

55-90GHz Broadband Amplifier, Gain=35dB, Pout=+18dBm, 1.0mm Female

2023-3-6



Product Overview

AT-PA-5590-3518T-10F is an High Gain amplifier operating in the 55-90GHz frequency range with super low NF=5dB. The PA is packaged with 1.0mm Female connector

The amplifier can be used both as PA and Low Noise Amplifier.

More information, please visit www.atmicrowave.com.

Advantages

- ✓ Frequency: 55-90GHz
- ✓ Gain: 35dB
- ✓ NF: 5dB
- ✓ Pout=+18dBm

Application

- ✓ E band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		55-90GHz	
Gain	30	35dB	
Gain Flatness		+/-5dB	
P1dB		+15dBm	
Psat	+16dBm +14dBm	55-85GHz: +18dBm 85-90GHz: +15dBm	
NF		5dB	
Drain Supply		+5V	+8V
Current		0.35A	0.45A
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Spec Temp		25C	





AT-PA-5590-3518T-10F

55-90GHz High Gain Power Amplifier

Mechanical Information

Item	Description
Input Port	1.0mm Female
Output Port	1.0mm Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	See outline

Absolute Maximum Ratings Table

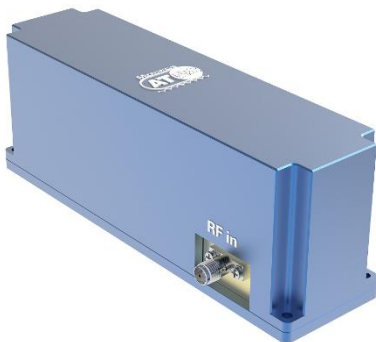
Parameter	Value
Drain Supply	+9V
RF Input Power	+5dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

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



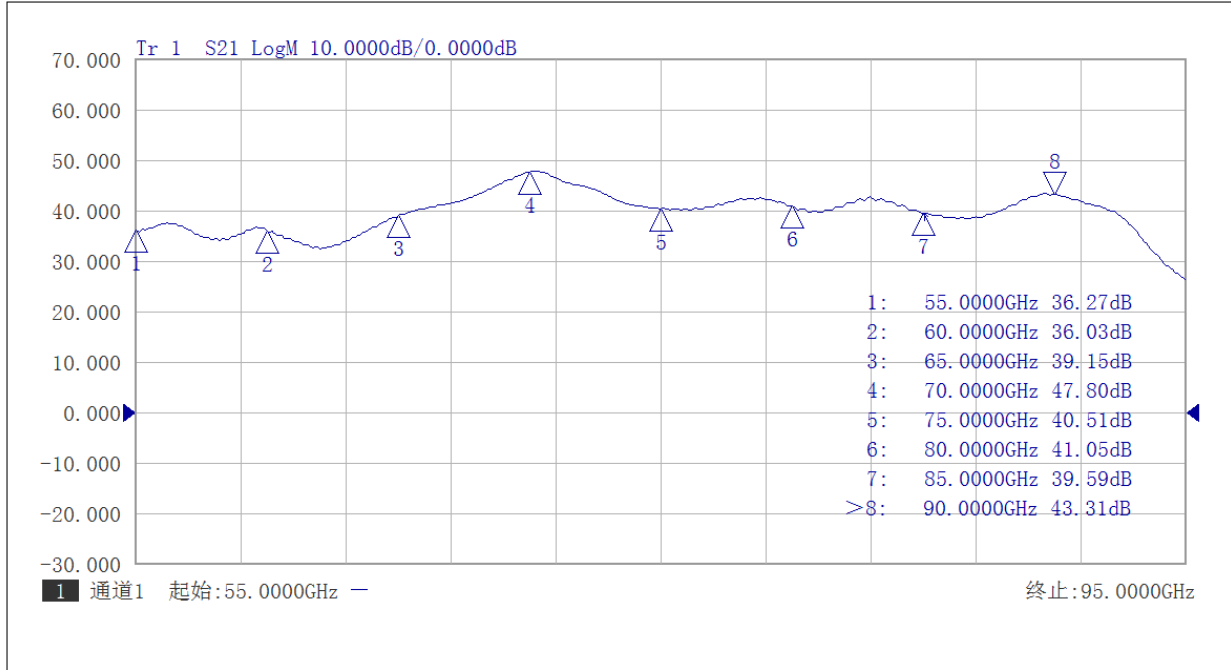


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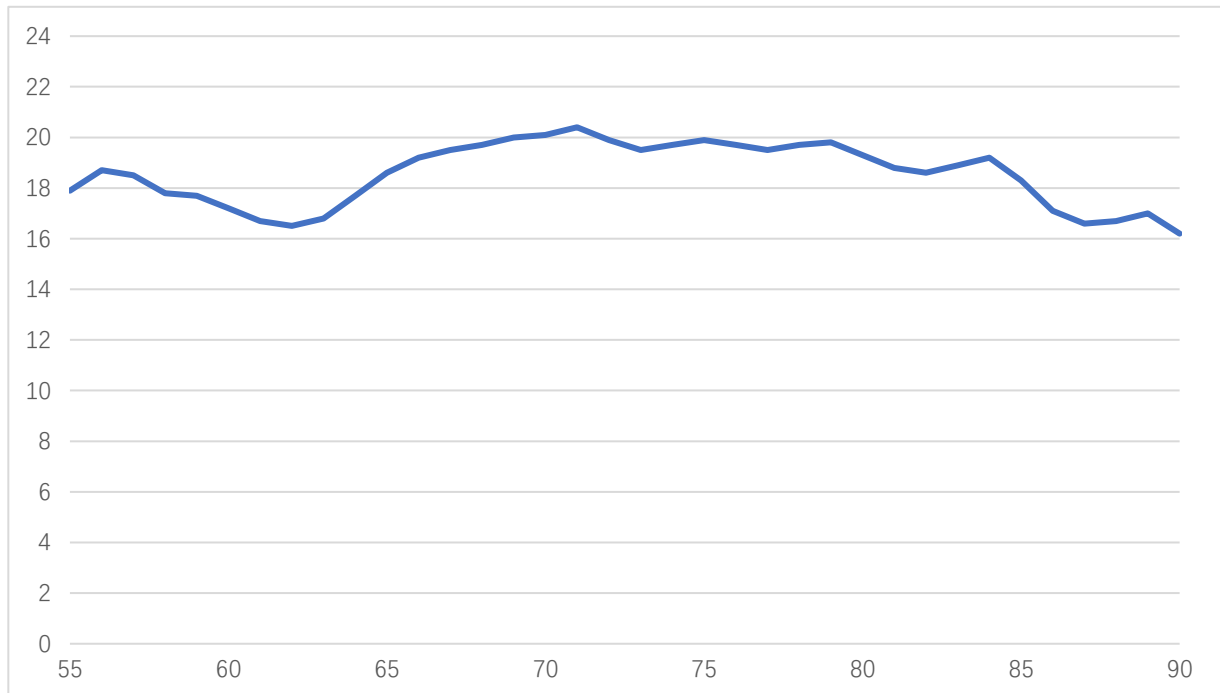
55-90GHz High Gain Power Amplifier

Test Data (25C)

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

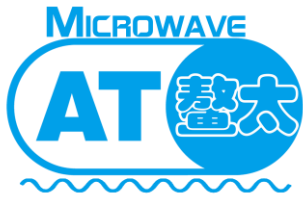


Gain vs Frequency



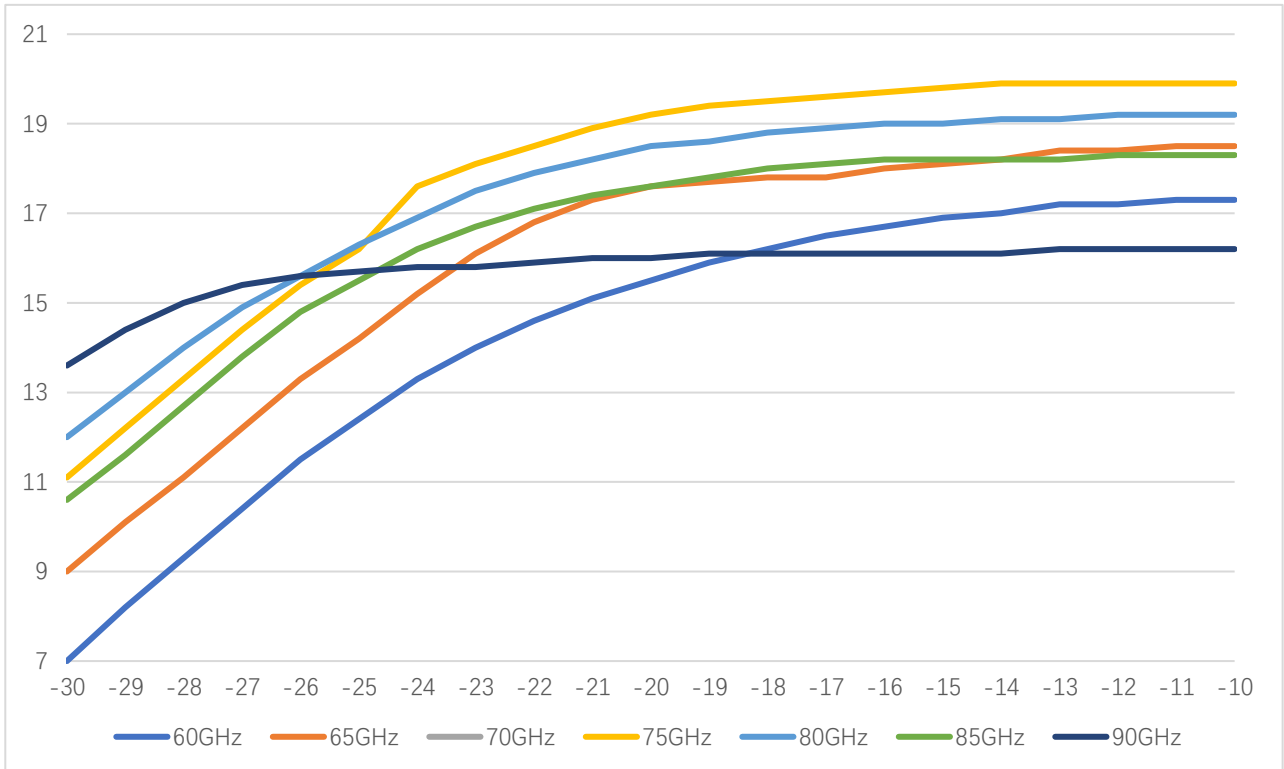
Psat vs Frequency



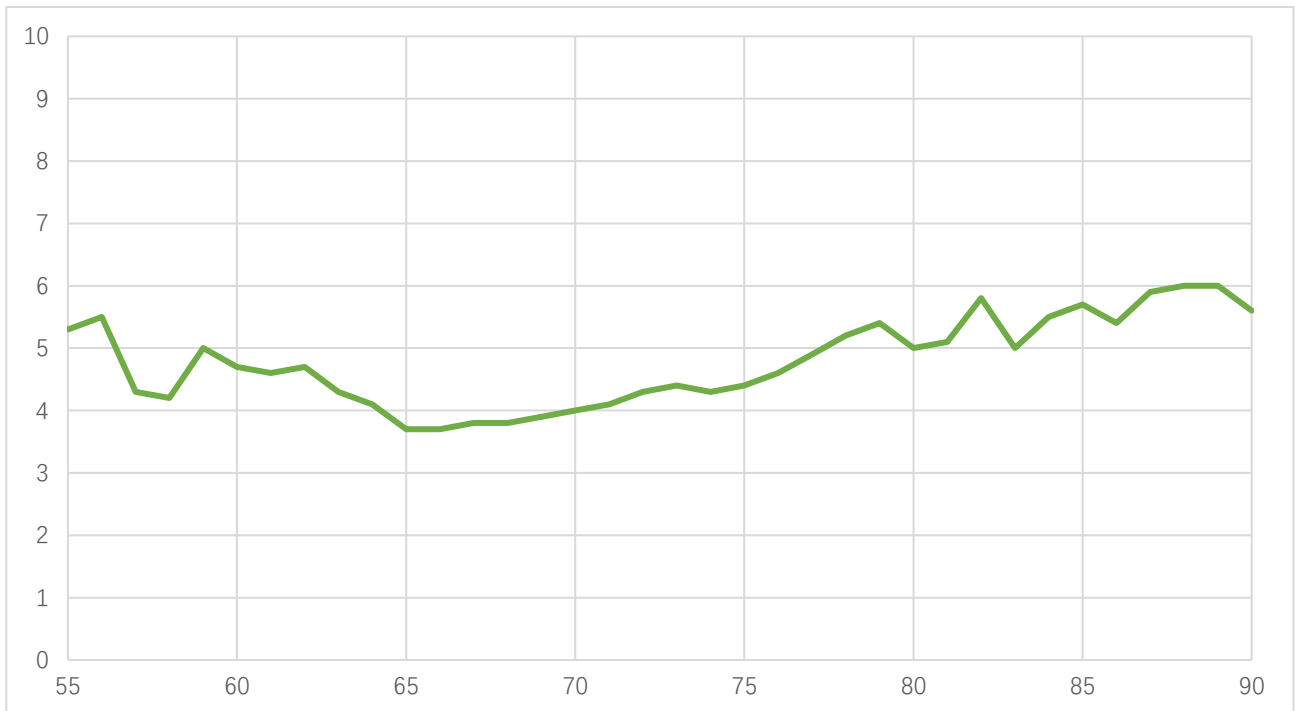


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Pout vs Pin



NF vs Frequency



Dimension (mm)

