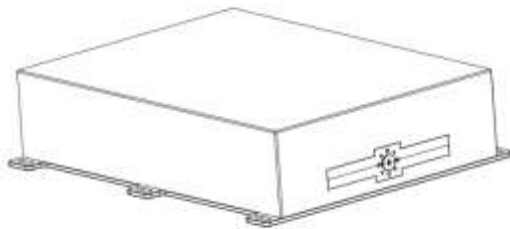




AT-CPA-8186-4534G3

81-86GHz Power Amplifier, Psat=+34dBm

E2 Band High Linear Power Amplifier, Gain=45dB , Psat=+34dBm, WR-12



Product Overview

AT-CPA-8186-4534G3 is 45dB high gain power amplifier with +34dBm output power in the frequency of 81-86GHz. The DC power requirement is +5V/18A. The module is with a standard WR-12 waveguide. GaAs amplifier chips are used inside.

It can also be used from 75-90GHz with some variation of performance.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 81-86GHz
- ✓ P1=+32dBm
- ✓ Psat:+34dBm
- ✓ Small signal gain: 45dB

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	40dB	45dB	
Output P1	+31dBm	+32dBm	
Output Saturated Power	+33dBm	+34dBm	
Supply Voltage	+4.5V	+5V	+5.5V
Quiescent Current/A (No RF)		12A	
Psat Current/A		18A	22A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		40C	

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81-86GHz Power Amplifier, $P_{sat}=+34\text{dBm}$

Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight	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.

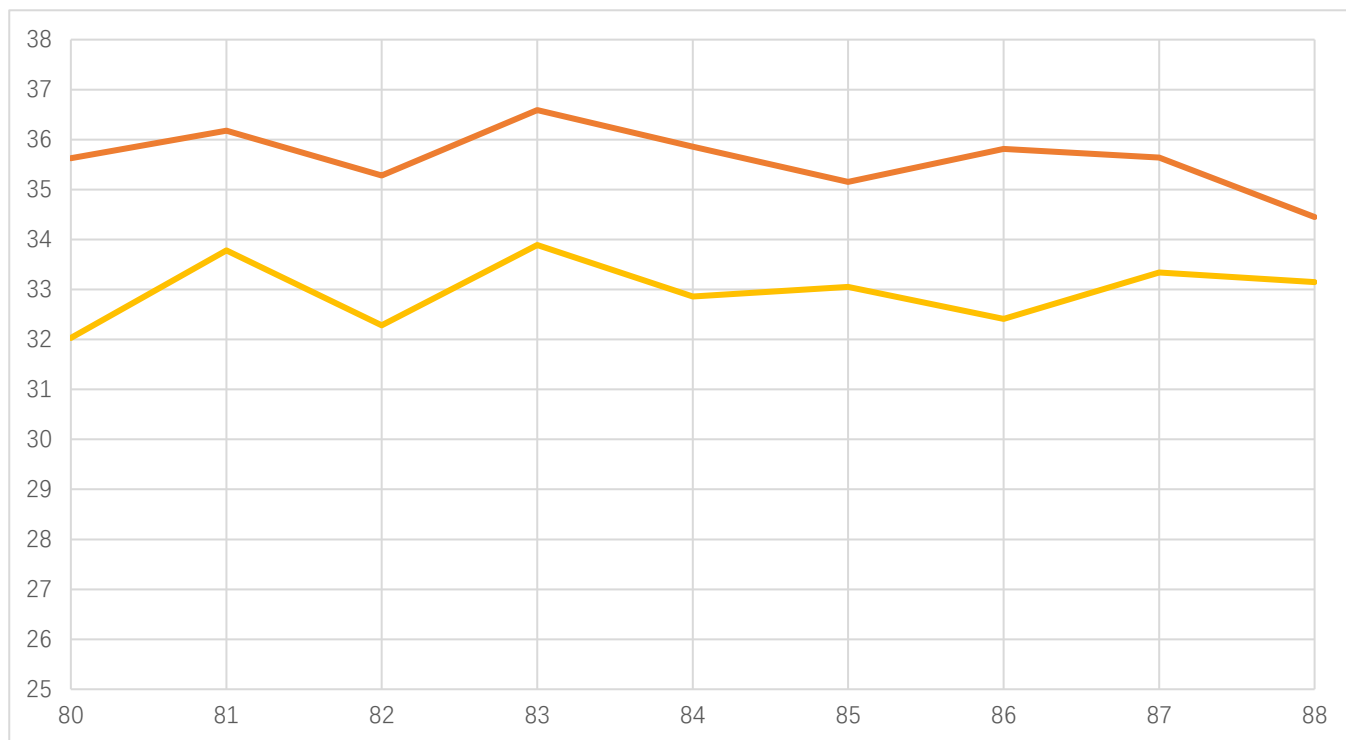




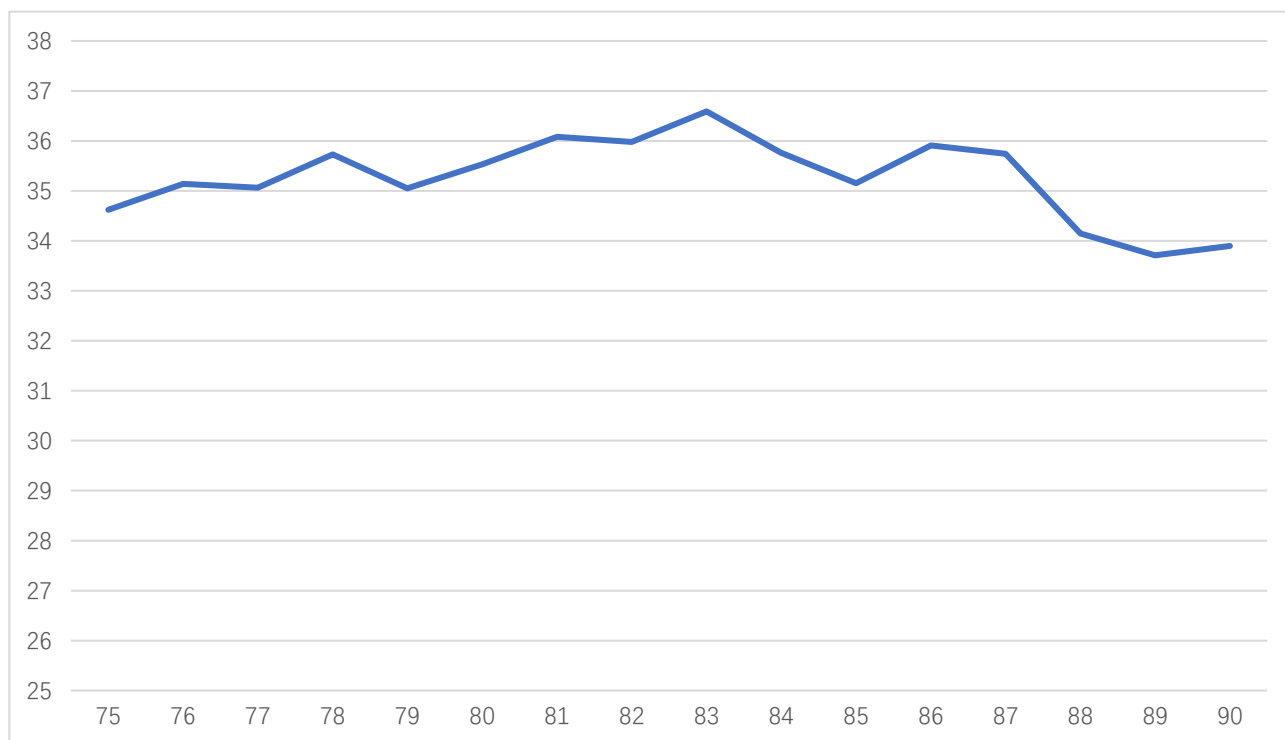
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Test Data:



Psat and P1db vs Frequency 81-86GHz



Psat vs Frequency 75-90GHz

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