

# 10MHz-43GHz Broadband Amplifier



### Product Overview

AT-BB-0043-3520C is broadband amplifier from 10MHz-43GHz, with  $P_{out}=+22\text{dBm}$ ,  $NF=6\text{dB}$ . It can be used both as Power amplifier or low noise amplifier. The DC power requirement is  $+8\text{V}/350\text{mA}$ . The module is with 2.92mm Female

$+5\text{V}$  Single power supply (With 3dB lower output power) is also available according to request. Bench-top test equipment type with 110-240V power supply is available according to request.

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

### Advantages

- ✓ Frequency: 10MHz-43GHz
- ✓  $P_{sat}:+22\text{dBm}$
- ✓ Small signal gain: 35dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-43GHz	
Gain	33dB	35dB	
Gain Flatness		$\pm 3\text{dB}$	$\pm 5\text{dB}$
$P_{1\text{dB}}$ (0.1-40GHz)		$+20\text{ dBm}$	
$P_{\text{sat}}$ (0.1-40GHz)		$+22\text{dBm}$	
Drain Supply	$+8\text{V}$	$+12\text{V}$	$+13\text{V}$
Current		350 mA	450mA
$NF$ (1-40GHz)		4.5dB	6dB
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





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## Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+15 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

### Caution:

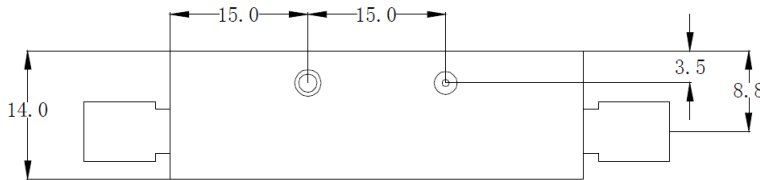
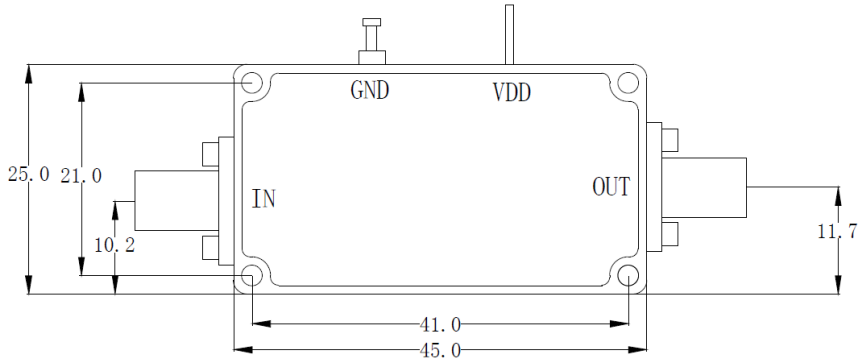
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

## Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

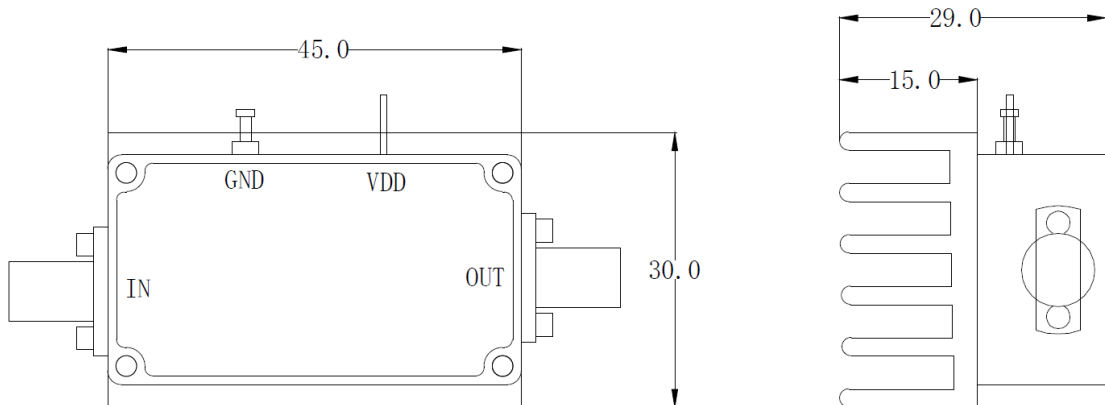


### Dimension: (unit in mm)



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

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



Including a small heatsink without Fan if output Power higher than +20dBm.  
 Customers can removed it or use their own heatsink according to actual situation.

**Heat Sink Required During Operation**

