

W Band Broadband Power Amplifier



Product Overview

AT-PA-90110-1217Y is power amplifier with +17dBm output power in the frequency of 90-110GHz. The DC power requirement is +5V/0.95A. 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: 90-110GHz
- ✓ Psat:+17dBm
- ✓ Small signal gain: 12dB
- ✓ 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		90-110GHz	
Gain	10	12dB	
Drain Supply		+5V	+8V
Quiescent Current/A		0.95A	
Psat Current/A		1.2A	
P1Db		+15 dBm	
Psat		+17dBm	
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Spec Temp		25C	





AT-PA-90110-1217Y

90-110GHz Power Amplifier, $P_{sat}=+17dBm$

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	+15dBm
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.

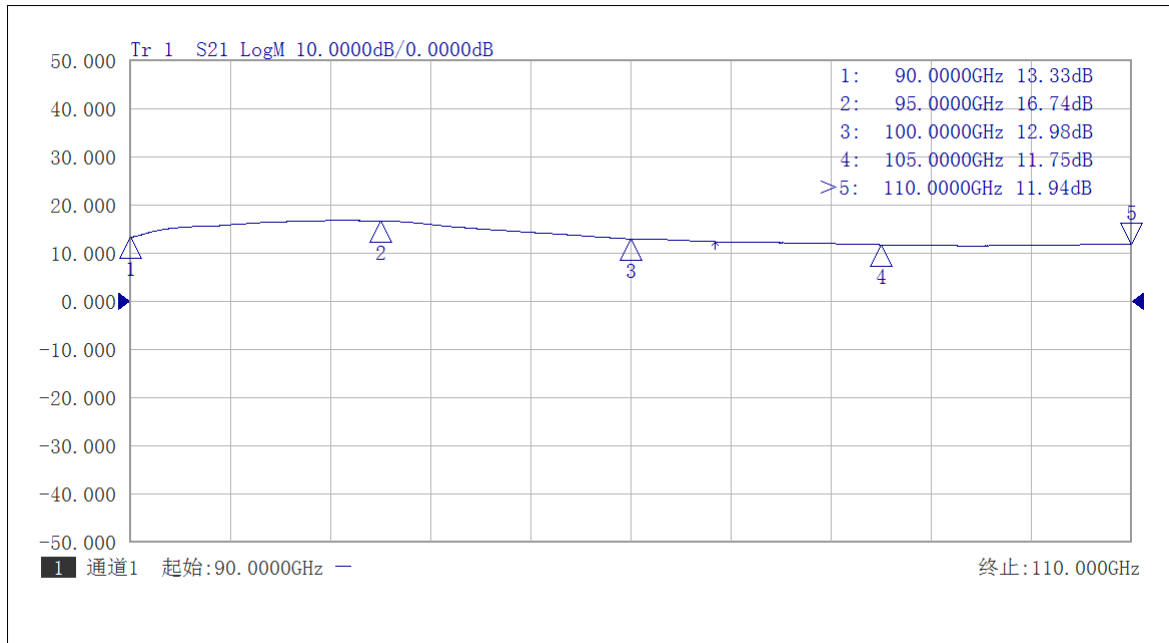
Notes:

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.

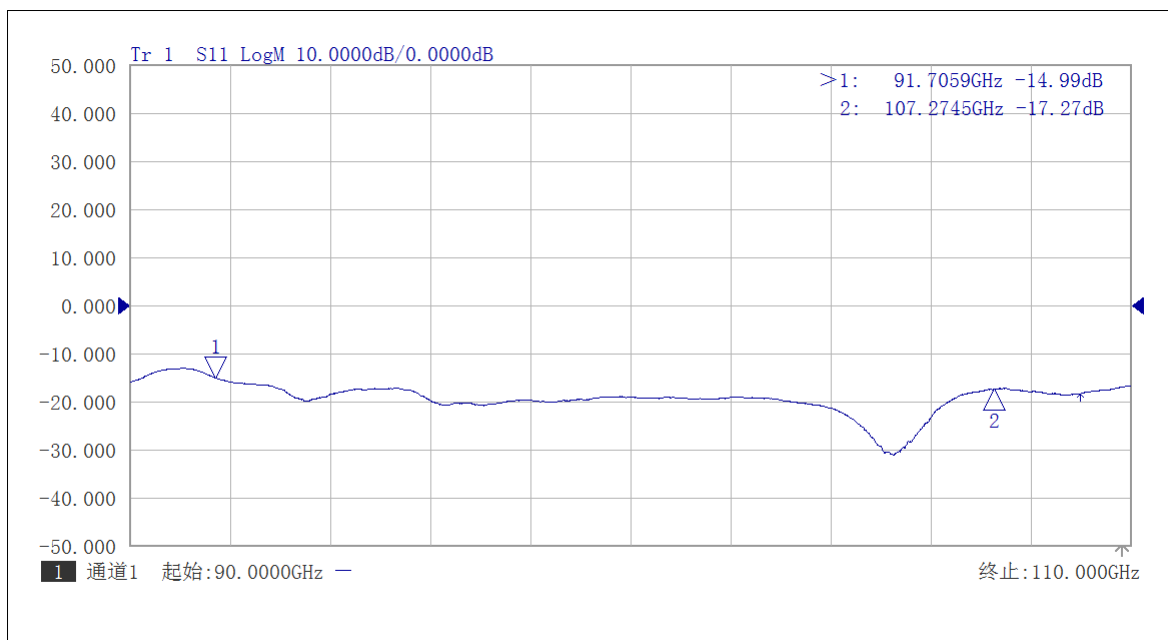
Please contact AT Microwave team to make sure you have the most current data.



Test Data:



Gain vs Frequency



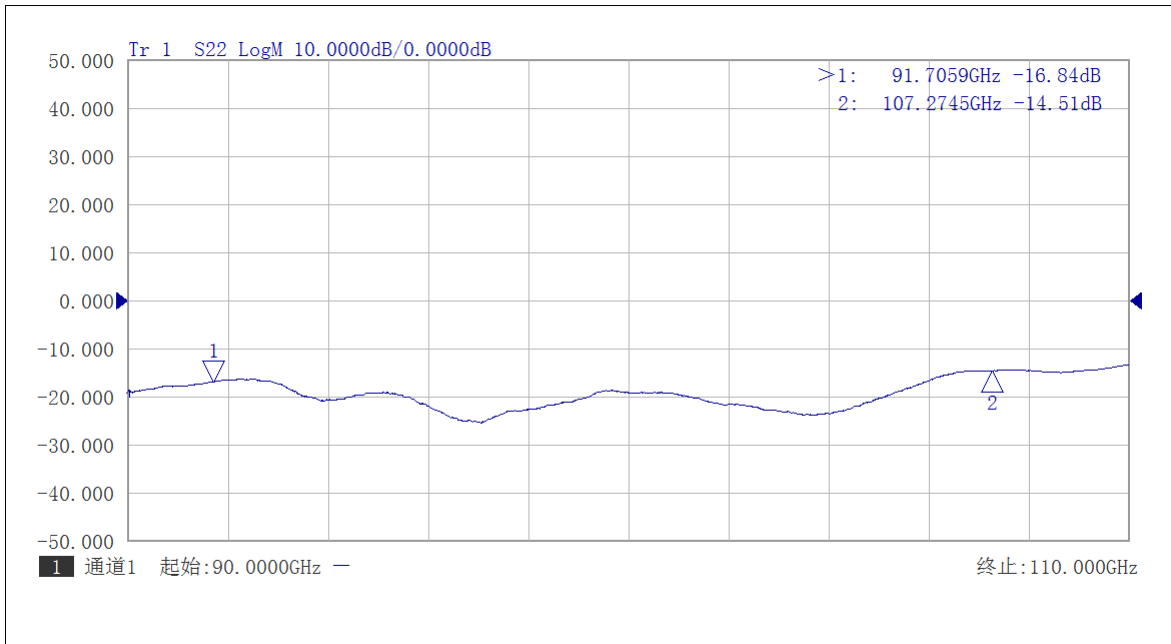
Input Return Loss vs Frequency



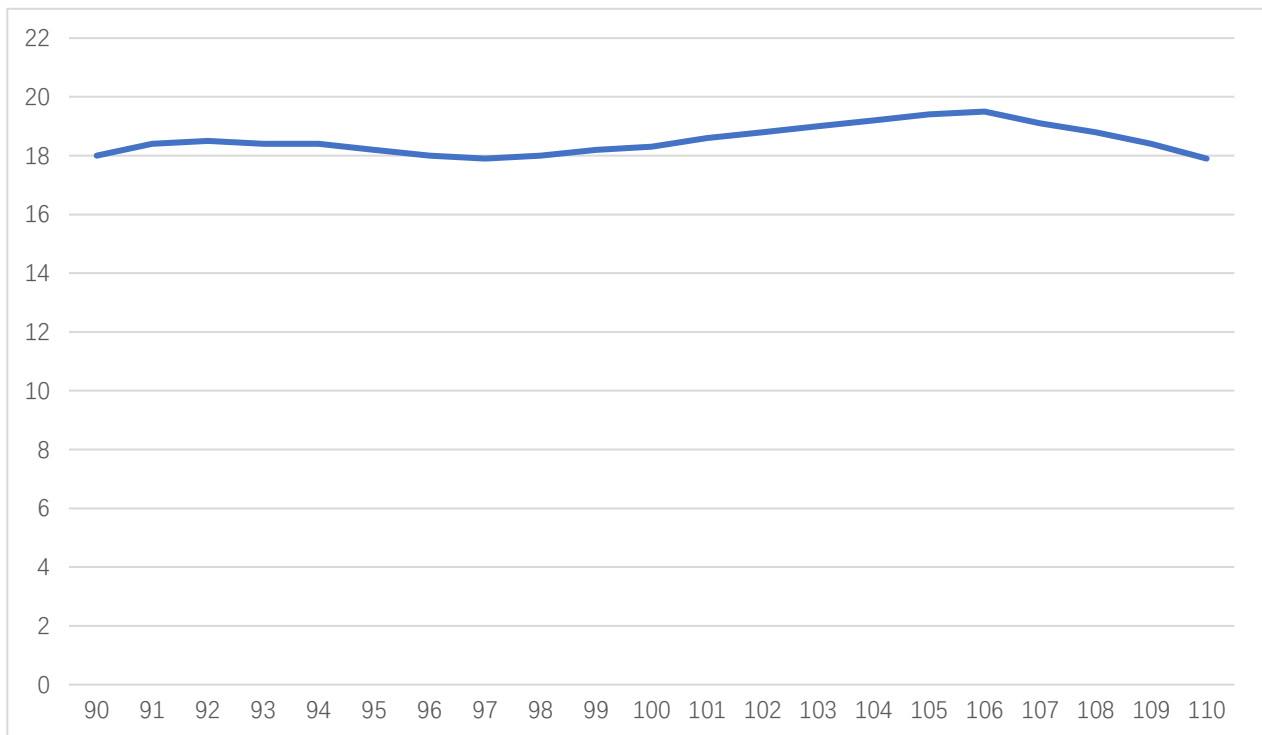


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90-110GHz Power Amplifier, Psat=+17dBm



Output Return Loss vs Frequency



Psat vs Frequency

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Dimension: (unit in mm)

