



AT-AM6-7586-23

Active Multiplier x6, 75-86GHz Pout=+23dBm

High Power X6 E Band Active Multiplier

2021-12-16



Product Overview

AT-AM6-7586-23 is a E band, active x6 frequency multiplier. The multiplier has an input frequency of 12.5 to 14.3GHz with a typical output +23dBm from 75-86GHz.

The integrated input and output buffers deliver high output power at a low drive level. The multiplier also has a typical harmonic suppression of -20dBc. The input port is SMA female, and the output is a WR-12 waveguide.

Other port configurations are available under different requirement.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 75-86GHz
- ✓ Pout: +23dBm typical
- ✓ Input: 13-14.3GHz, +5dBm
- ✓ Single Supply: +5V, LDO inside

Application

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

Key Features

Parameter	Min	Typical	Max
Input Frequency	13GHz		14.3GHz
Input Power	+3dBm	+5dBm	+10dBm
Output Frequency	75GHz		86GHz
Output Power	+21dBm	+23dBm	
Harmonica Suppression		-20dBc	
Drain Voltage		+5V	+8V
Current Quiescent/A		0.99A	
Current at Psat		1.25A	1.5A
Spec Temp		25C	





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Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	190g
Size:	50X22X20 mm

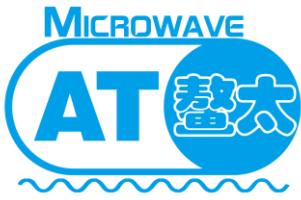
Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
Operating Temperature	0 to 50 C
Storage Temperature	-65 to +150C

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.

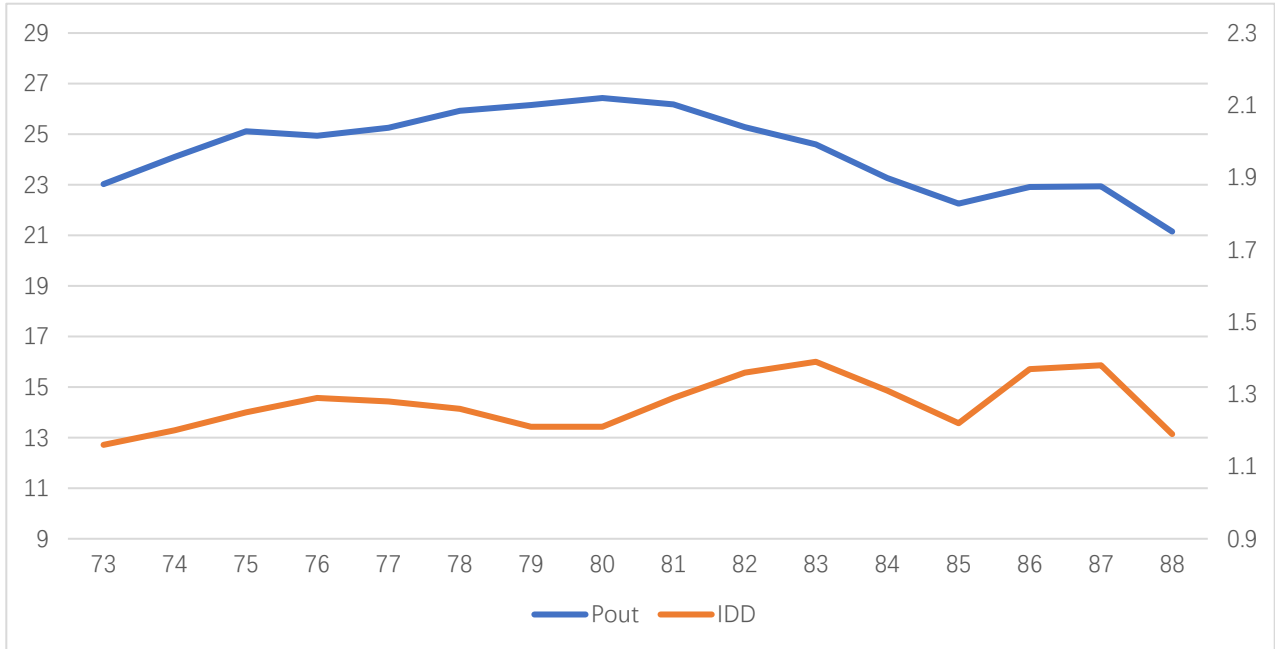




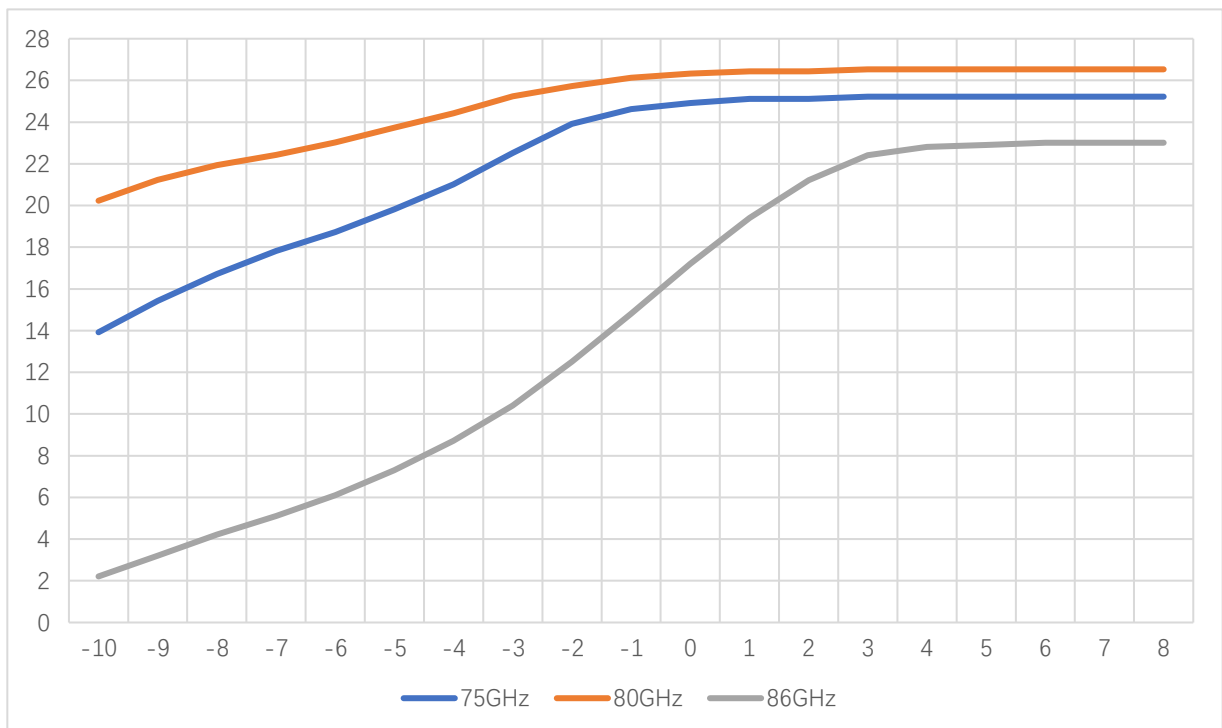
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Test Data:

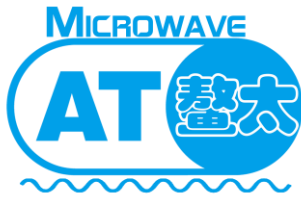


Pout and IDD vs Frequency, Pin=+5dBm



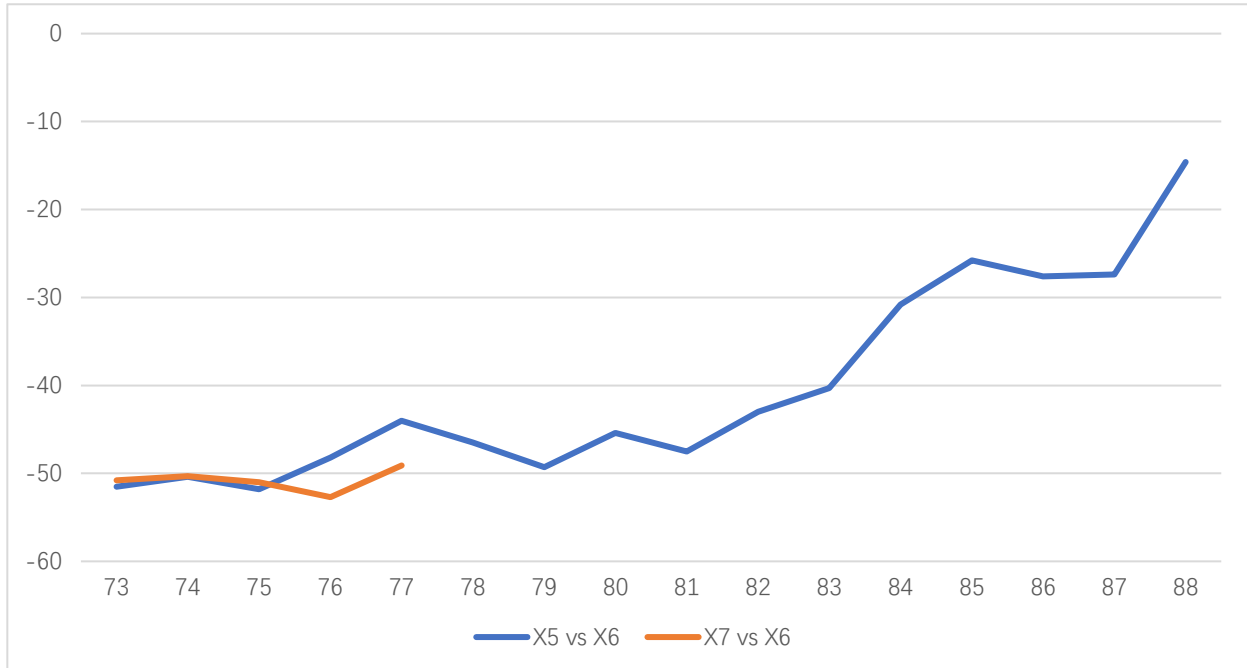
Pout vs Pin at 75/80/86GHz





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X5/X7 Harmonics Suppression vs X6 Pout



Dimension:

