



Power Amplifier

Model: PA-18G-26G5-10-L

18-26.5GHz 3W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 18-26.5GHz
- High output power at saturation, 10W Min.
- High gain, 35 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-18G-26G5-10-L is a power amplifier with a minimum power gain of 35 dB and a minimum Psat of 10W across the frequency range of 18 to 26.5 GHz. The DC power requirement for the amplifier is +20 VDC/70W. The input and output port configuration offers coax adapter structure with 2.92mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	18		26.5	GHz
Power Gain	35			dB
Power Gain Flatness		±2		dB
Output P1dB	35			dBm
Output Psat	40	41		dBm
Spurious			-50	dBc
Harmonic			-20	dBc
Input VSWR			2	:1
DC Voltage	+18	+20	+22	V DC
Power consumption			70	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95	%
RF Input/Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Feedthru Capacitor	
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	60*60*11(Without Heatsink) 188*125*135(With Heatsink)	mm
Weight	200	g

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

Absolute Maximum Ratings:

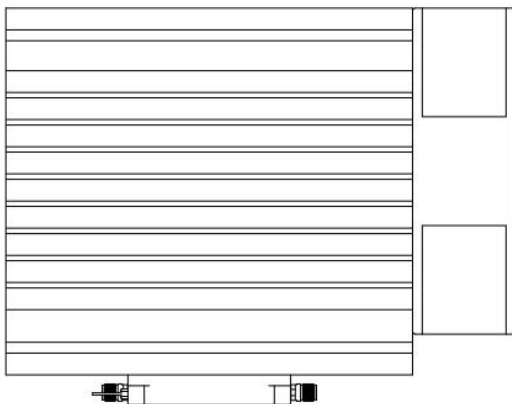
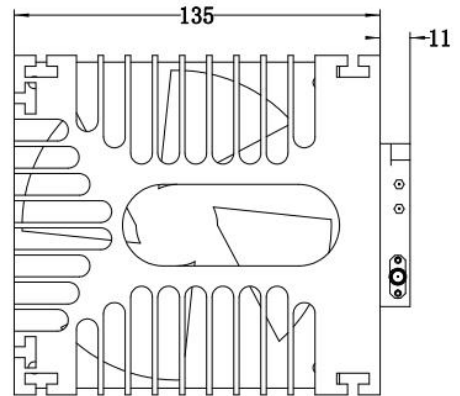
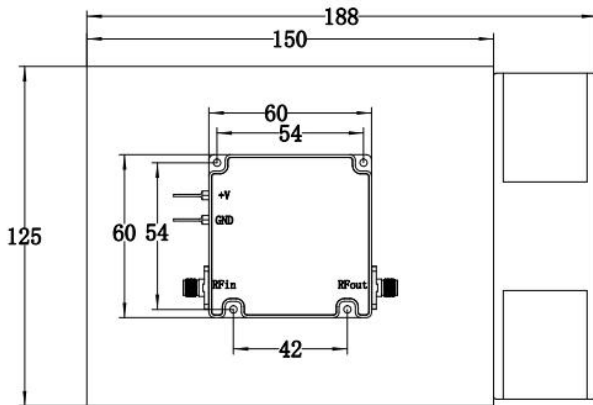
Parameter	Value
Supply Bias Voltage	+22 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-18G-26G5-10-L-HS



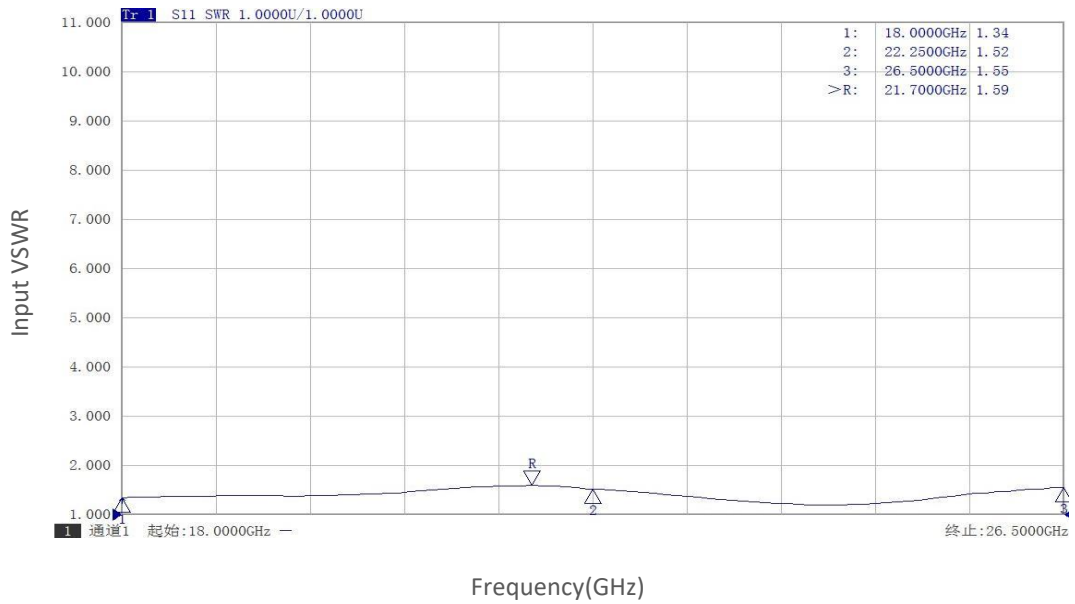
Ordering Information:

Base Number	Description	Optional
PA-18G-26G5-10-L	Power Amplifier, 18-26.5GHz, Gain:35dB,Psat:10W,+20V DC	Without Heatsink
PA-18G-26G5-10-L-HS	Power Amplifier, 18-26.5GHz, Gain:35dB,Psat:10W,+20V DC	With Heatsink

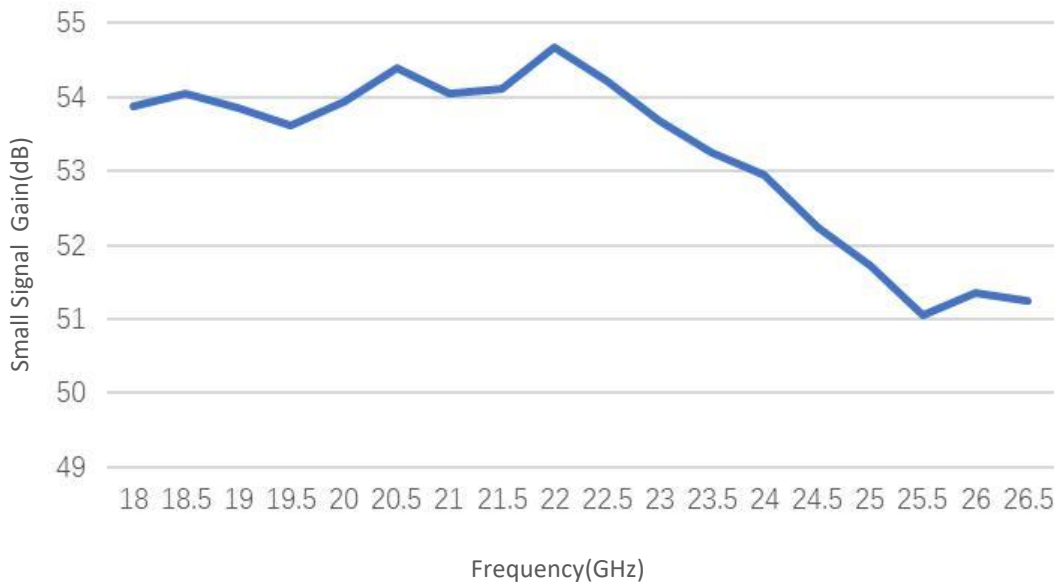


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

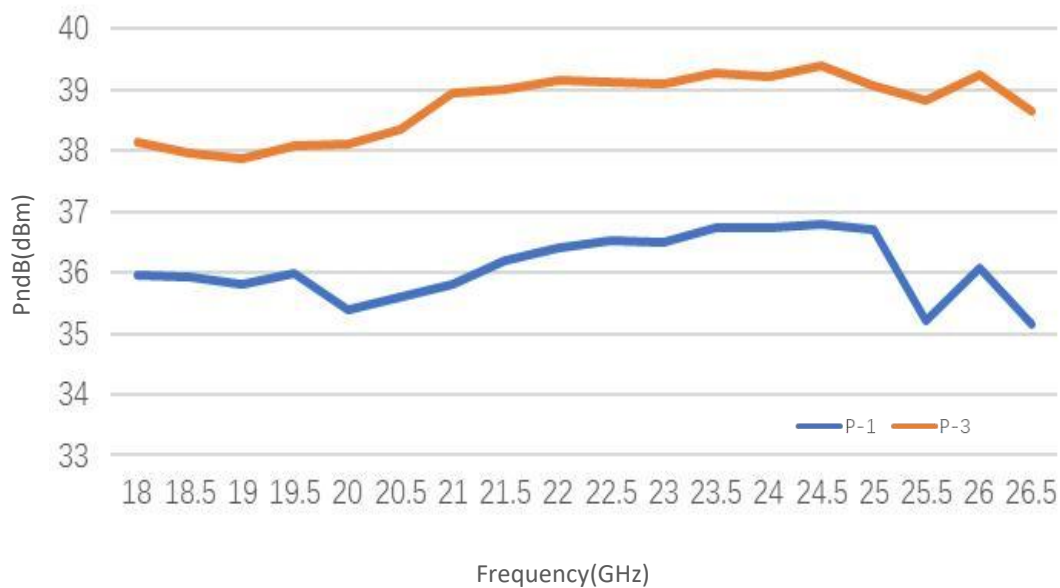


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

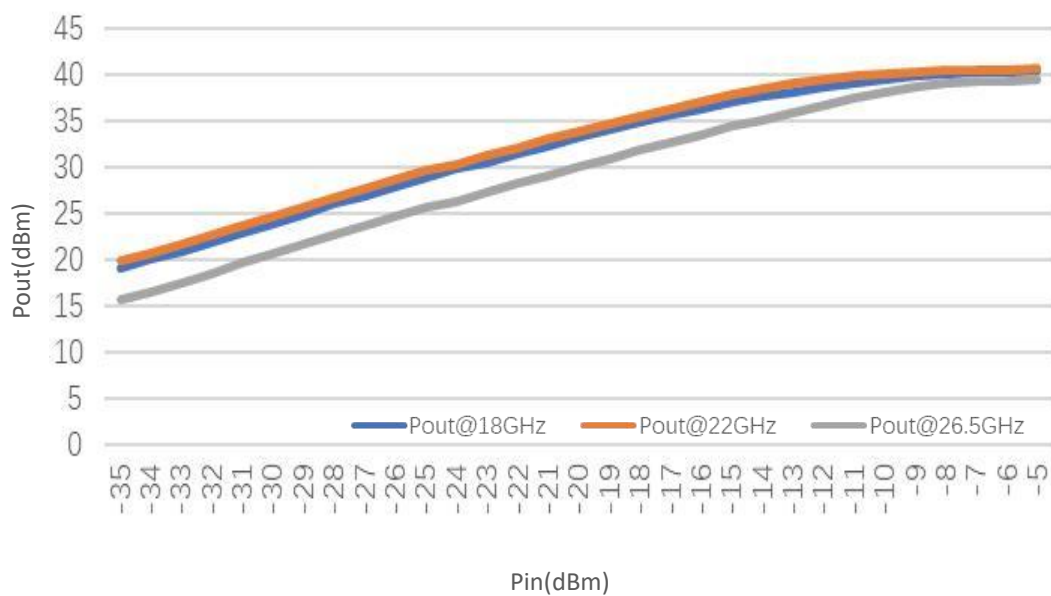


Typical Performance Data:

PndB vs Frequency



Pout@Pin

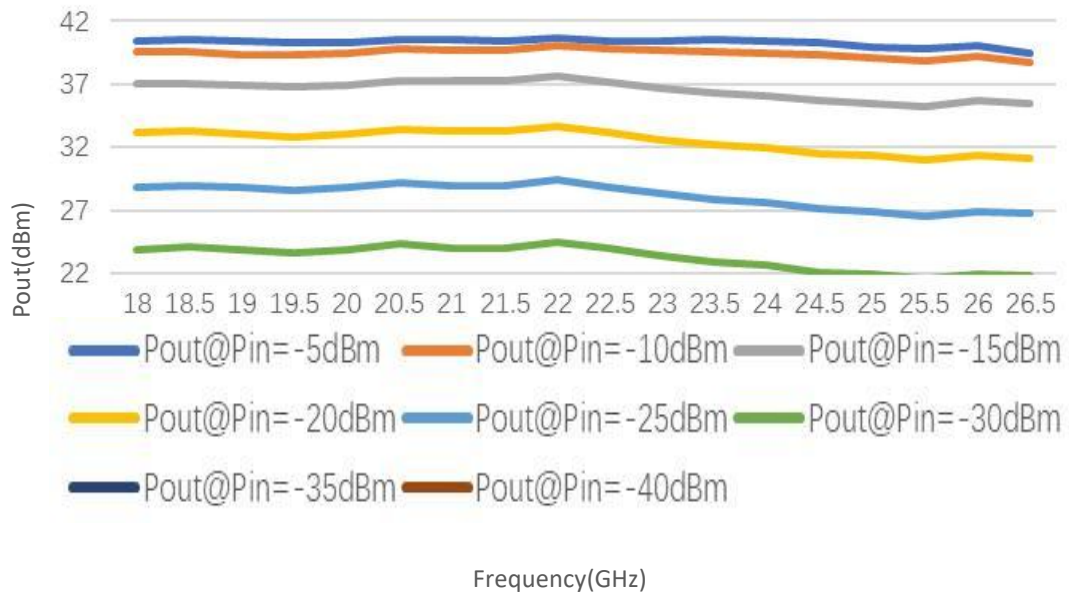


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

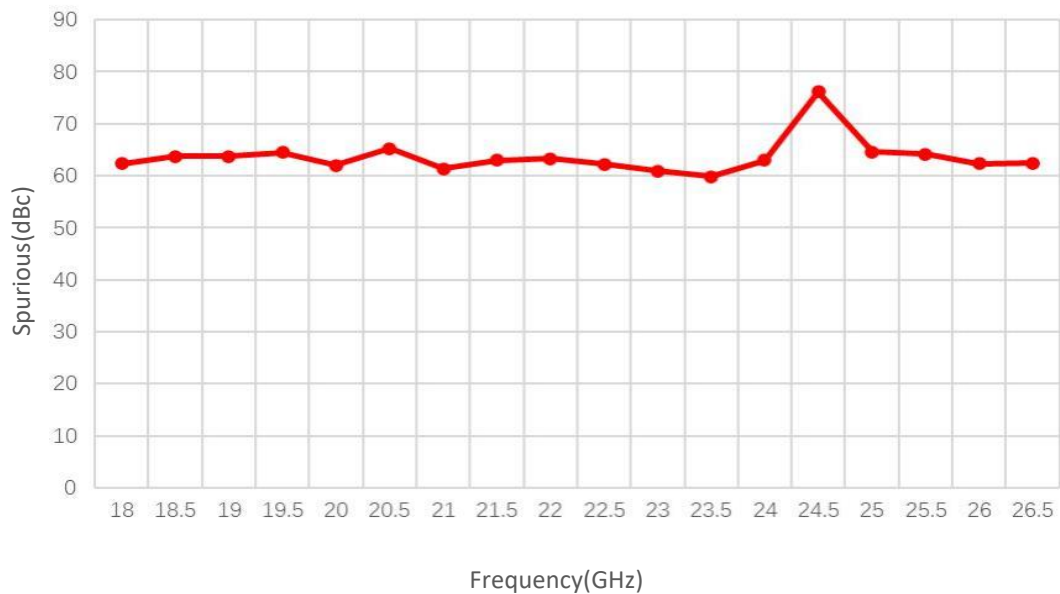


Typical Performance Data:

Pout@Equal_Pin



Spurious vs Frequency

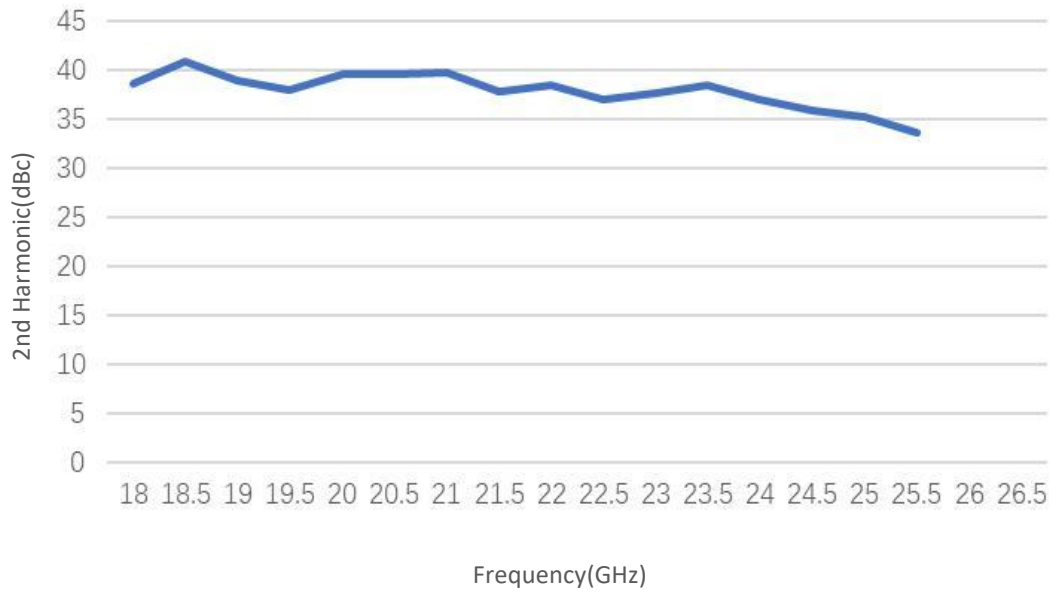


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.



Typical Performance Data:

2nd Harmonic vs Frequency



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