



AT-CPA-8186-3032G2

81-86GHz Power Amplifier, Psat=+32dBm

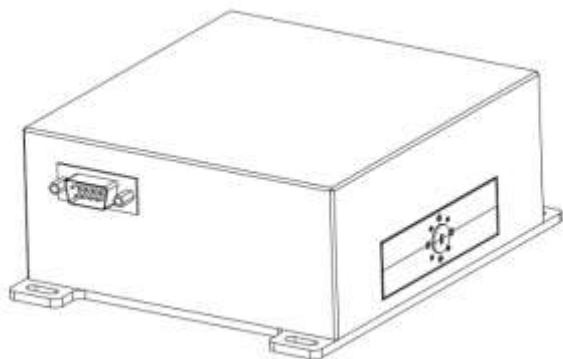
E2 Band High Linear Power Amplifier, Gain=30dB , Psat +32dBm, WR-12

Product Overview

AT-PA-8186-3032G2 is 30dB high gain power amplifier with +32dBm output power in the frequency of 81-86GHz. The DC power requirement is +5V/8A. The module is with a standard WR-12 waveguide. GaAs amplifier chips are used inside.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. It can also be used from 75-86GHz with some variation of performance.

More information, please visit www.atmicrowave.com



Advantages

- ✓ Frequency: 81-86GHz
- ✓ P1=+30dBm
- ✓ Psat:+32dBm
- ✓ Small signal gain: 30dB

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		81-86GHz	
Small Signal Gain	28dB	30dB	
Output P1	+28dBm	+30dBm	
Output Saturated Power	+31dBm	+32dBm	
Supply Voltage (V)		+5V	+6V
Quiescent Current/A (No RF)		6A	
Psat Current/A		8A	11A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





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81-86GHz Power Amplifier, $P_{sat}=+32dBm$

Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Power Supply	DB9
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	TBD
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
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.
3. Please contact AT Microwave team to make sure you have the most current data.

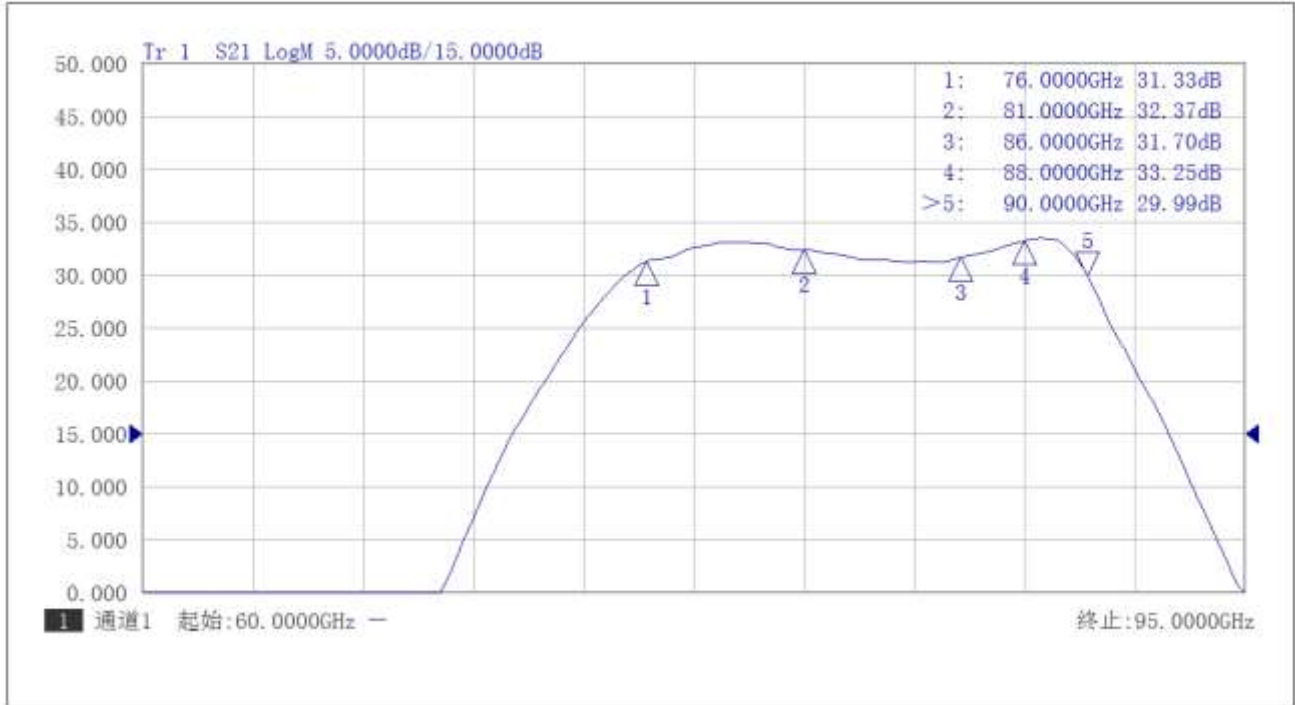




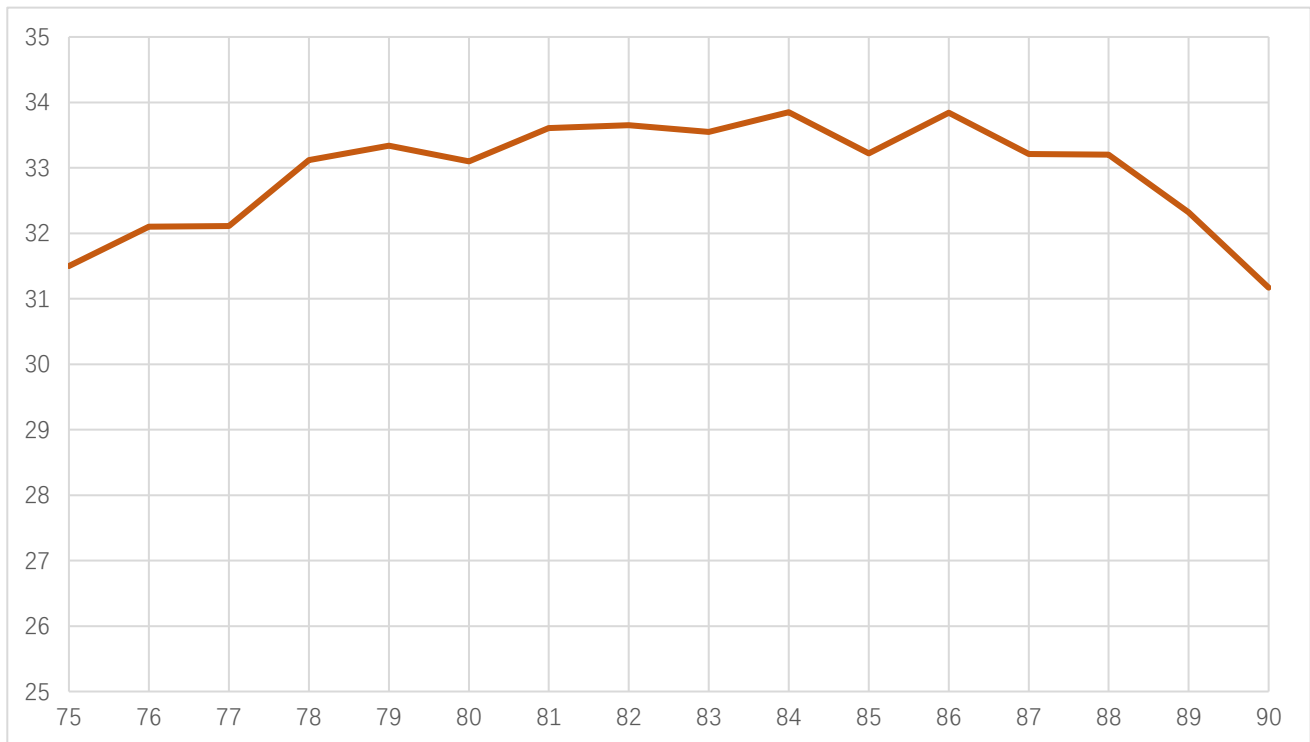
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81-86GHz Power Amplifier, $P_{sat}=+32\text{dBm}$

Test Data



Gain vs Frequency



Psat vs Frequency

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