBc
2nd Harmonics			-15	dBc
Input VSWR			2	:1
DC Voltage		+24		V DC
DC Supply Current			25	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	2.92 Female WR42	
DC Power Interface	SUB-7W2	
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	300*264*85	mm
Weight	10	Kg

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

Absolute Maximum Ratings:

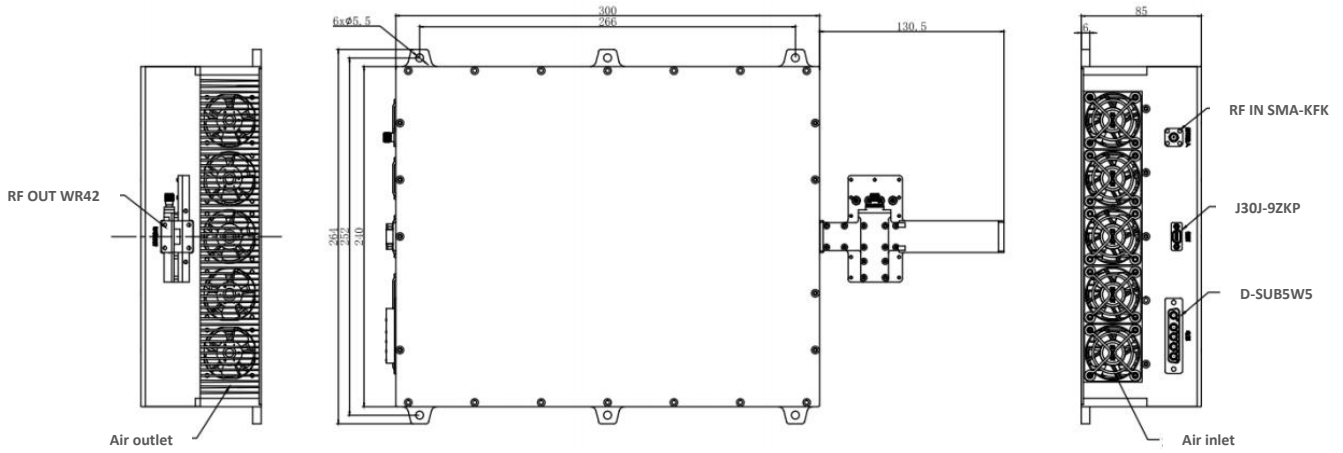
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-18G-26G5-50



SUB-7W5 Define:

Pin	Function
A1-A2	+24V
A3-A5	GND

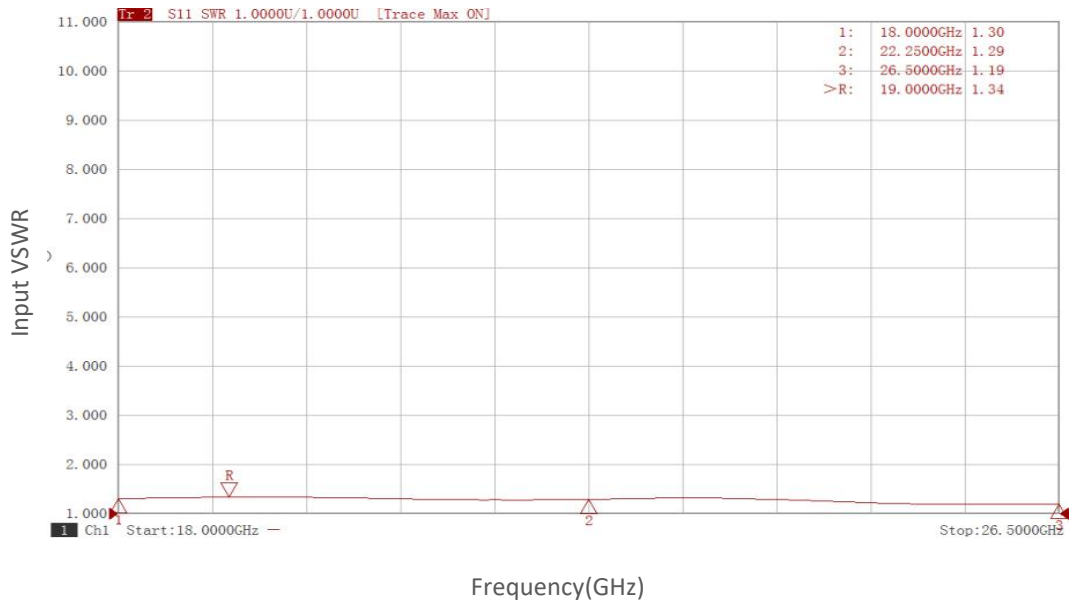
Ordering Information:

Base Number	Description	Optional
PA-18G-26G5-50	Power Amplifier, 18-26.5GHz, Gain:47dB,Psat:50W,+24V DC	With Heatsink

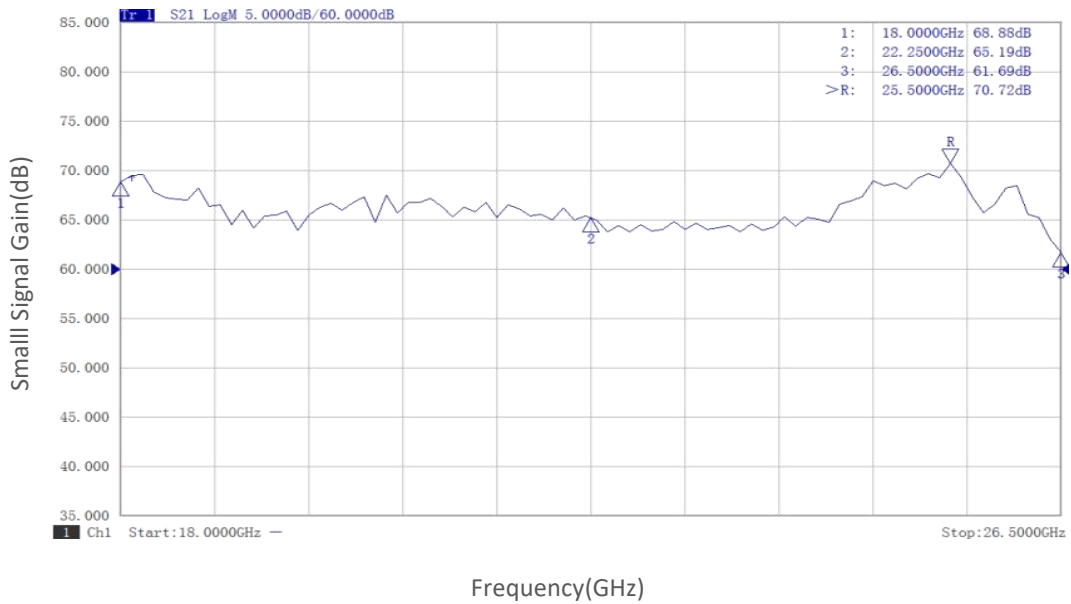


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

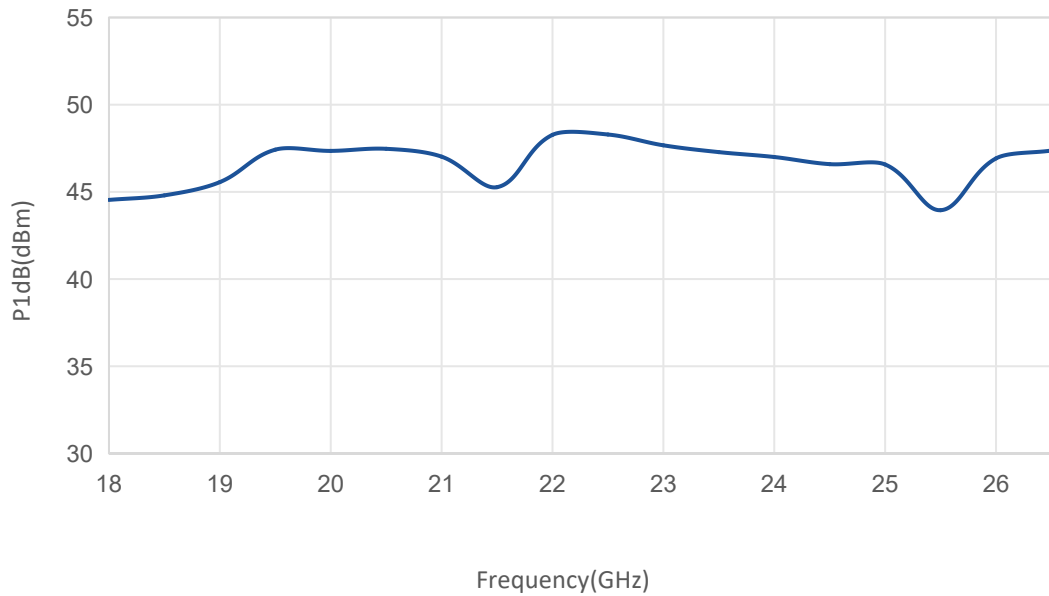


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

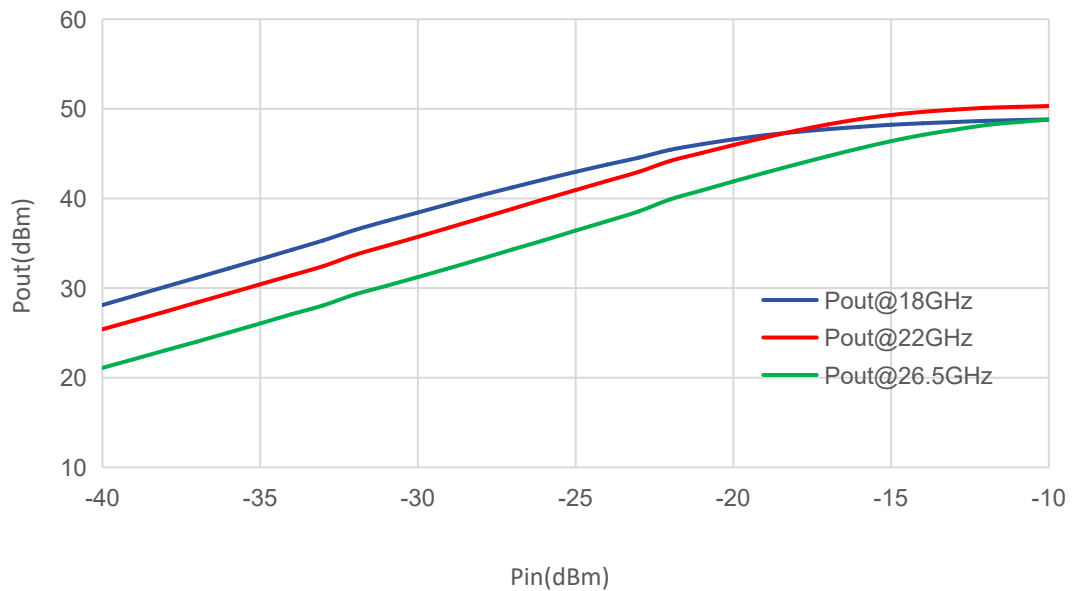


Typical Performance Data:

P1dB vs Frequency



Pout@Pin

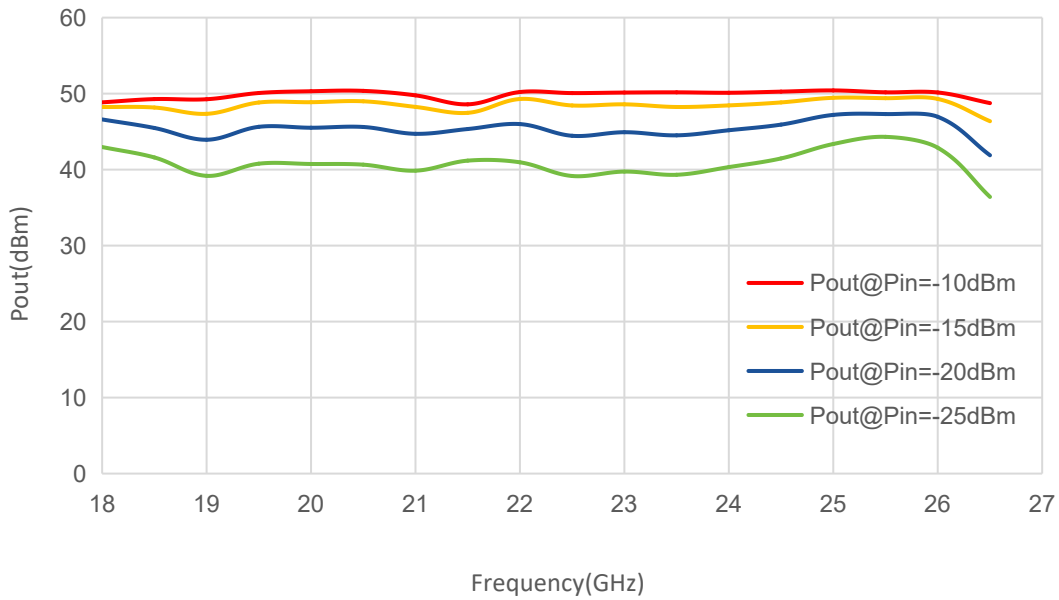


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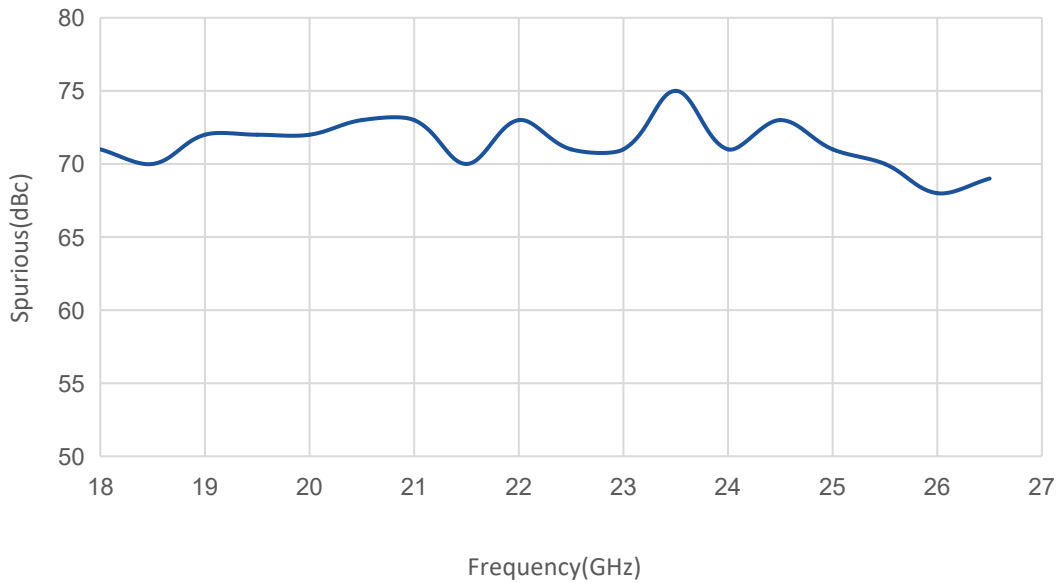


Typical Performance Data:

Pout@Equal_Pin



Spurious vs Frequency

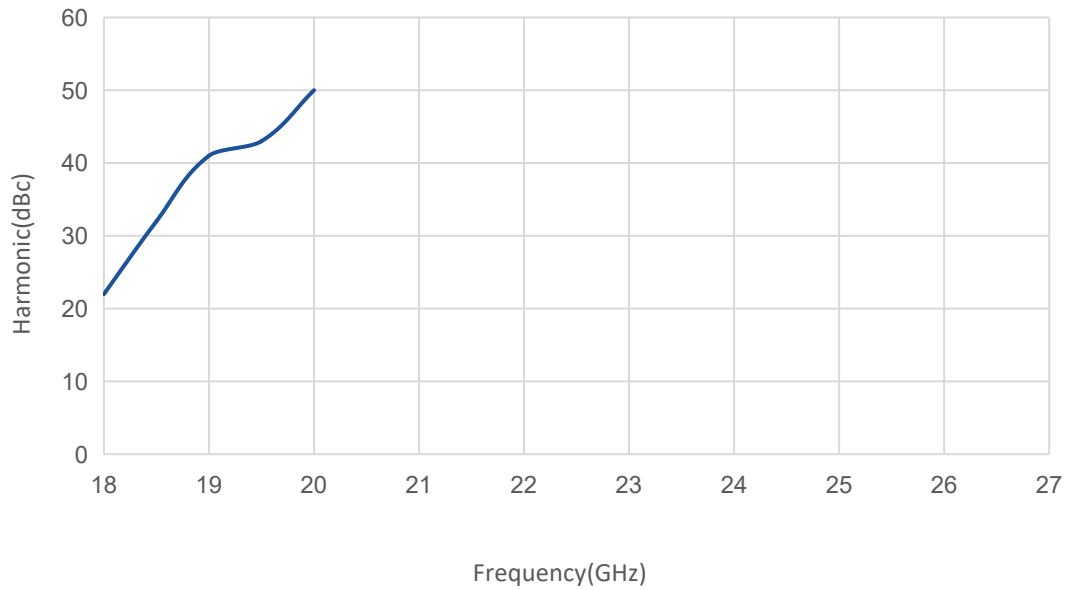


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Typical Performance Data:

Harmonic vs Frequency



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