

W Band Broadband Power Amplifier



Product Overview

AT-PA-88104-1818 is power amplifier with +18dBm output power in the frequency of 88-104GHz. The DC power requirement is +5V/420mA. The module is with a standard WR-10 waveguide.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 88-104GHz
- ✓ Psat:+18dBm
- ✓ Small signal gain: 28dB
- ✓ Single Power Supply

Application

- ✓ W band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		88-104GHz	
Gain	25	28dB	
Drain Supply		+5V	+8V
Quiescent Current/A (NO RF)		0.42A	
Psat Current/A		0.5A	
P1Db		+16 dBm	
Psat		+18dBm	
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	





AT-PA-88104-2818

88-104GHz Power Amplifier, $P_{sat}=+18\text{dBm}$

Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	128g
Size:	50X25X20 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+5dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Caution:

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

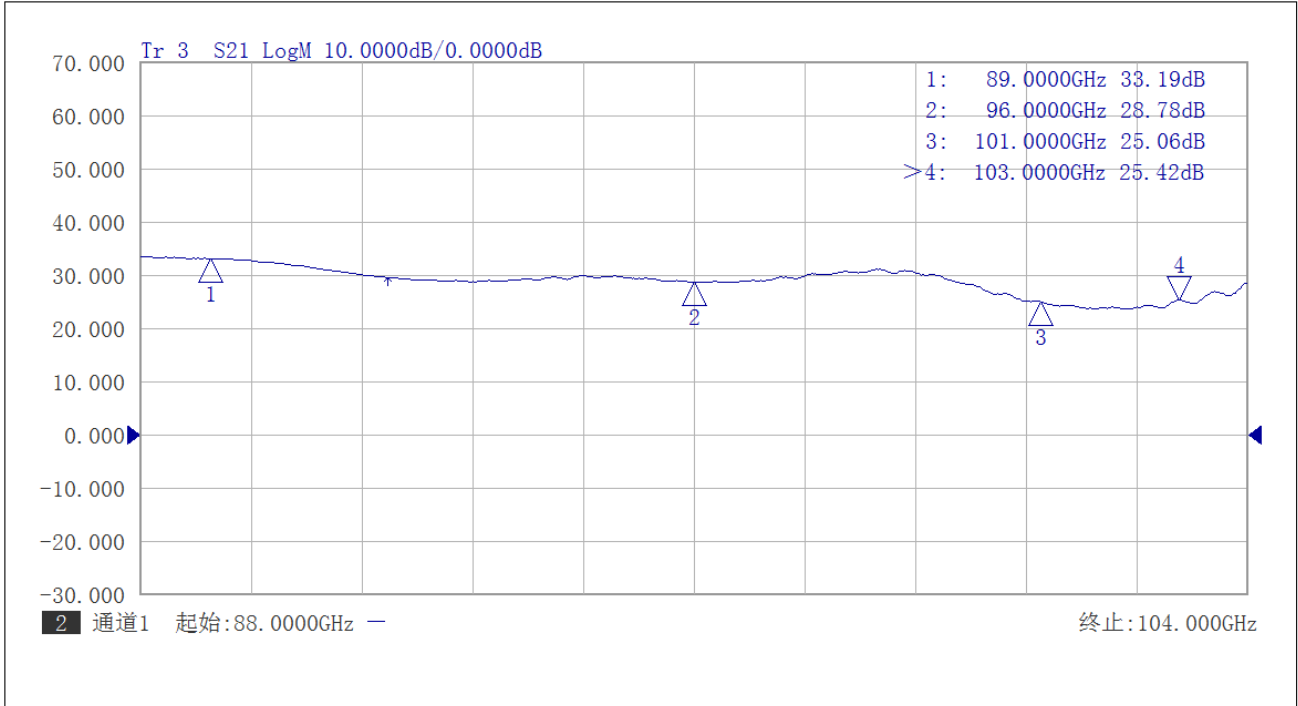
Notes:

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.

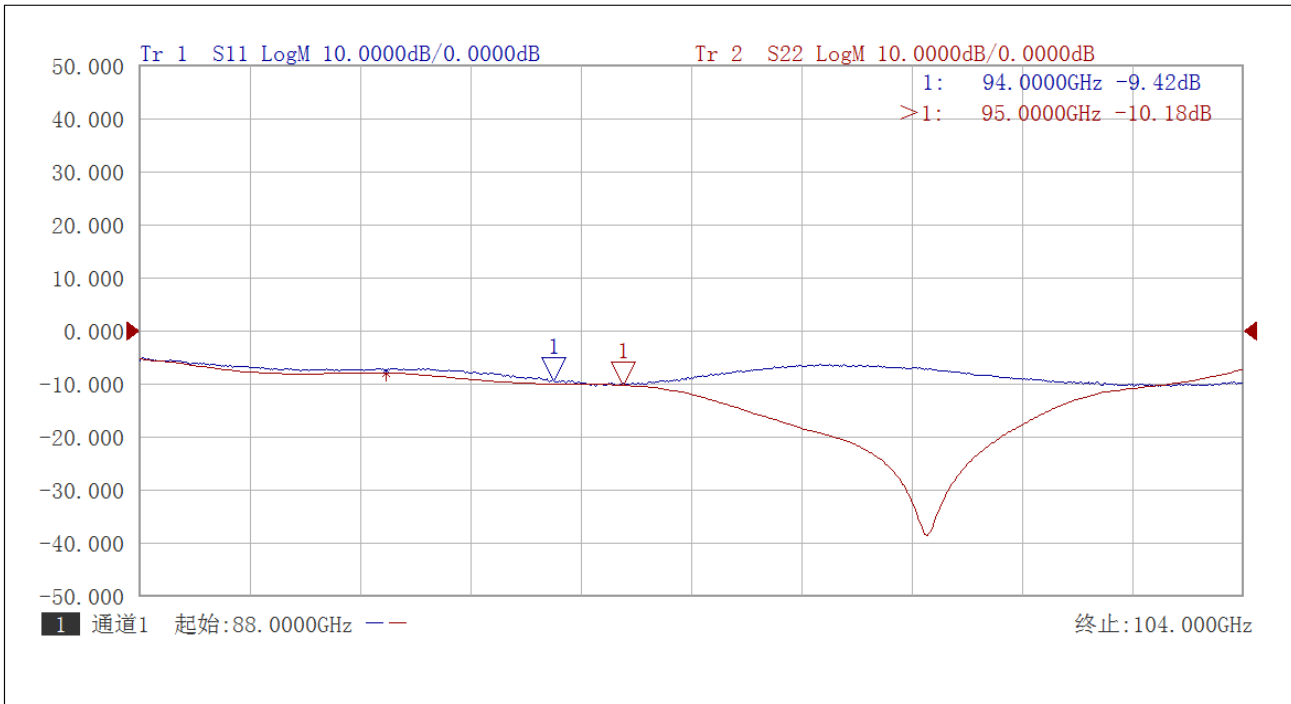
Please contact AT Microwave team to make sure you have the most current data.



Test Data

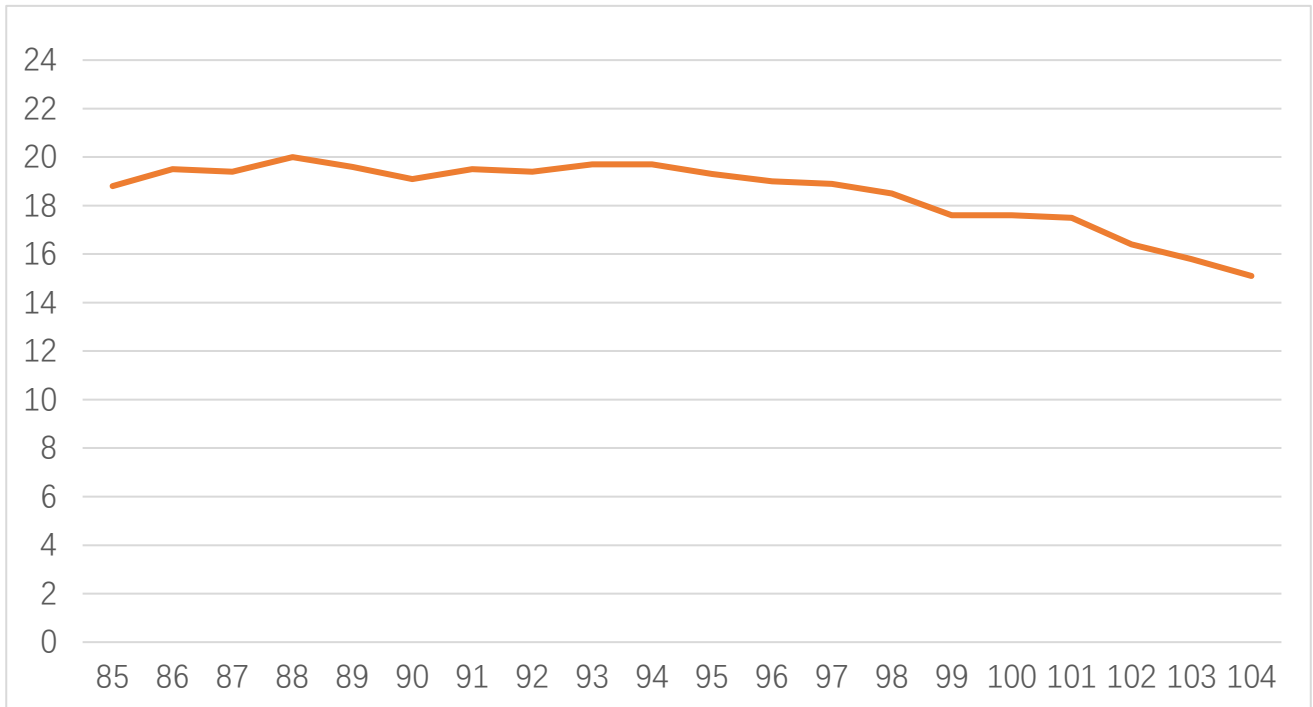


S21 Gain Vs Frequency



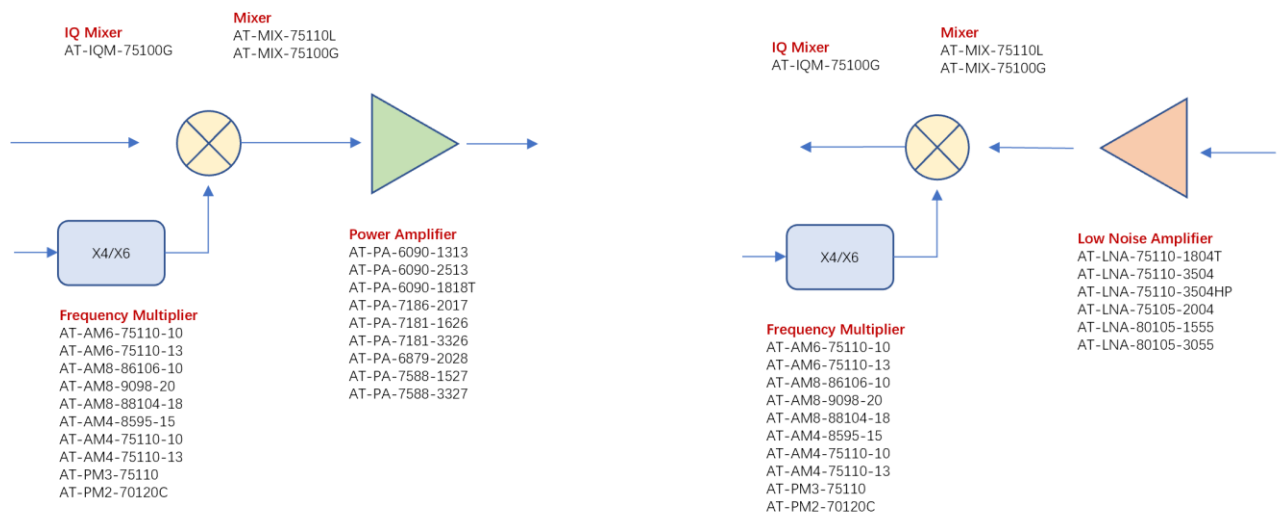
Input and Output Return Loss





Pout vs Frequency

W BAND 75-110GHZ



Dimension: (unit in mm)

