

V Band Power Amplifier



Product Overview

AT-PA-5565-1622 is power amplifier with +22dBm output power in the frequency of 55-65GHz. The DC power requirement is +5V/470mA. The module is with a standard WR-15 waveguide.

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

It can also be used from 52-70GHz with some variation of performance.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 55-65GHz
- ✓ Psat:+22dBm
- ✓ Small signal gain: 16dB
- ✓ Single Power Supply

Application

- ✓ V Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		55-65GHz	
Gain	14	16dB	
Drain Supply		+5V	+6V
P1db		+19dBm	
Psat	+20	+22dBm	
Current quiescent		275 mA	
Current at Psat		470mA	500mA
Input Return Loss		-8dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-PA-5565-1622

55-65GHz Power Amplifier, $P_{sat}=+22\text{dBm}$

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	40x25X20 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+6V
RF Input Power	+12dBm
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.

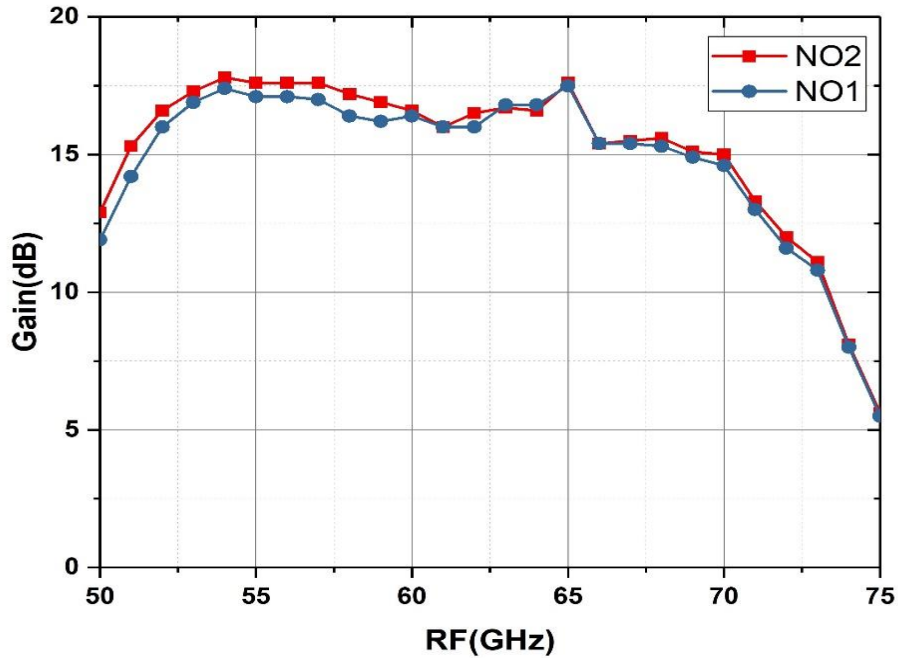
Notes:

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.

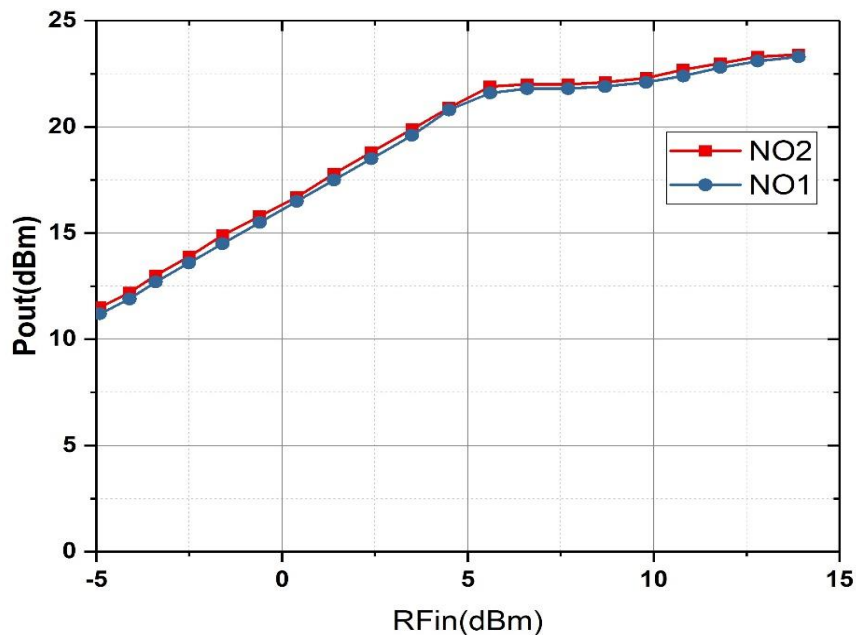


Test Data (25C)

Vdd=+5V, Idd=270mA without RF. Idd=470mA at Psat.

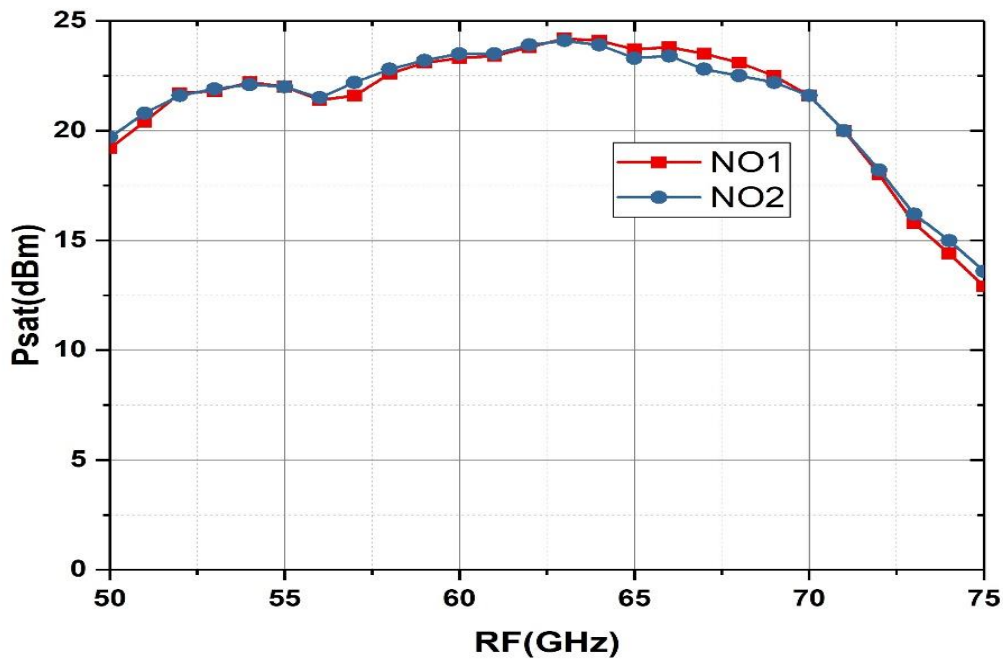


Gain VS Frequency



Pout VS Pin at 60GHz





Psat Vs Frequency

Dimension:(unit in mm)

