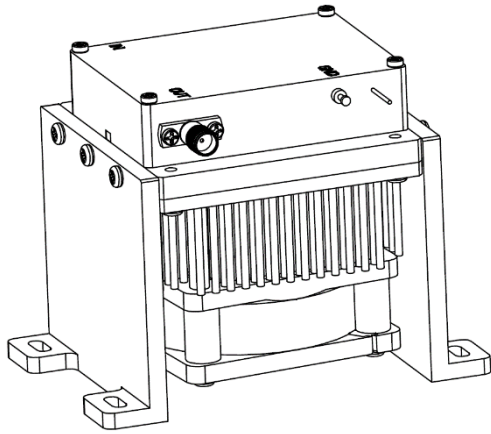


### 2-18GHz Broadband Amplifier, +34dBm

2022-4-1



#### Product Overview

AT-HPA-0218-3334GN is high gain power amplifier with +34dBm output power in the frequency of 2-18GHz. The DC power requirement is +30V/0.9A. Supply voltage can be from +28 to 32V. The module is with SMA 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.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

#### Advantages

- ✓ Frequency: 2-18GHz
- ✓ Pout:+34dBm
- ✓ Small signal gain: 33dB
- ✓ Single Power Supply

#### Application

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

#### Key Features

Parameter	Min	Typical	Max
Frequency		2-18GHz	
Gain	30	33dB	
P1dB	+32	+33dBm	
Psat	+33dBm	+34dBm	
Drain Supply		+24V	+28V
Current/Quiscent		0.75A	
IDD Psat		0.9A	1.2A
Input Return Loss		-10dB	
Output Return Loss		-7dB	
Spec Temp		25C	





# AT-HPA-0218-3334GN

2-18GHz Power Amplifier

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	150g
Size:	60X45X14mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+35V
RF Input Power	+10 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

### Caution:

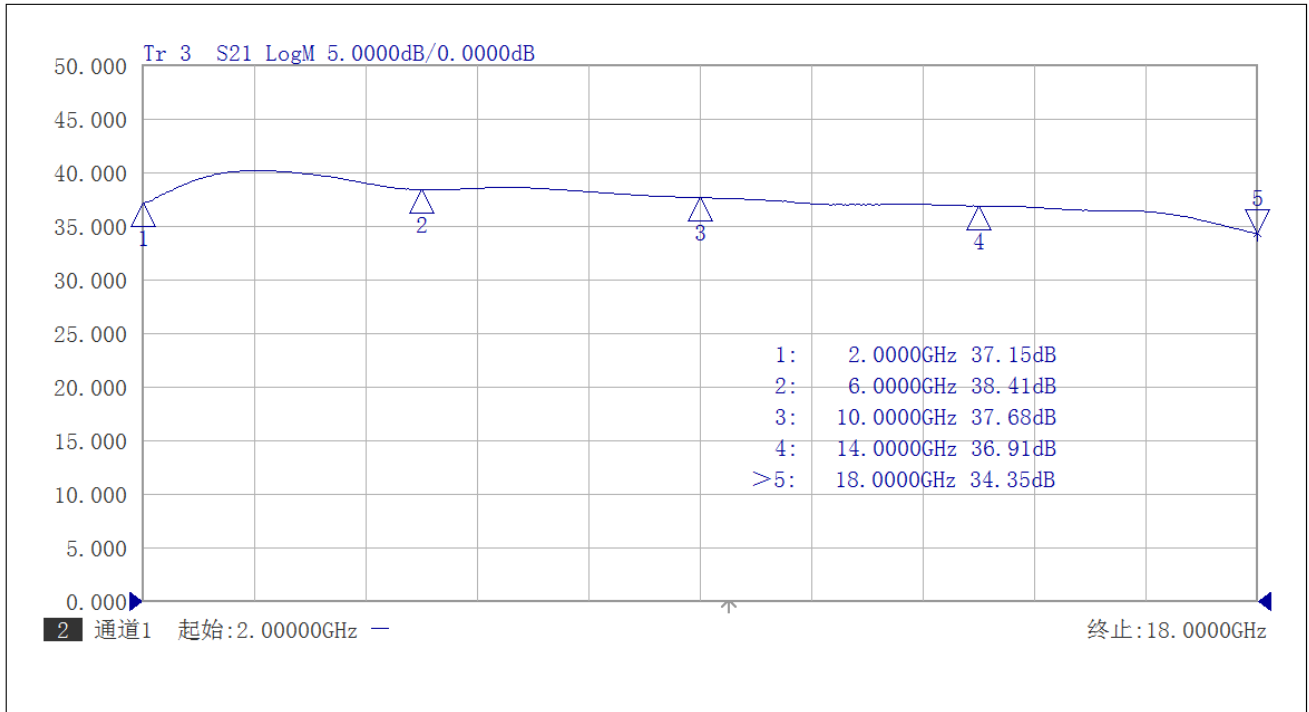
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

## Part Number Selection

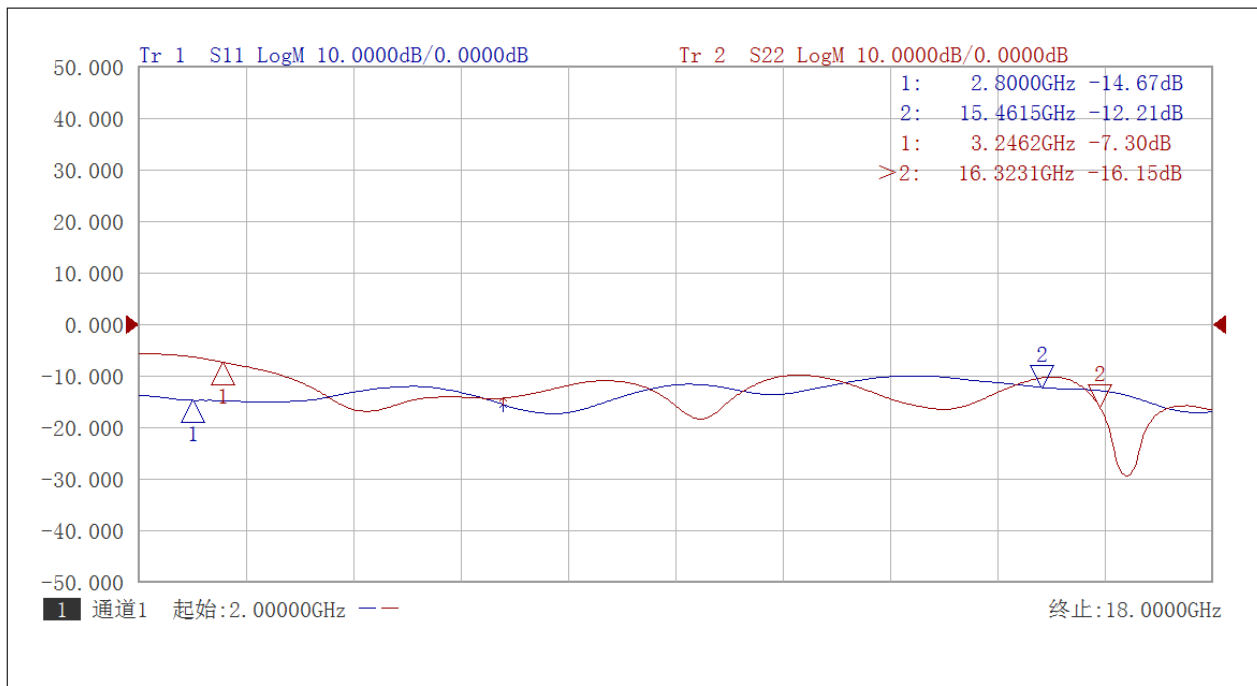
Item	Description
AT-HPA-0218-3334GN	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-HPA-0218-3334GN-HF	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply



### Test Data (25C)



Gain vs Frequency



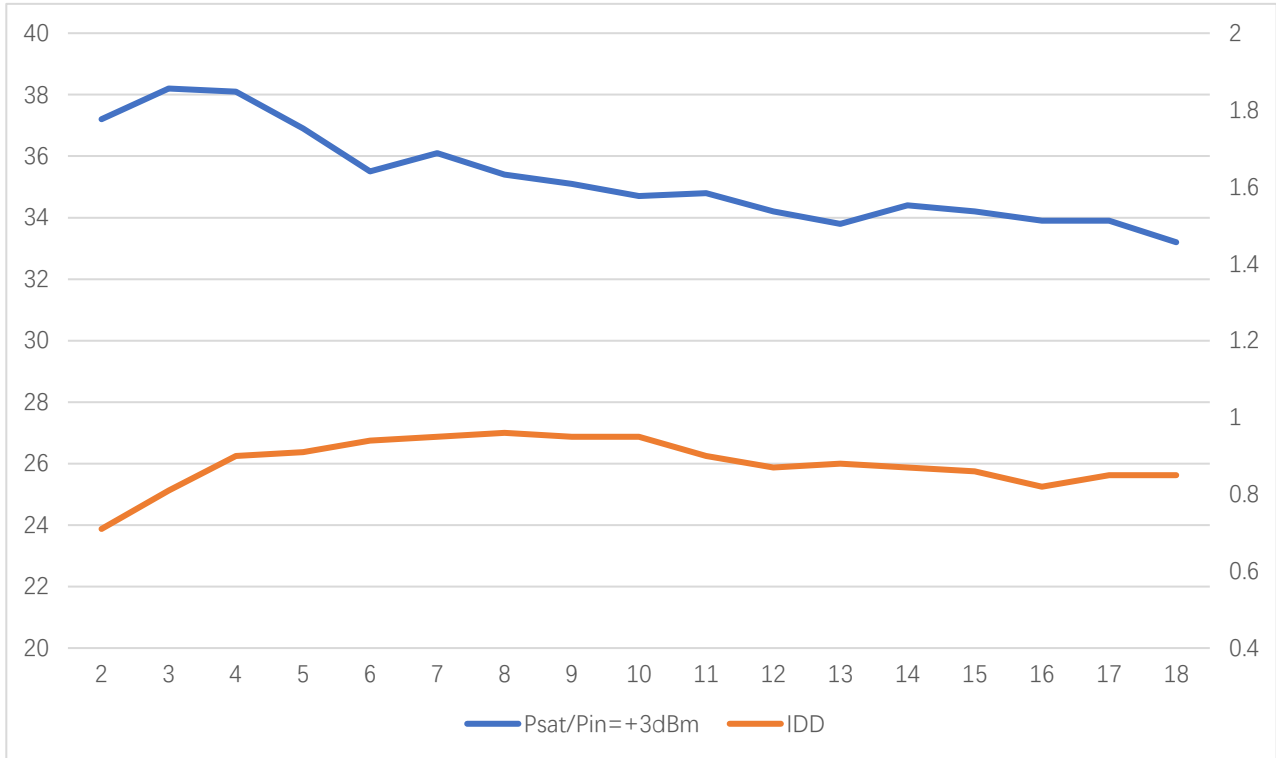
Return Loss vs Frequency



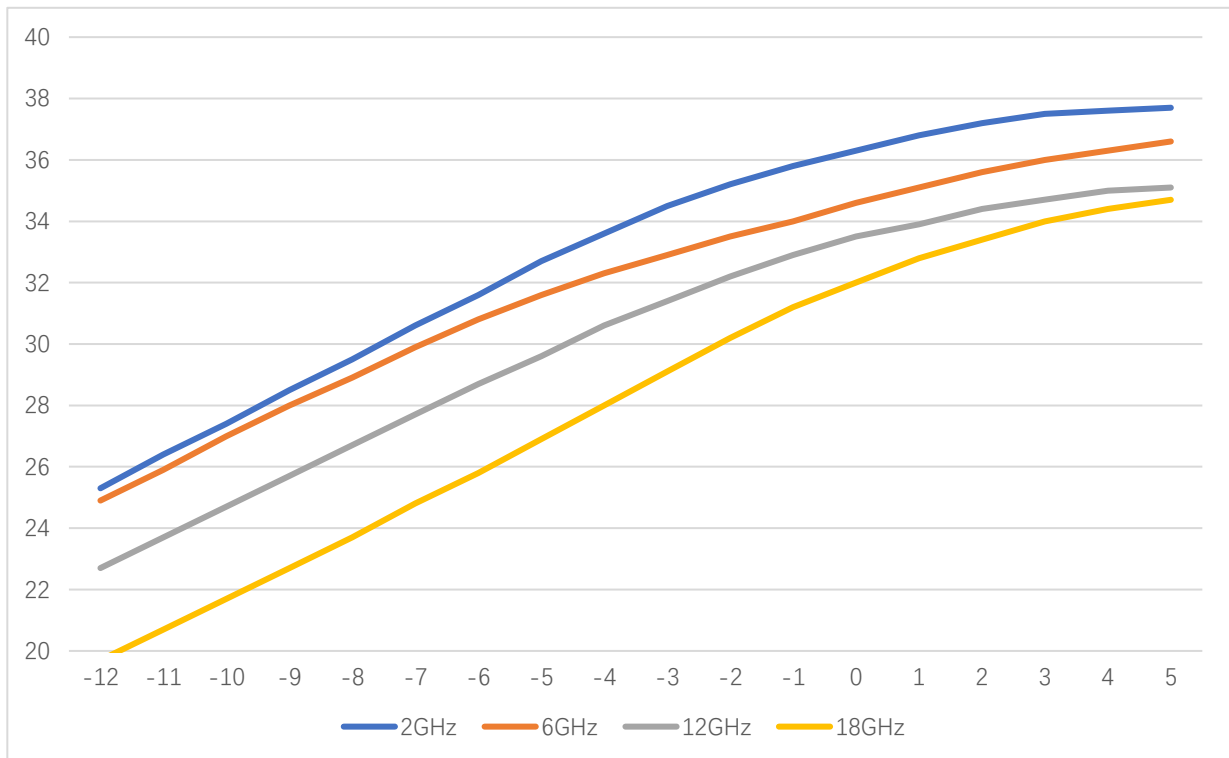


# AT-HPA-0218-3334GN

2-18GHz Power Amplifier



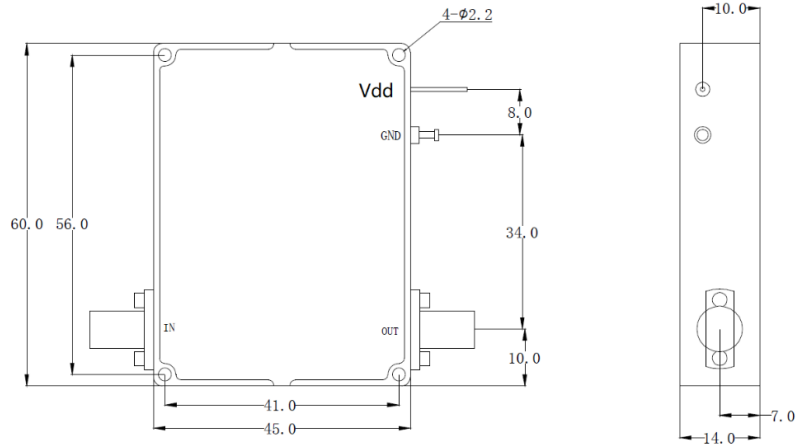
Psat and IDD vs Frequency



Pout vs Pin at 2/6/12/18GHz



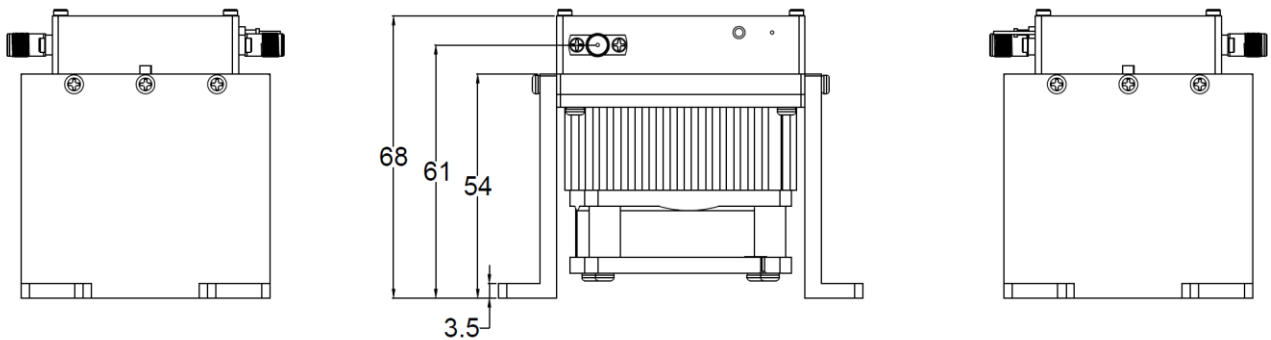
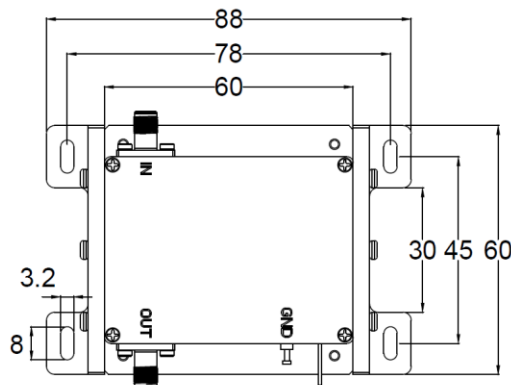
### Dimension: (unit mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Length of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

Outline without heatsink. Heat Sink Required During Operation



Outline-HF option with heatsink

