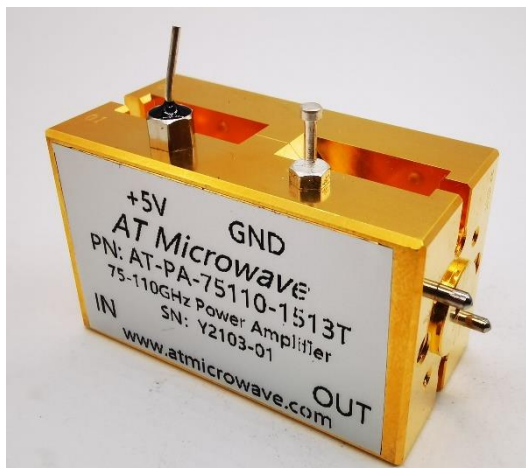


W Band Broadband Power Amplifier



Product Overview

AT-PA-75110-1513T is power amplifier with +13dBm output power in the frequency of 75-110GHz. The DC power requirement is +5V/130mA. 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. Higher gain module is available by AT-LNA-75110-3504HP with gain=35dB, NF=4dB and Pout=+13dBm

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 75-110GHz
- ✓ Psat:+13dBm
- ✓ Small signal gain: 15dB
- ✓ 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		75-110GHz	
Gain		15dB	
Drain Supply		+5V	+8V
Quiescent Current/A		0.1A	
Psat Current/A		0.13A	
P1dB	+10	+12 dBm	
Psat		+13dBm	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-PA-75110-1513T

75-110GHz Power Amplifier, $P_{sat}=+13dBm$

Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	150g
Size:	50x30x30 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+10dBm
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.

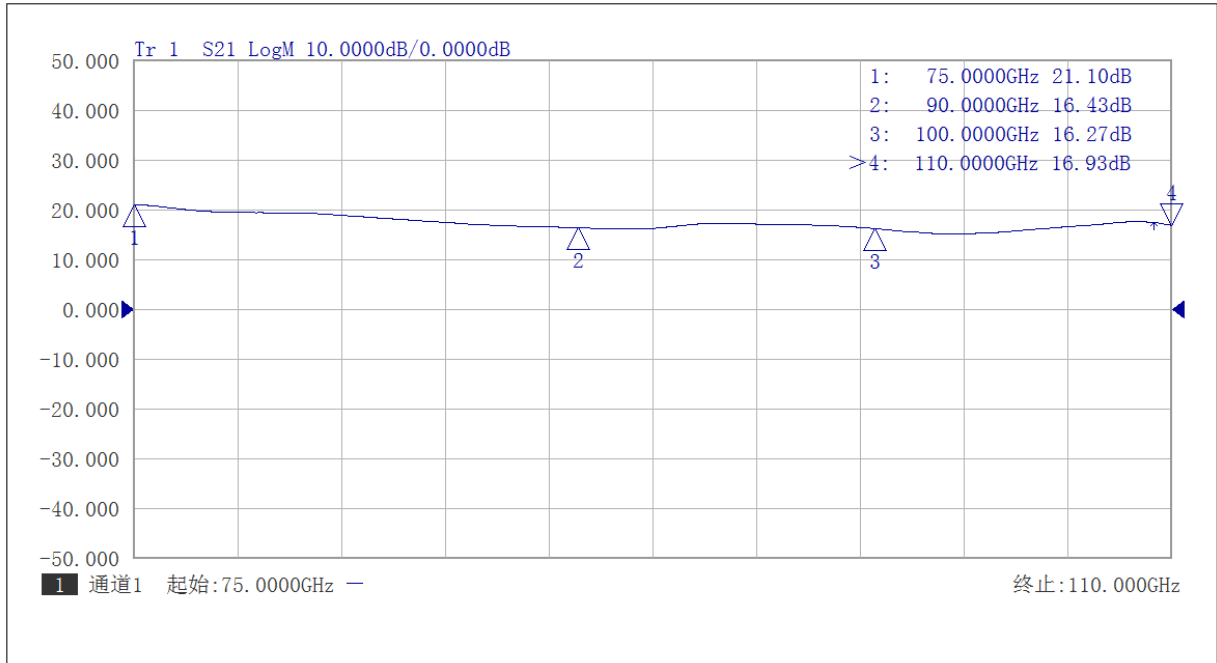
Notes:

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.

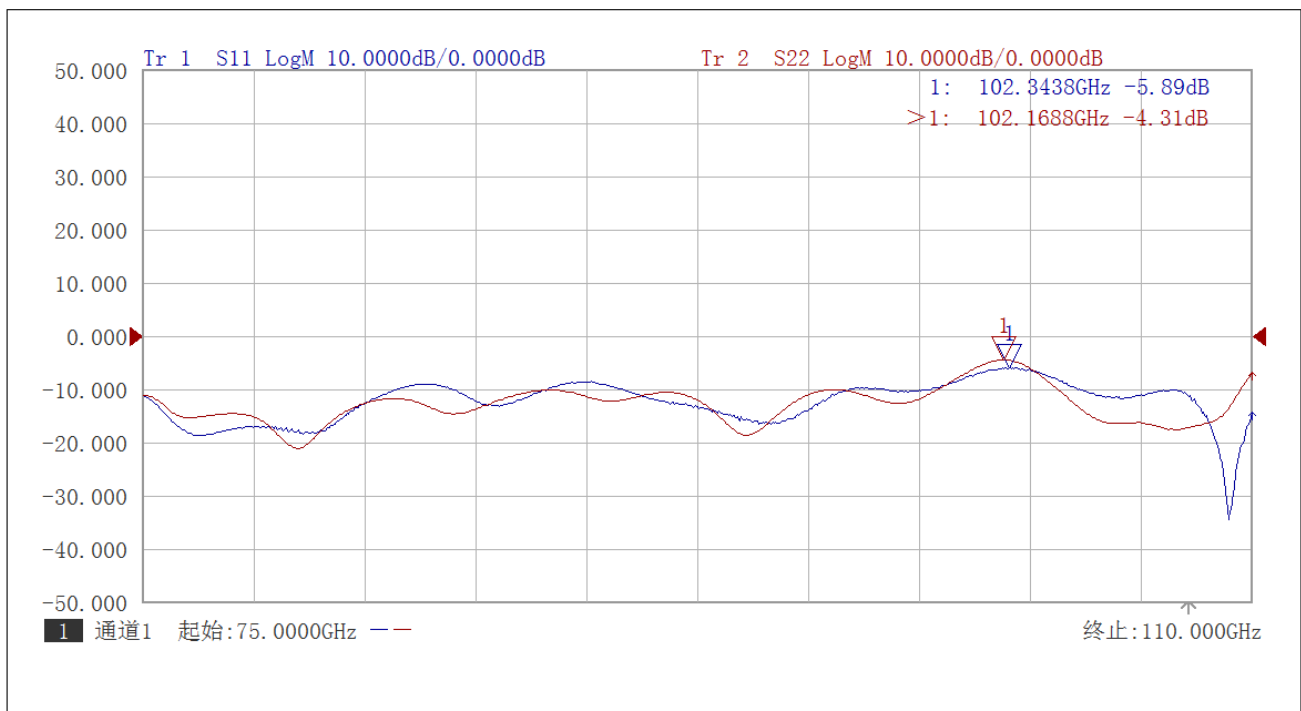
Please contact AT Microwave team to make sure you have the most current data.



Test Data:



Gain vs Frequency



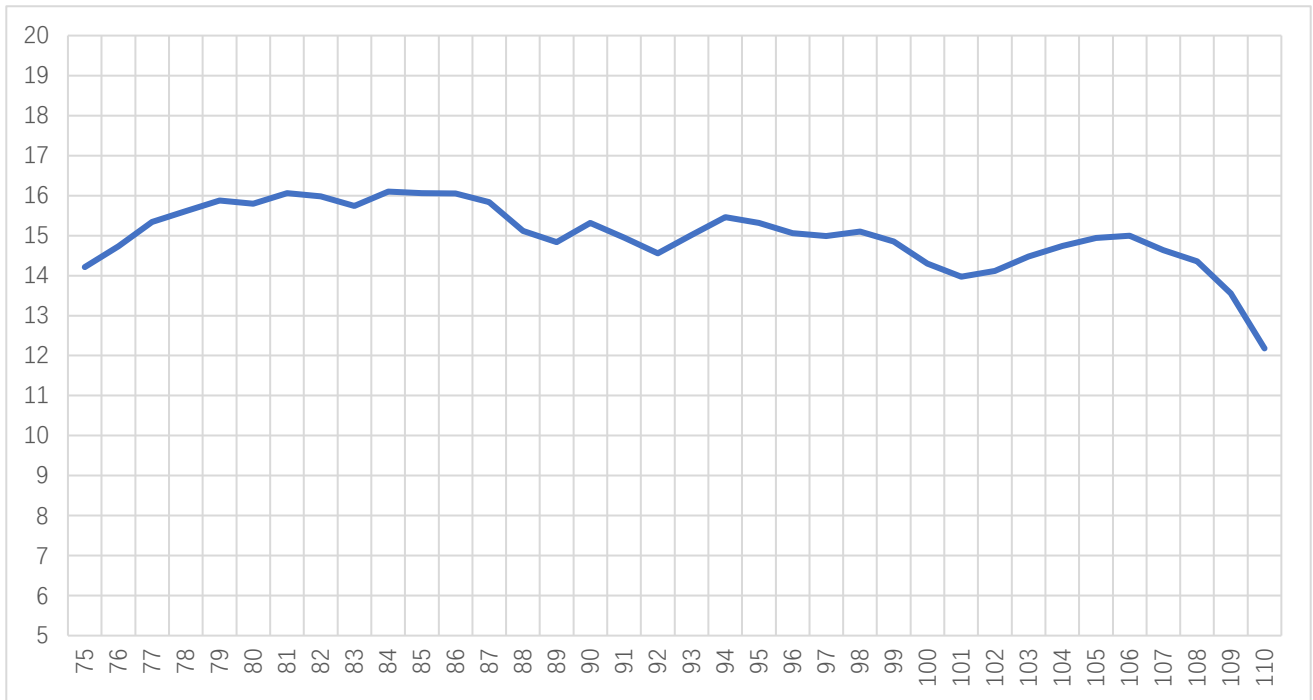
Return Loss vs Frequency



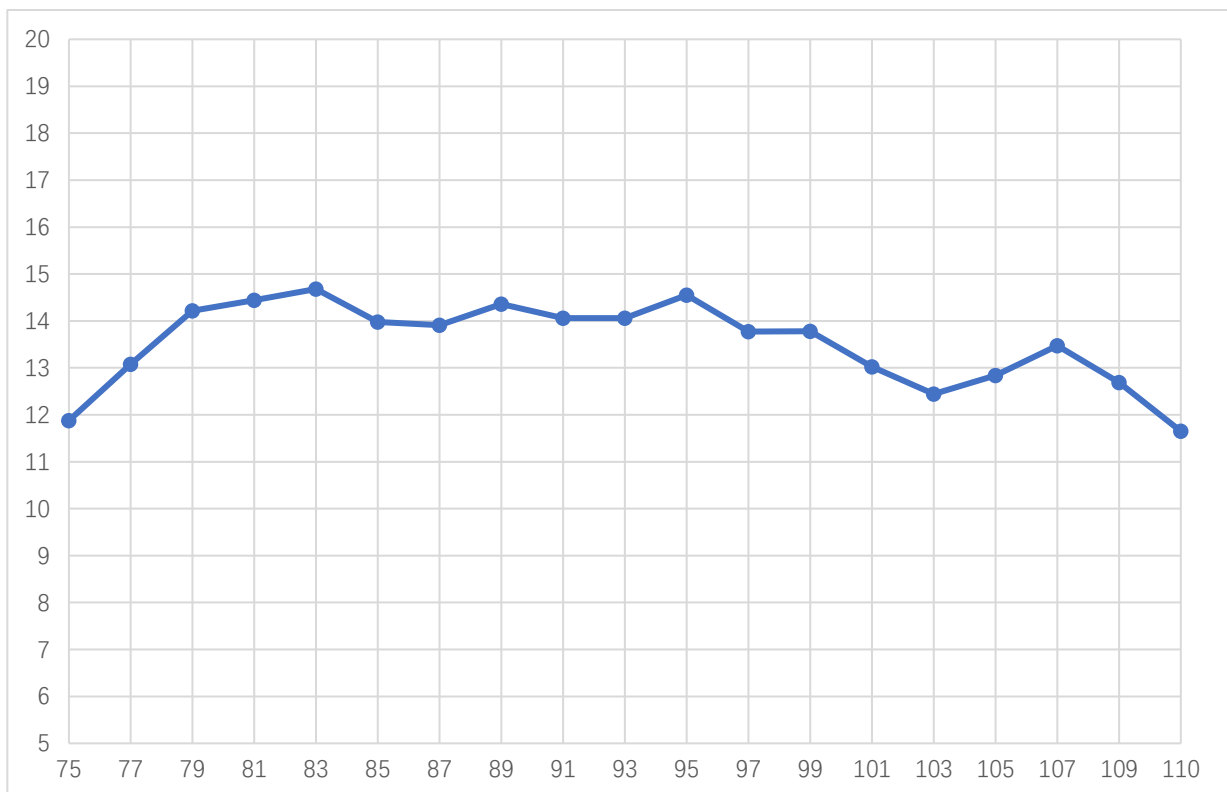


AT-PA-75110-1513T

75-110GHz Power Amplifier, Psat=+13dBm



Psat vs Frequency



P1dB vs Frequencys

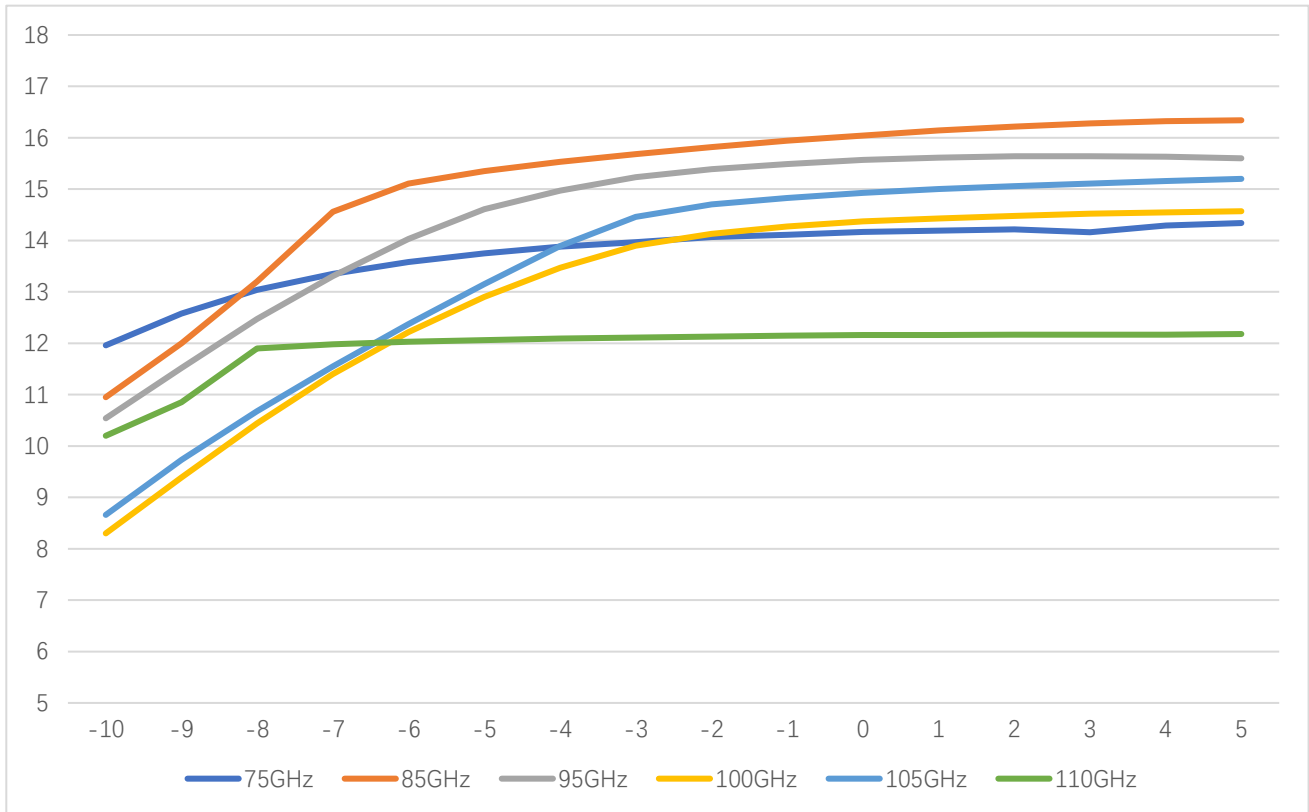
Shanghai AT Microwave Limited

Tel:021-6229 1233

Email:sales@atmicrowave.com

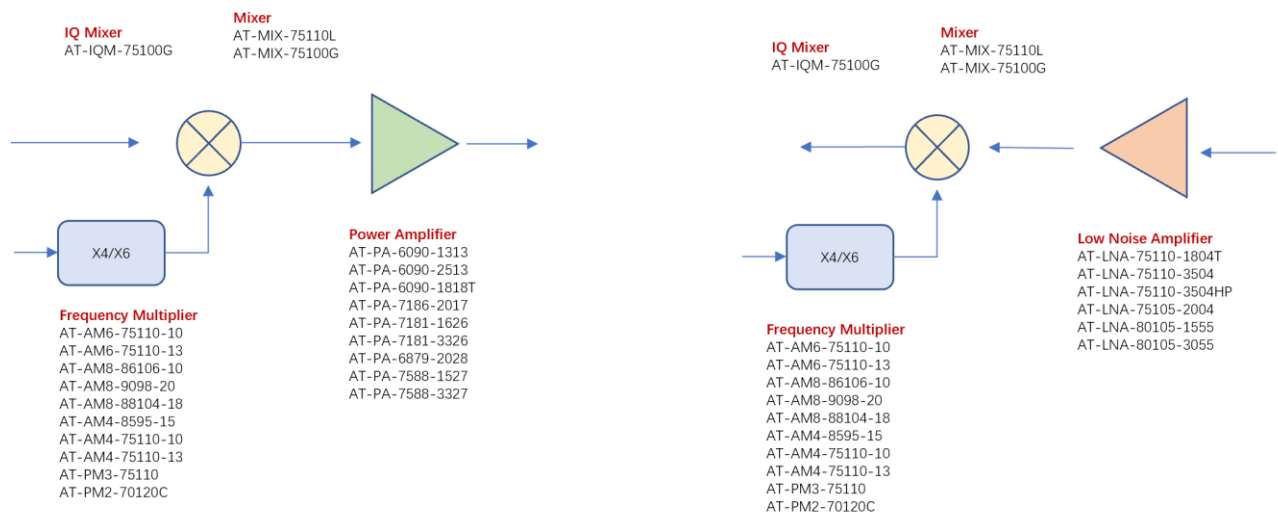
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Pout vs Pin at 75/85/95/105/110GHz

W BAND 75-110GHZ



Dimension: (unit in mm)

