



Power Amplifier

Model: PA-26G5-40G-50

26.5-40GHz 50W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 26.5-40GHz
- 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-26G5-40G-50 is a power amplifier with a minimum power gain of 47 dB and a minimum Psat of 50W across the frequency range of 26.5 to 40 GHz. The DC power requirement for the amplifier is +24 VDC/30 A. The input port configuration offers coax adapter structure with 2.92mm female and output port is WR28.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	26.5		40	GHz
Power Gain	47			dB
Power Gain Flatness		±4.5		dB
Output Psat	47			dBm
Spurious			-50	dBc
Input VSWR		2	2.5	:1
DC Voltage		+22	+24	V DC
DC Supply Current			30	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	2.92mm Female WR28	
Forward/Reverse Coupling Connector	2.92 Female/2.92 Female	
DC Power Interface	SUB-5W5	
Control and Test Connector	J30J-9ZKP	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
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:

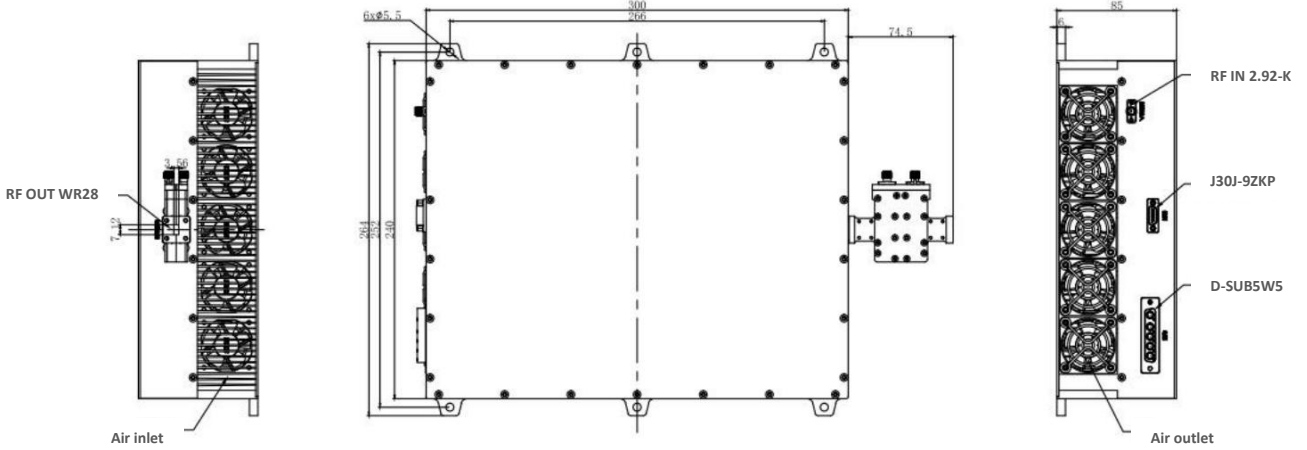
Parameter	Value
Supply Bias Voltage	+24 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-26G5-40G-50



SUB-5W5 Define:

Pin	Function
A1-A2	+24V
A3-A5	+24V
Pin1	TTL(high for open,low for close)
Pin2	Current Monitor
Pin3	Temperature Monitor
Pin4	0.5dB Attenuation
Pin5	1dB Attenuation
Pin6	2dB Attenuation
Pin7	4dB Attenuation
Pin8	8dB Attenuation
Pin9	16dB Attenuation
Pin10-15	GND

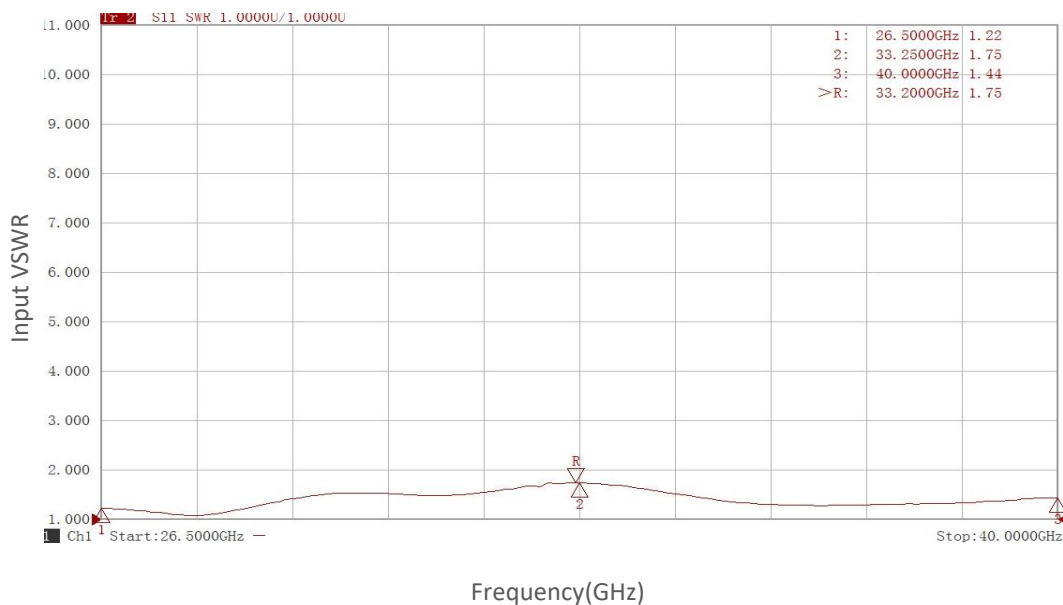


Ordering Information:

Base Number	Description	Optional
PA-26G5-40G-50	Power Amplifier, 26.5-40GHz, Gain:47dB,Psat:50W,+24V DC	Without Heatsink
PA-26G5-40G-50-HS	Power Amplifier, 26.5-40GHz, Gain:47dB,Psat:50W,+24V DC	With Heatsink

Typical Performance Data:

Input VSWR vs Frequency

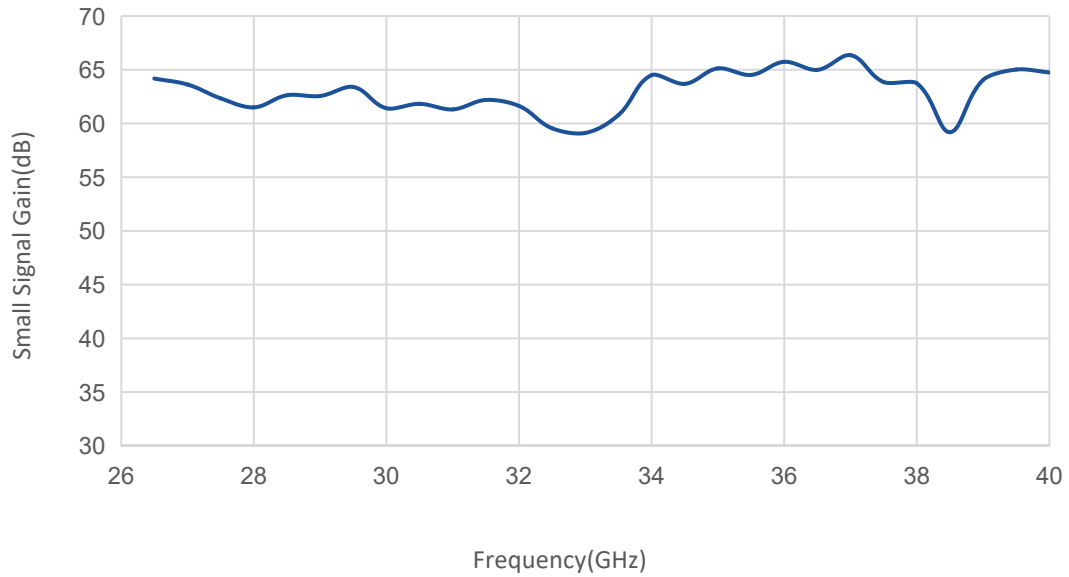


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

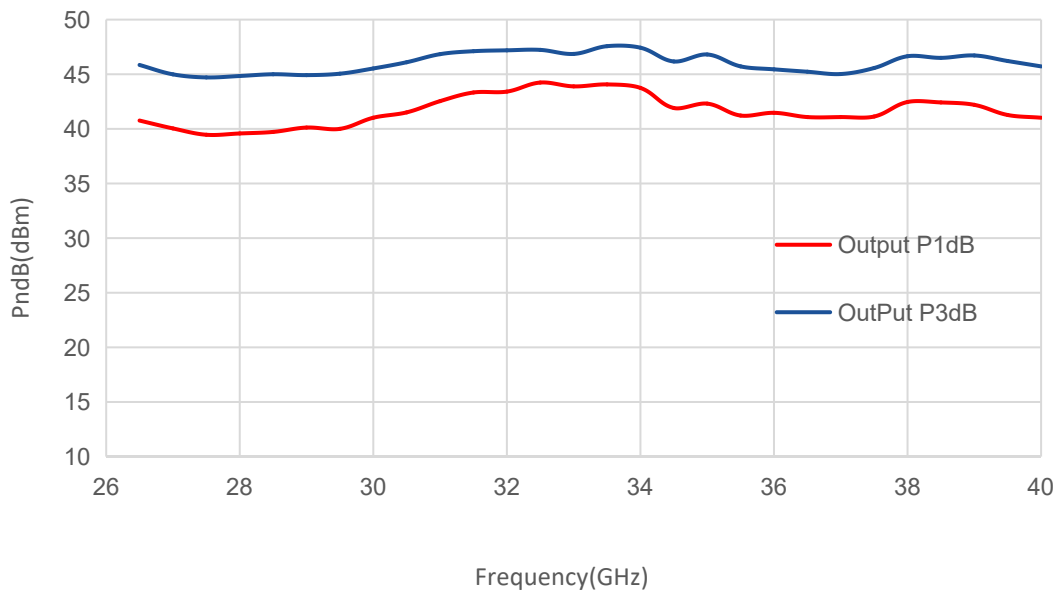


Typical Performance Data:

Small Signal Gain vs Frequency



PndB vs Frequency

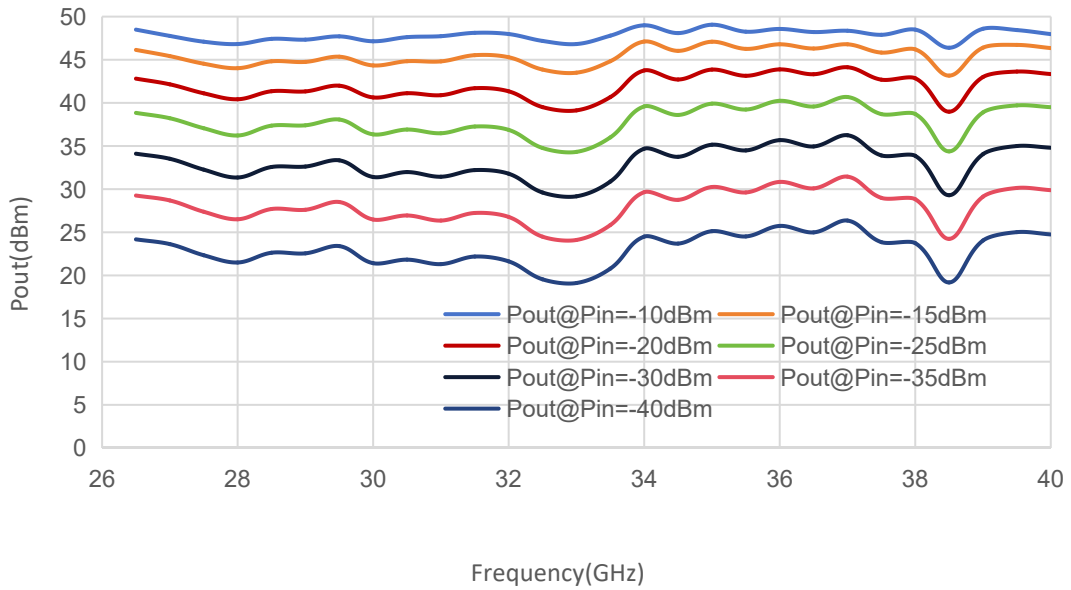


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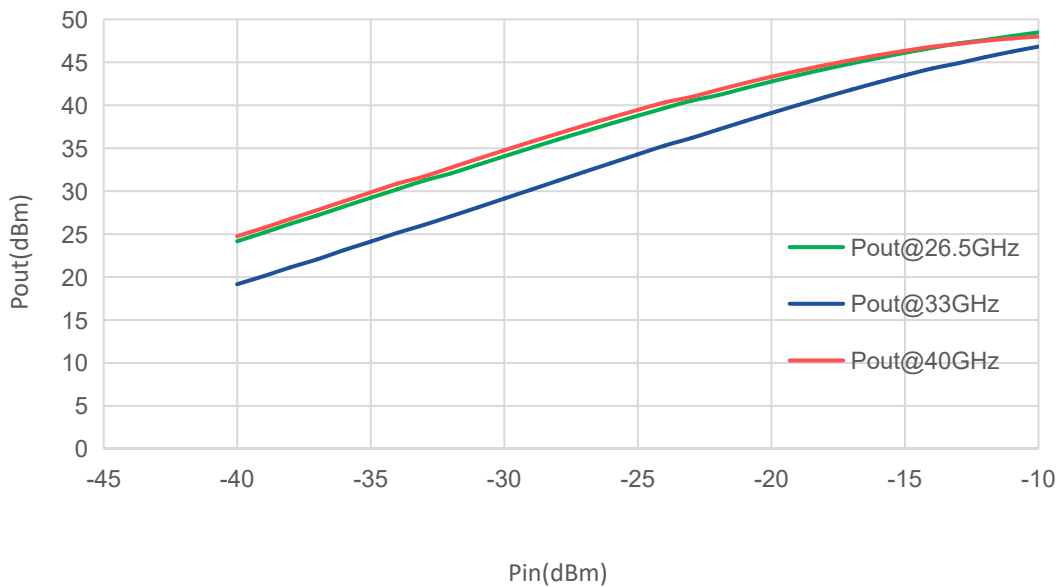


Typical Performance Data:

Pout@Equal_Pin



Pout@Pin

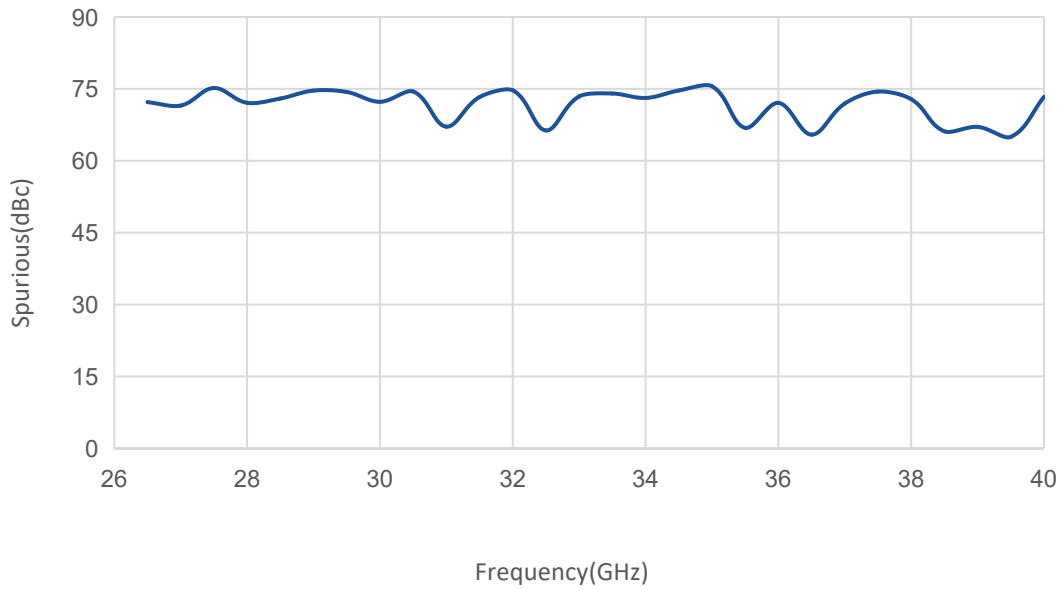


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Typical Performance Data:

Spurious vs Frequency



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