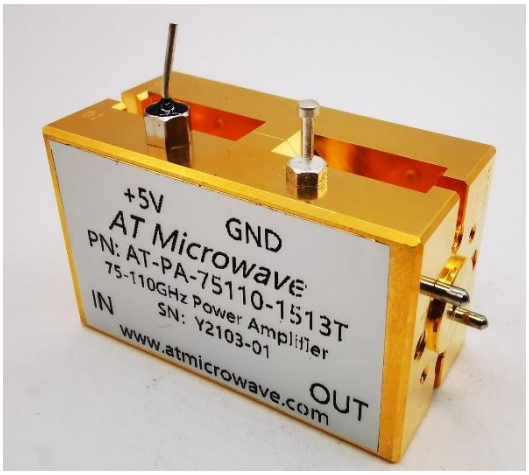
AT-PA-75110-1513T

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

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	

Shanghai AT Microwave Limited

Tel:021-6229 1233 Email:sales@atmicrowave.com www.atmicrowave.com

AT-PA-75110-1513T

75-110GHz Power Amplifier, Psat=+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

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.

Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
PN-LCBT	Low Cost, Compact Bench-Top, +220V Supply with AC/DC Adapter

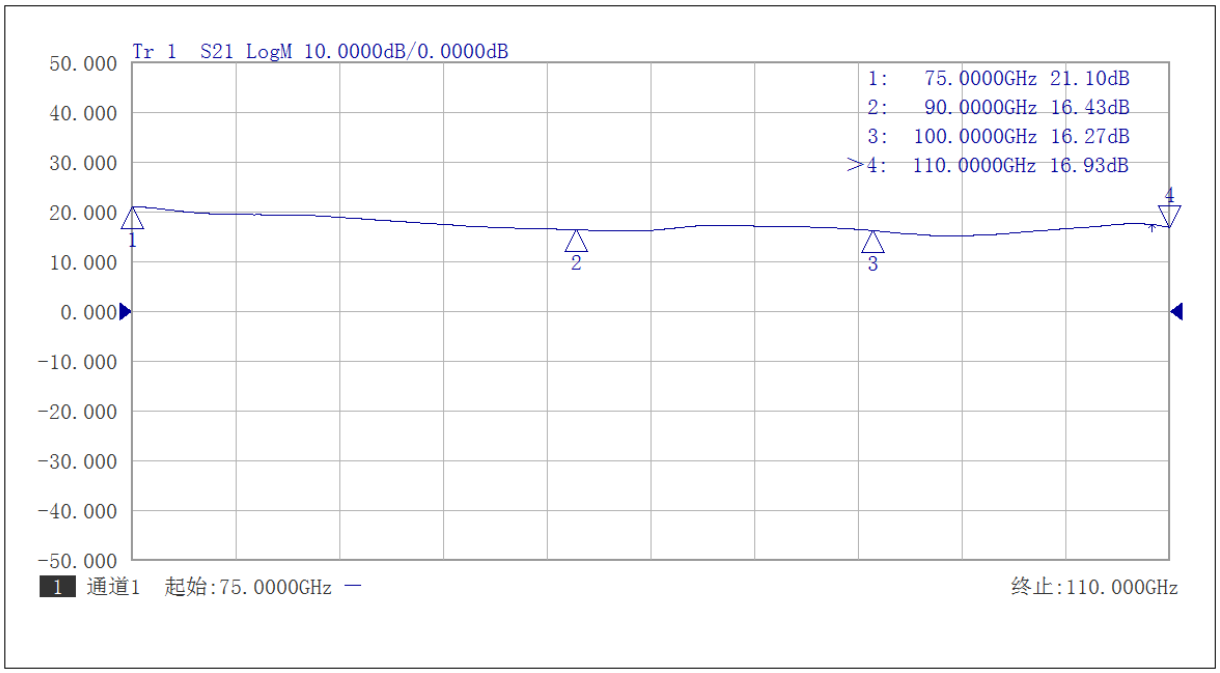
Shanghai AT Microwave Limited

Tel:021-6229 1233 Email:sales@atmicrowave.com www.atmicrowave.com

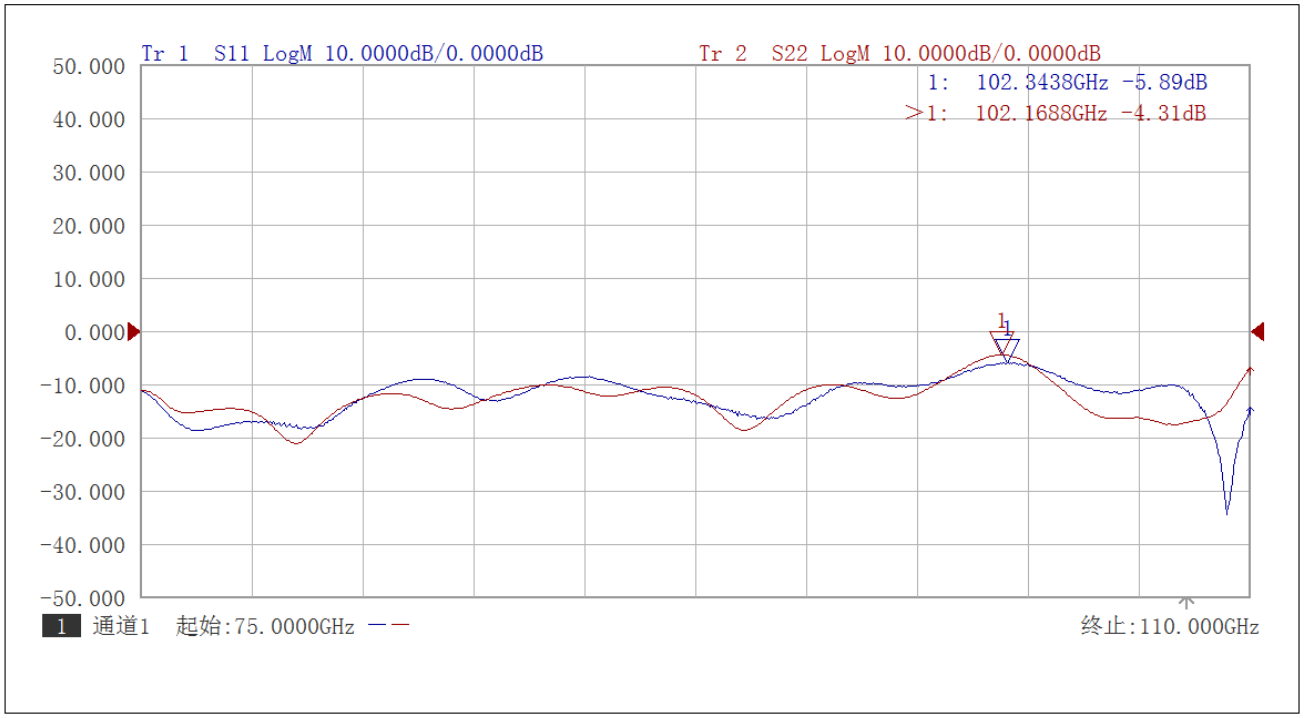
AT-PA-75110-1513T

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

Test Data:



Gain vs Frequency



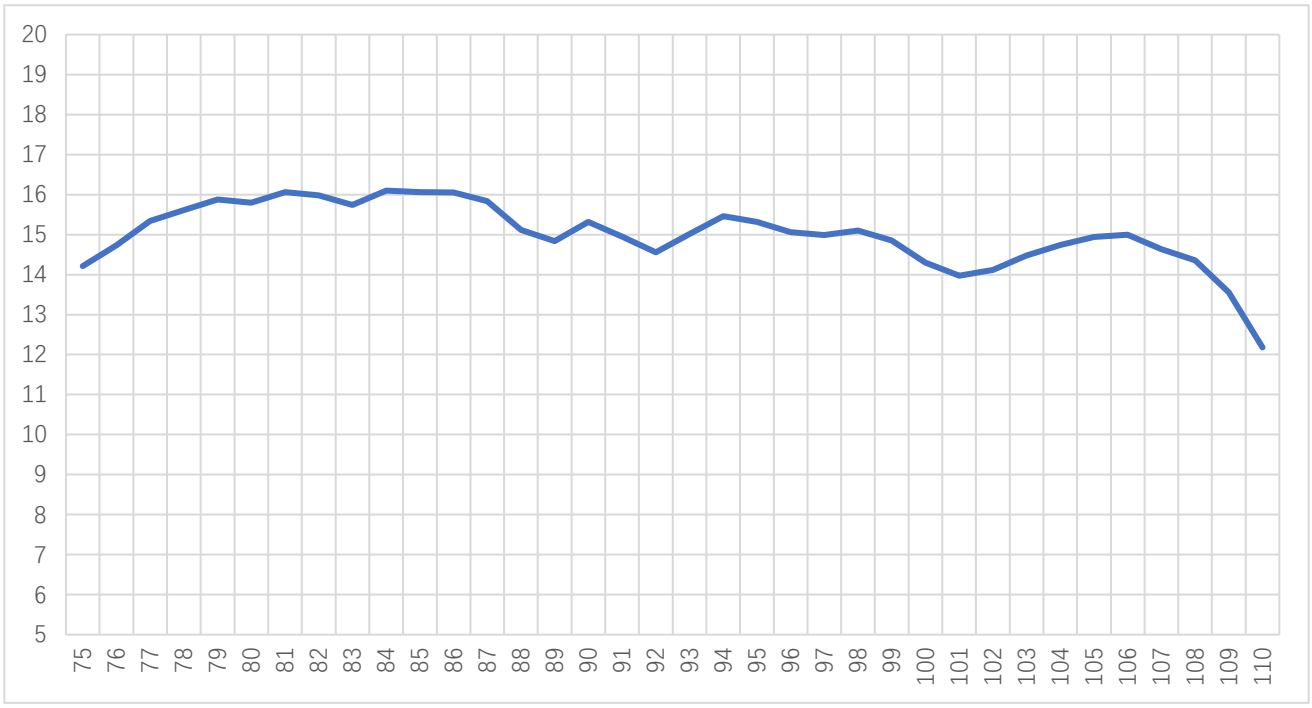
Return Loss vs Frequency

Shanghai AT Microwave Limited

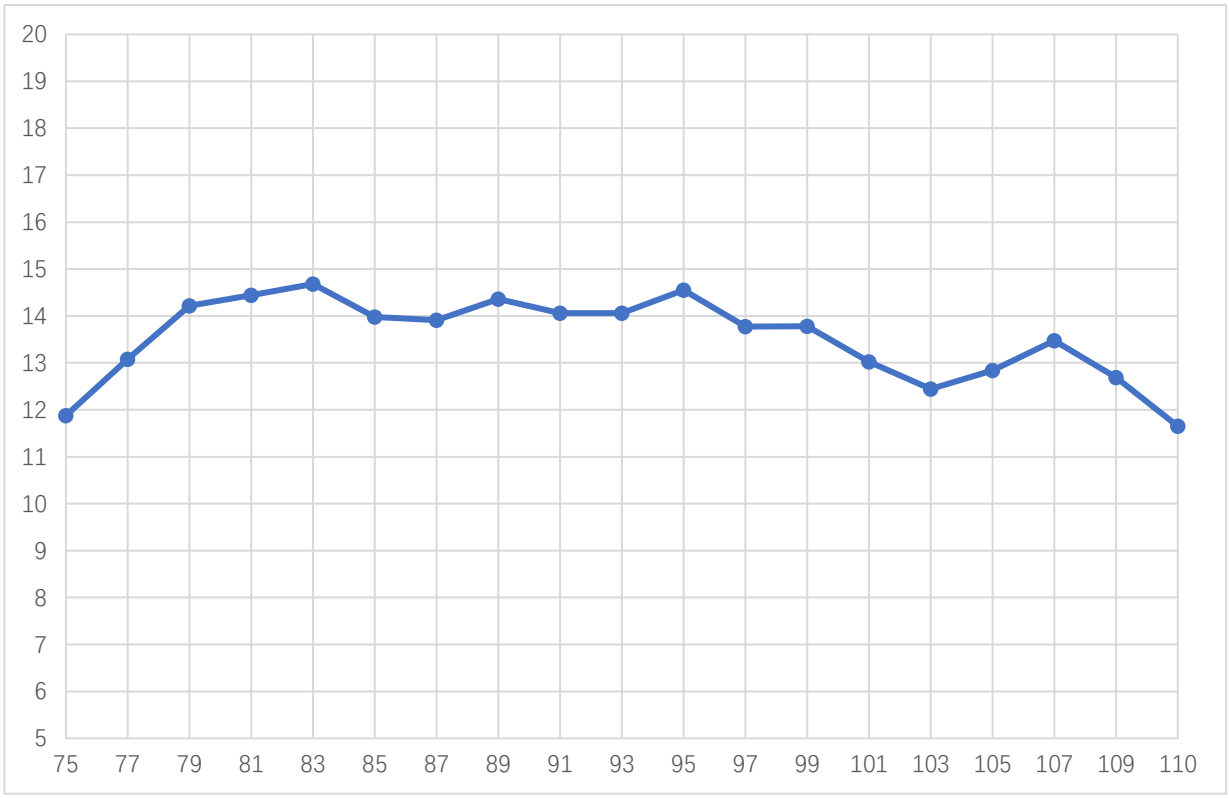
Tel:021-6229 1233 Email:sales@atmicrowave.com www.atmicrowave.com

AT-PA-75110-1513T

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



Psat vs Frequency



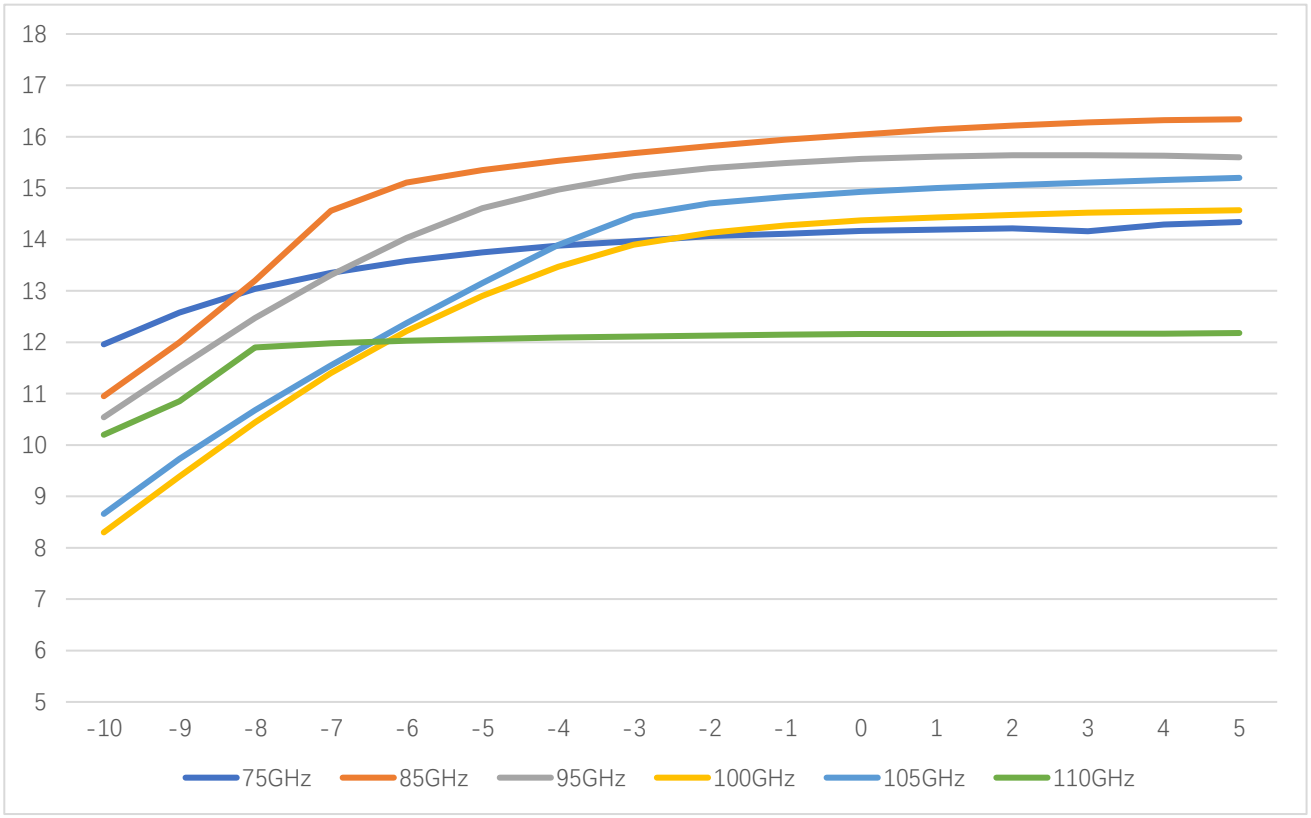
P1dB vs Frequencys

Shanghai AT Microwave Limited

Tel:021-6229 1233 Email:sales@atmicrowave.com www.atmicrowave.com

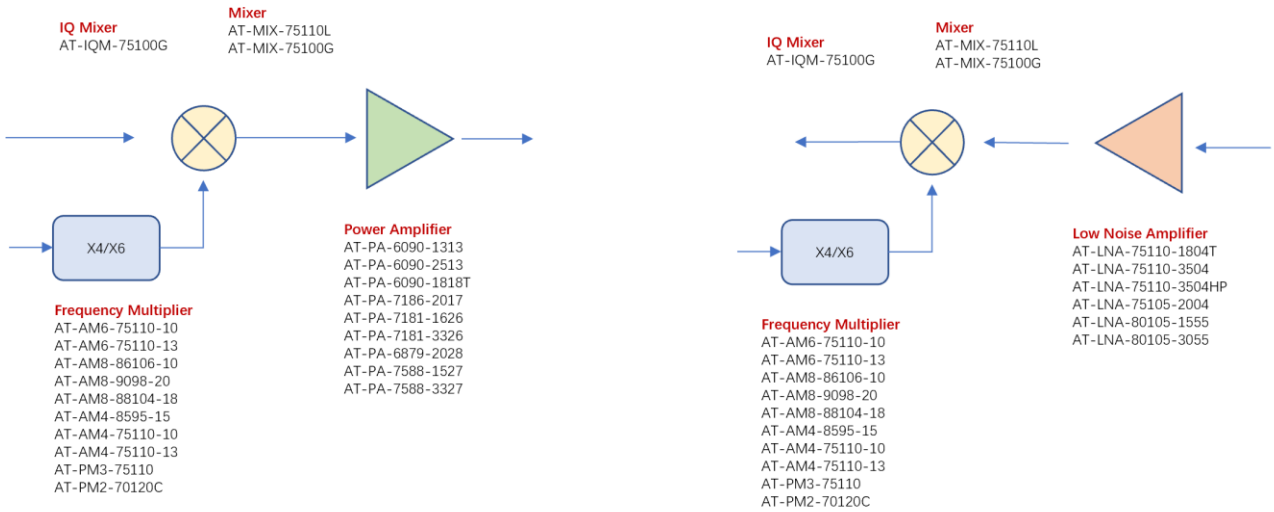
AT-PA-75110-1513T

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



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

W BAND 75-110GHZ



Shanghai AT Microwave Limited

Tel:021-6229 1233 Email:sales@atmicrowave.com www.atmicrowave.com

AT-PA-75110-1513T

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

Dimension: (unit in mm)