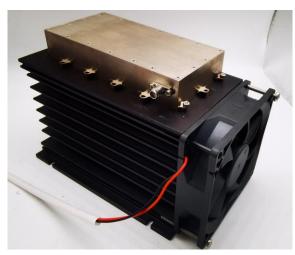


18-26.5GHz High Power Amplifier

18-26.5GHz High Power Amplifier Gain=45dB, Pout=+39dBm



-HF Option with heatsink and Fan

Advantages

Frequency: 18-26GHz

Psat:+39dBm

Small signal gain: 45dB

Single Power Supply

Product Overview

AT-HPA-1826-4539GN is GaN Based high gain power amplifier with +39dBm output power in the frequency of 18-26.5GHz. The DC power requirement is +22V/3.3A at Psat. The module is with 2.92mm connector.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. There is no heatsink and fan in default. Option with suffix "-HF" is part number with heatsink and Fan, -BT option is for bench-top system amplifier.

More information, please visit www.atmicrowave.com

Application

- 5G Communication
- Test Equipment
- ROF (RF Over Fiber)
- Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		18-26.5GHz	
Gain	42dB	45dB	
P1dB		TBD	
Psat	+38dBm	+39dBm	
Drain Supply		+22V	+24V
ldd NO RF		2A	
IDD Psat		3.3A	3.7A
Input Return Loss		-10dB	
Spec Temp		25C	





18-26.5GHz High Power Amplifier

Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Aluminum
Finish	Nickel Plated
Weight (With Heatsink and Fan)	TBD
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+28V
RF Input Power	+16 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

Very Important:

- 1. MUST Apply to heatsink and Fan during operation, or the amplifier will be damaged due to the high power consumption;
- 2. Do NOT leave Output OPEN with Bias and input power. Connect to 50 Ohms system during operation.
- 3. Take care that Vdd never touch Case/GND when Power ON, or the amplifier will be damaged.





18-26.5GHz High Power Amplifier

Part Number Selection

Item	Description	
AT-HPA-1826-4539GN	In defaulted without heatsink and Fan.	
	Heatsink and Fan required during operation.	
AT-HPA-1826-4539GN-HF	Including Heatsink and Fan.	
	Fan bias is same with Vdd normally.	
AT-BTHPA-1826-4539GN	Bench-top System Amplifier, 90-220V AC Power Supply	
	Please note gain will be 1-2db lower than standard module, while	
	Pout will keep the same. Please contact with us for more information.	



In default without heatsink



-HF Option With Heatsink and Fan



-BT Option Bench-top System Amplifier

Test Data (25C)

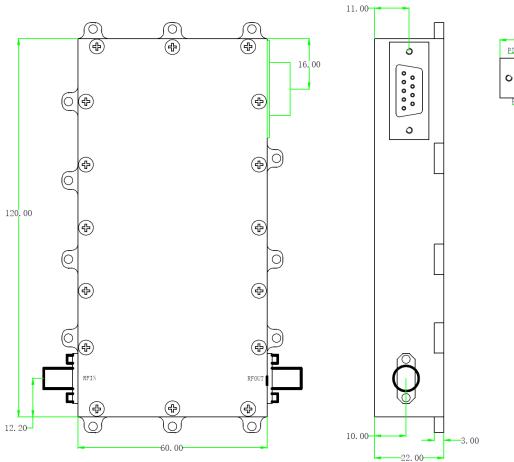
Please note that test curves will vary slightly from unit to unit.

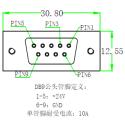




18-26.5GHz High Power Amplifier

Standard Module Outline Without Heatsink: (mm)





PA Module without heatsink and Fan

Heatsink and Fan Required during Operation

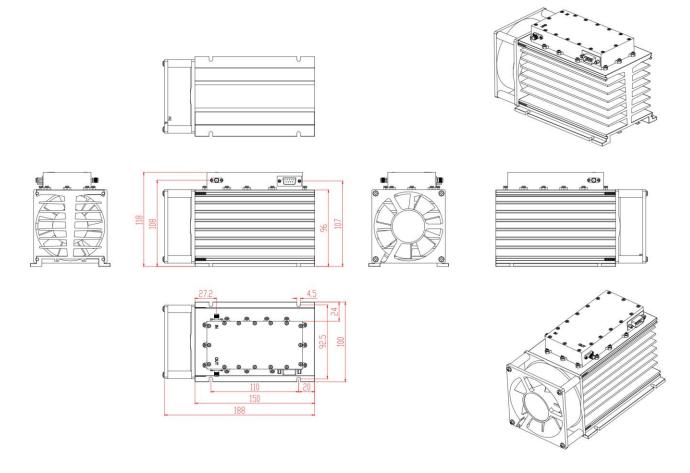




18-26.5GHz High Power Amplifier

-HF Option:

Module With Heatsink and Fan: (mm)



Customers can remove the heatsink and Fan if using their own heatsink.





18-26.5GHz High Power Amplifier

-BT Option,

Bench-top outline System Amplifier: (mm)

