

D Band Power Amplifier, 30dB Gain, Pout=+13dBm, WR-06

2023-6-15



Product Overview

AT-PA-110150-3013 is a high gain D Band power amplifier operating in the 110-150 GHz frequency range. The PA is packaged in a waveguide module using industry standard WR-06 waveguide with UG-387/U-M anti-cocking Flange.

The power amplifier is with very low NF=6dB, and it can be used as low noise amplifier as well.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 110-150GHz
- ✓ Gain: 30dB
- ✓ Pout: +13dBm
- ✓ NF=6dB
- ✓ Single Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		110-150GHz	
Gain	28dB	30dB	
P1dB	+8dBm	+10dBm	
Psat	+10dBm	+13dBm	
Power Supply		+5V	
Current		0.25A	
NF		6dB	9dB
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





AT-PA-110150-3013

110-150GHz Power Amplifier

Mechanical Information

Item	Description
Input Port	WR-06 with UG-387/U-M anti-cocking Flange.
Output Port	WR-06 with UG-387/U-M anti-cocking Flange.
Case Material	Copper
Finish	Gold Plated
Weight	150g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+8V
RF Input Power	+10dBm
Operating Temperature	0 to +50C
Storage Temperature	-45 to +85C

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.

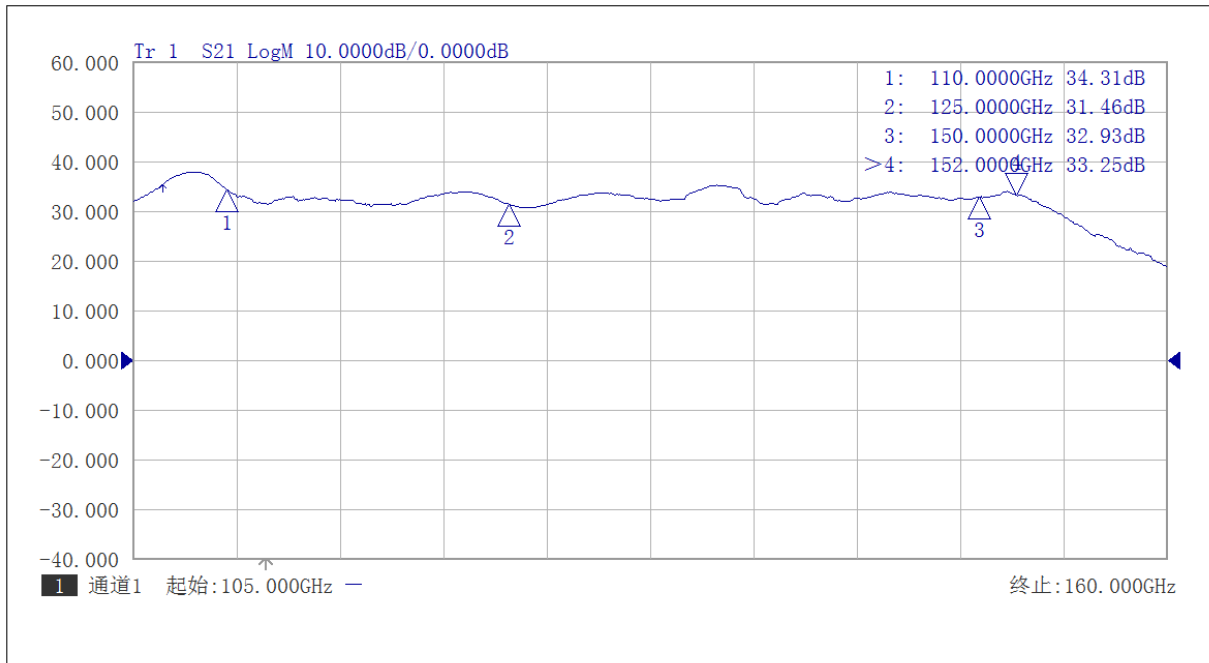
Part Number Selection Guide

Item	Description
PN	Standard Module with DC Power Supply
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter

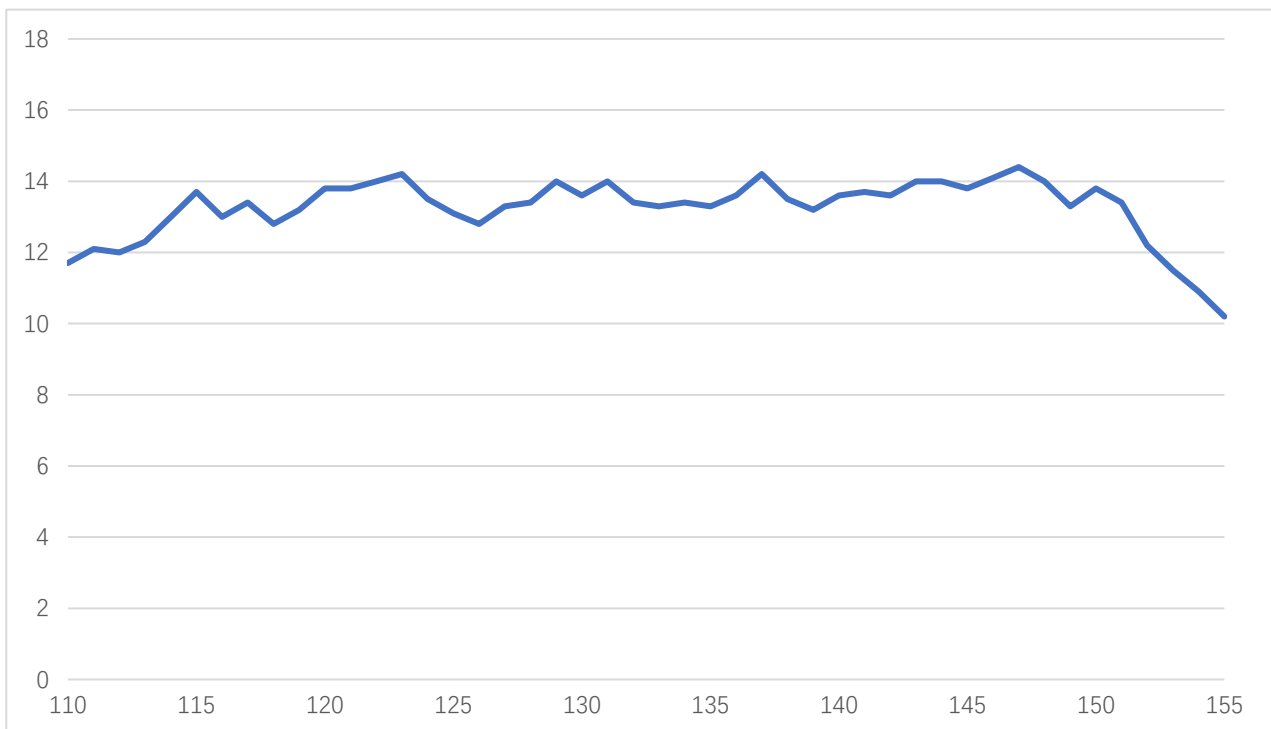


Test Data (25C)

Please note that test curves will vary slightly from unit to unit.



Gain vs Frequency



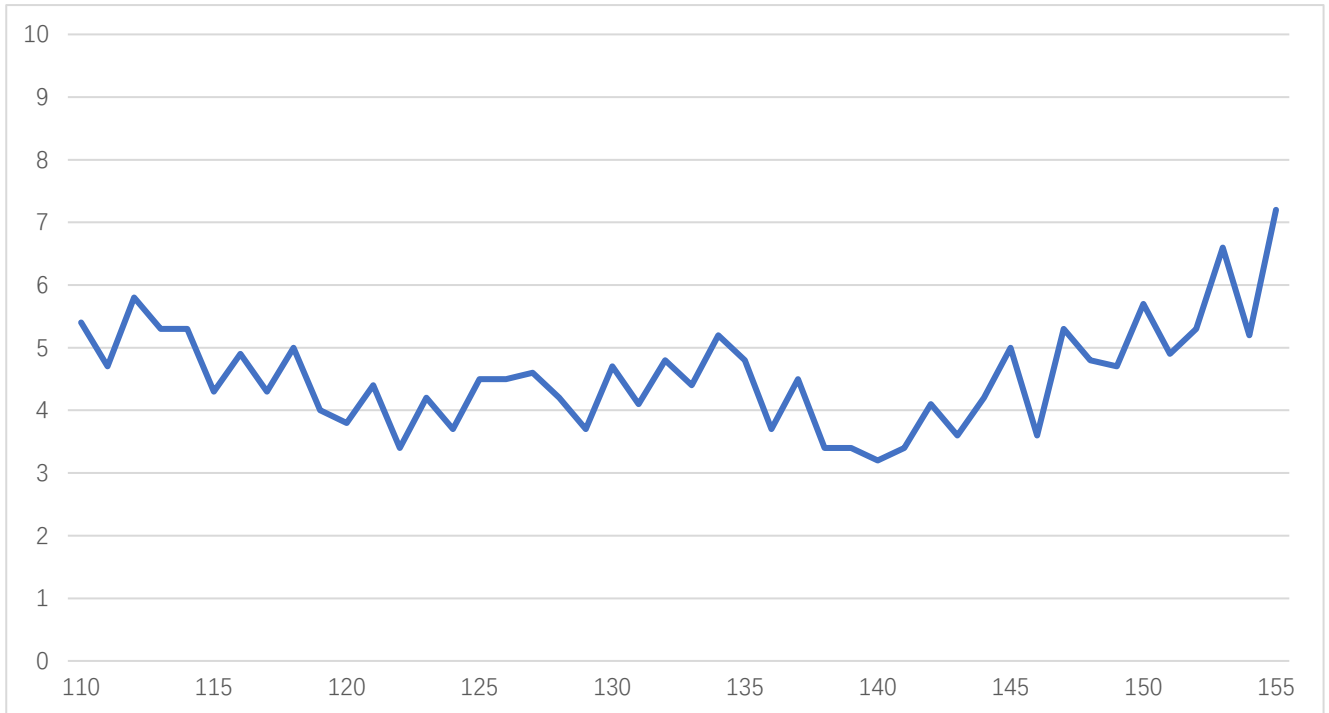
Pout vs Frequency, Pin=-5dBm





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NF vs Frequency



Dimension: (unit mm)

