

E1 Band High Gain, High Power Amplifier



Product Overview

AT-PA-7176-3326 is high gain high power amplifier with +26dBm output power in the frequency of 71-76GHz. The DC power requirement is +5/1500mA. The module is with a standard WR-12 waveguide.

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

It can also be used from 71-81Hz with some variation of performance.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 71-76GHz
- ✓ Psat:+26dBm
- ✓ Small signal gain: 33dB
- ✓ Single Positive Supply

Application

- ✓ E Band Point to Point Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		71-76GHz	81
Gain	30	33dB	
Drain Supply		+5V	+6V
Input Power			-10dBm
P1dB		+24dBm	
Psat	+25	+26dBm	
Current/NO RF		1.5A	
Idd/Psat		2.3A	
Input Return Loss		-7 dB	
Output Return Loss		-7 dB	
Spec Temp		25C	





AT-PA-7176-3326

71-76GHz Power Amplifier, Psat=+26dBm

Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	270g
Size:	57.5x40.5x22.4 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
RF Input Power	+0dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Caution:

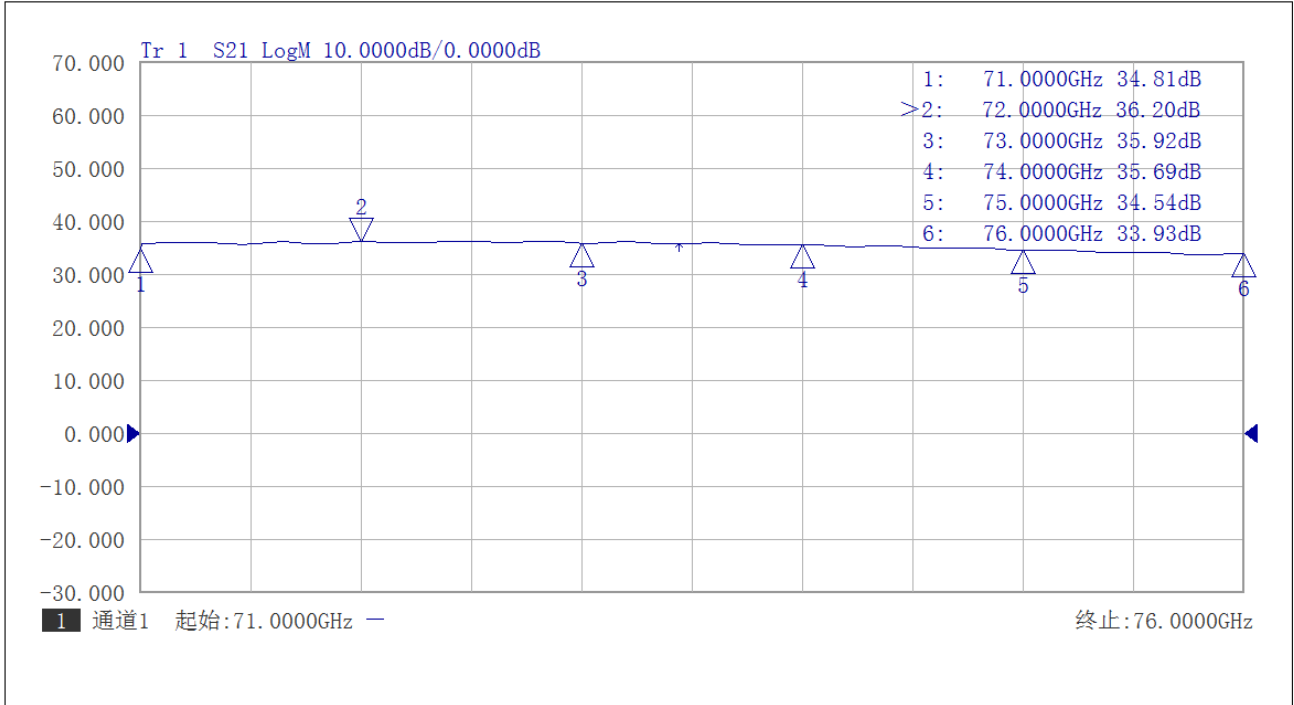
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

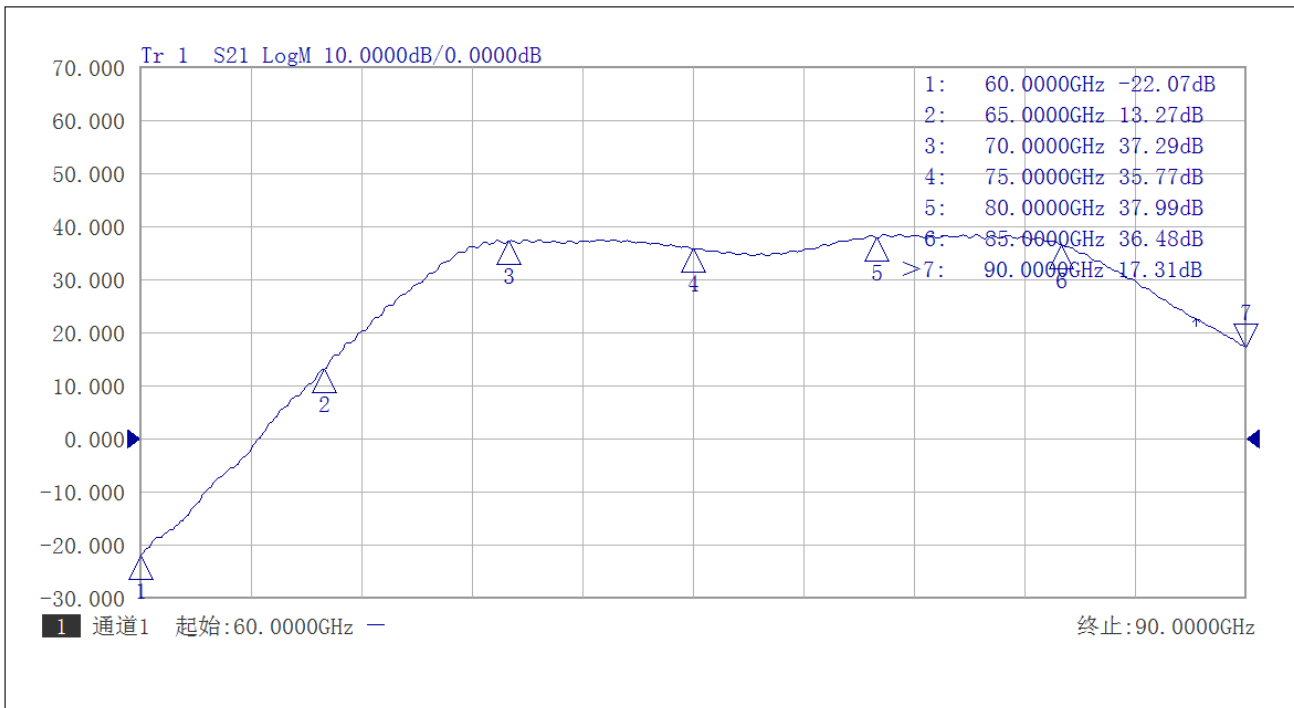
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test data:

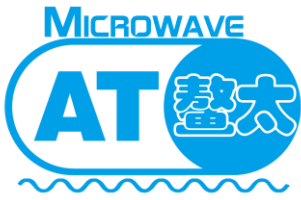


Gain vs Frequency, 71-76GHz



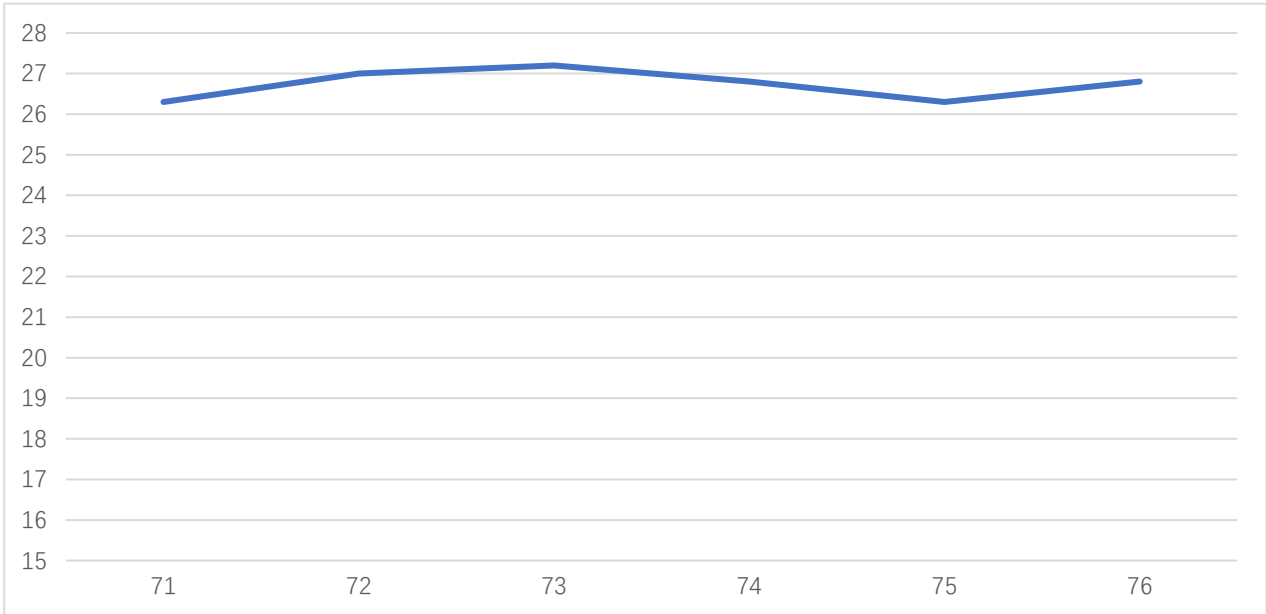
Gain vs Frequency, 60-90GHz



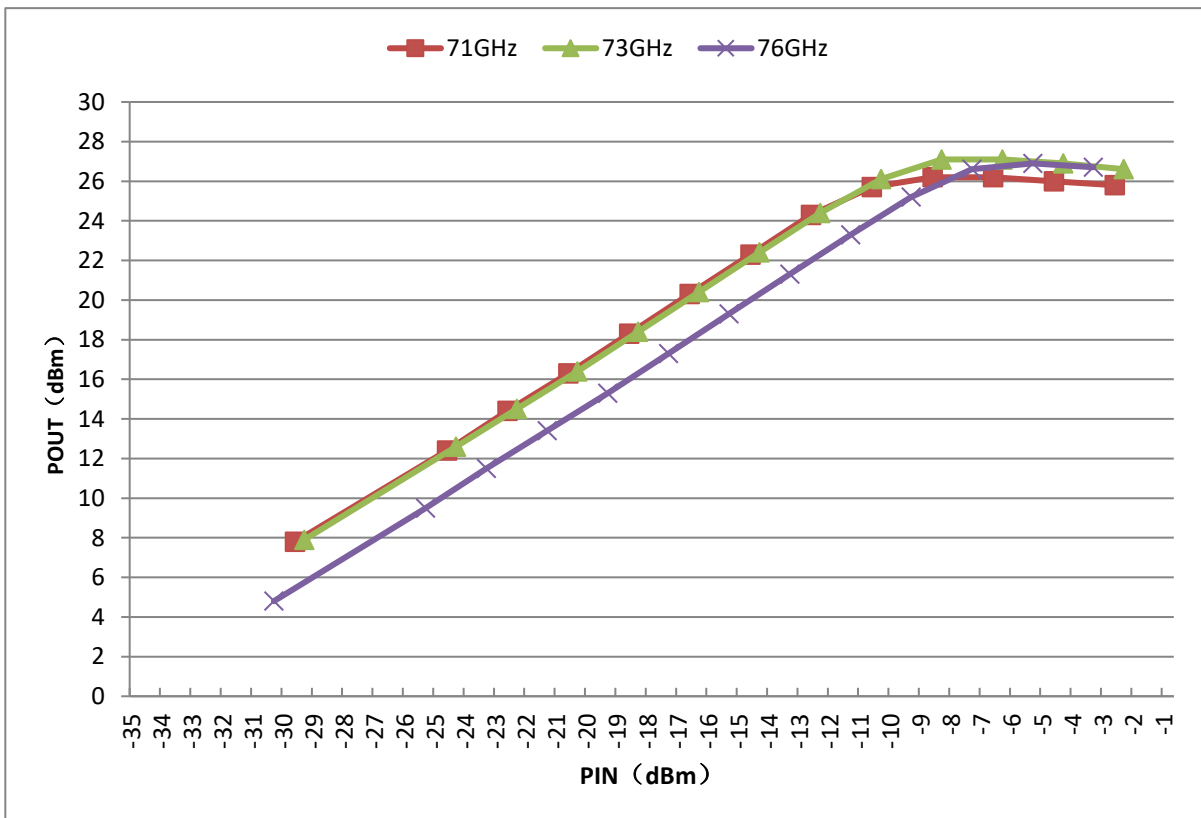


AT-PA-7176-3326

71-76GHz Power Amplifier, Psat=+26dBm



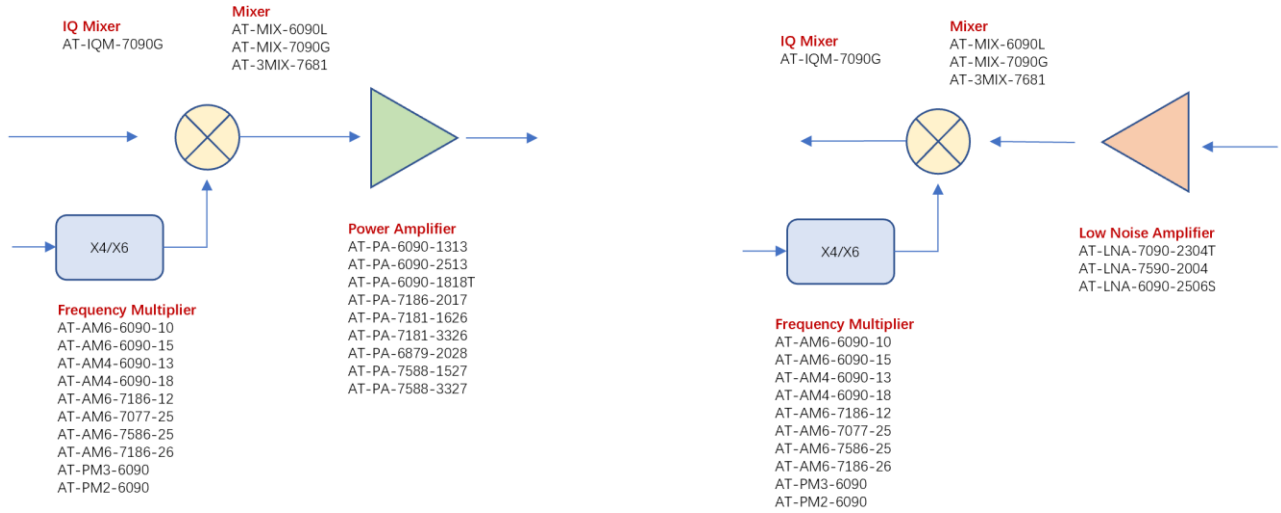
Psat vs Frequency



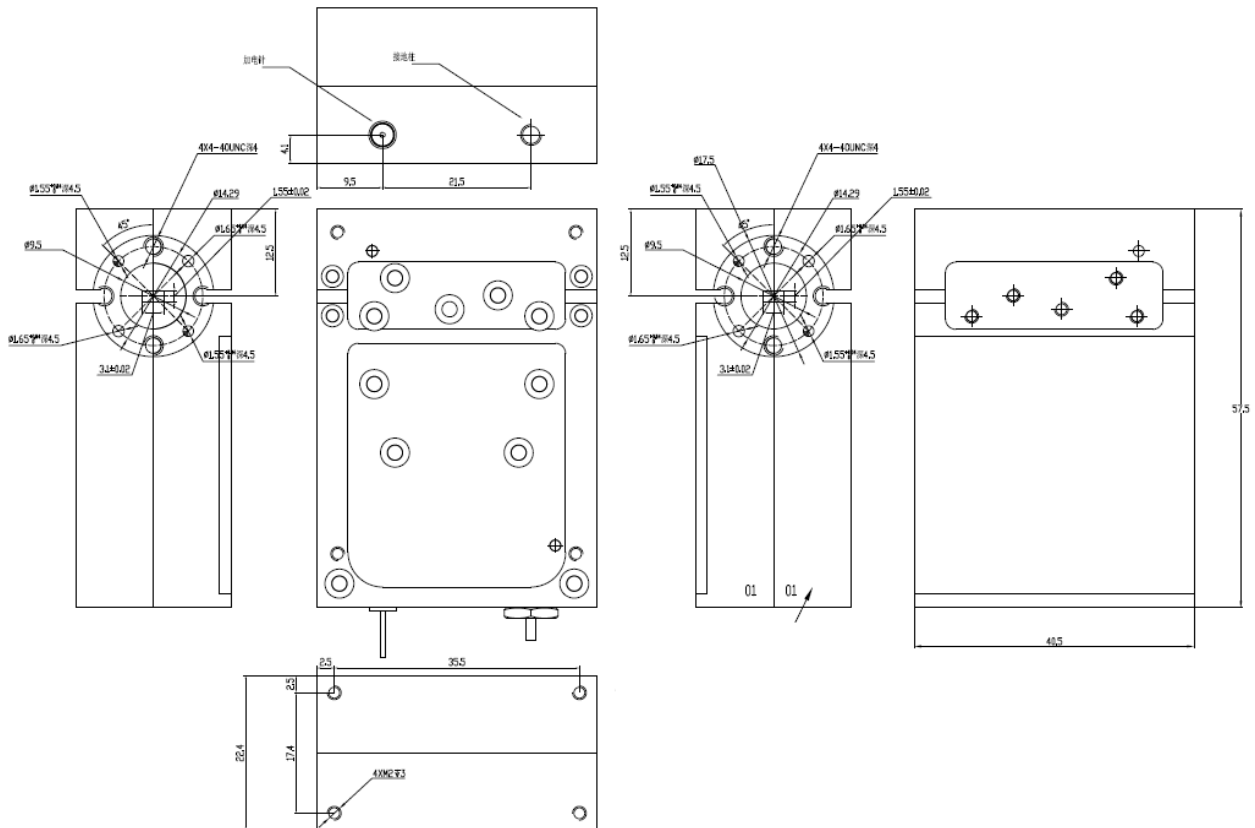
Pout vs Pin



E Band 60-90GHz



Dimension:(unit in mm)



Heatsink required during operation

