

Full W Band Active Multiplier 75-110GHz, Pout=+13dBm, WR-10

2022-12-1



Description:

AT-AM6-75110-13 is a full W band, active x6 frequency multiplier. The multiplier has an input frequency of 12.5-18.33 GHz with a typical output +13dBm from 75-110GHz. The gain will be a little lower at 102GHz, so make sure input power is larger than +13dBm to achieve the target Pout=+13dBm

The integrated input and output buffers deliver high output power at a low drive level. The multiplier also has a typical harmonic suppression. The input port is SMA female, and the output is WR-10. Other port configurations are available under different requirement.

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 75-110GHz
- ✓ Pout: +13dBm typical
- ✓ Input: 12.5-18.33GHz, +13dBm
- ✓ Low Harmonics

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	12.5GHz		18.33GHz
Input Power	+12	+13dBm	+15dBm
Multiplier Factor		X6	
Output Frequency	75GHz		110GHz
Output Power(Pin=+13dBm)	+11dBm	+13dBm	
X5/X7 Harmonic Suppression		-30dBc	
Drain Voltage		+5V/500mA	+6V
Spec Temp		25C	





AT-AM6-75110-13

Active Multiplier x6, 75-110GHz Pout=+13dBm

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-10 Waveguide with UG-387/U-M anti-cocking Flange
Case Material	Copper
Finish	Gold Plated
Weight	190g
Size:	See outline

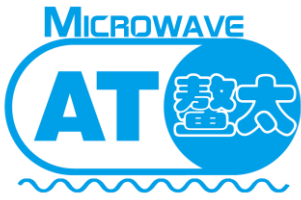
Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+20dBm
Operating Temperature	0 to +50C
Storage Temperature	-55 to +125C

Notes:

- ✓ Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
- ✓ This data is only for reference, not for guaranteed specifications.
- ✓ Please contact AT Microwave team to make sure you have the most current data.
- ✓ Always pay attention to the temperature of the case, heatsink and fan are required if case temperature exceeds over 50C.

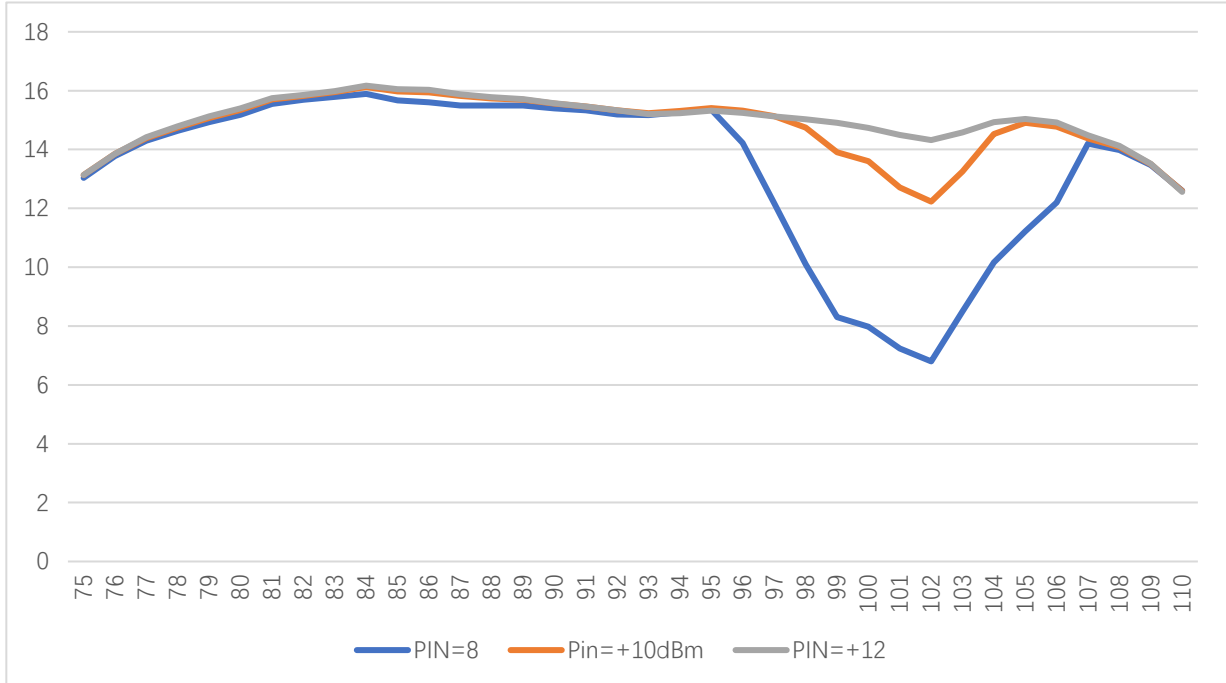




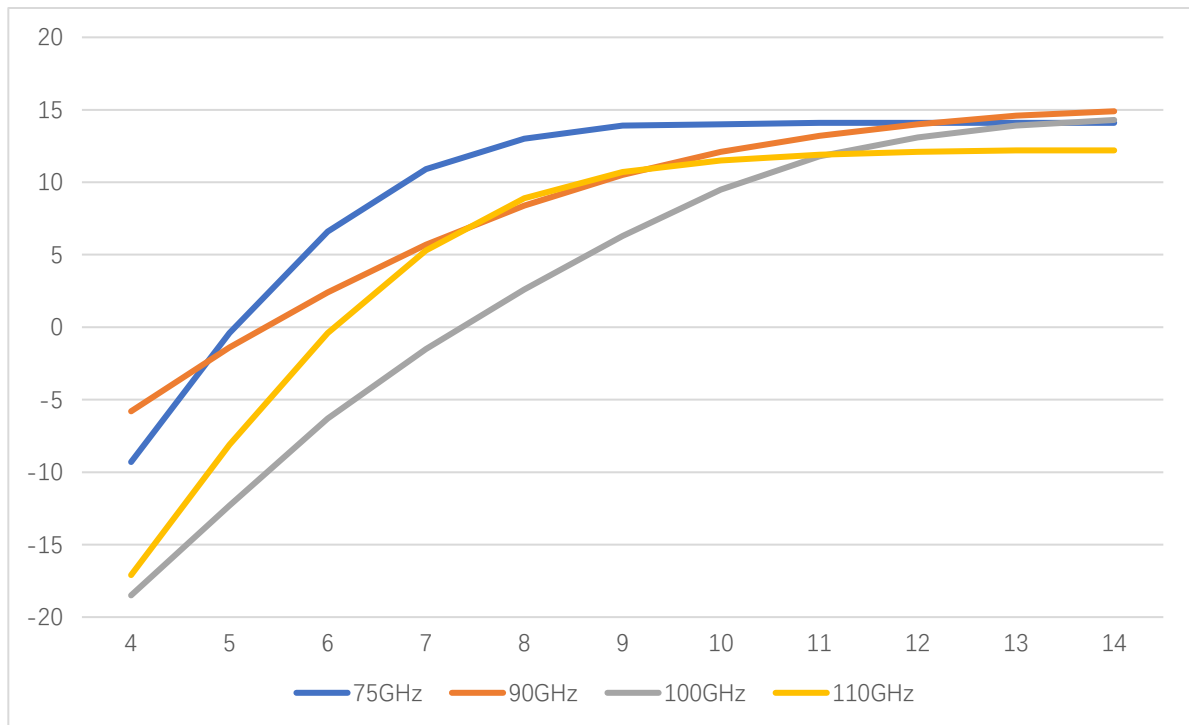
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Test Data(25C)

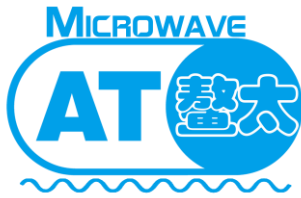


Pout vs Frequency



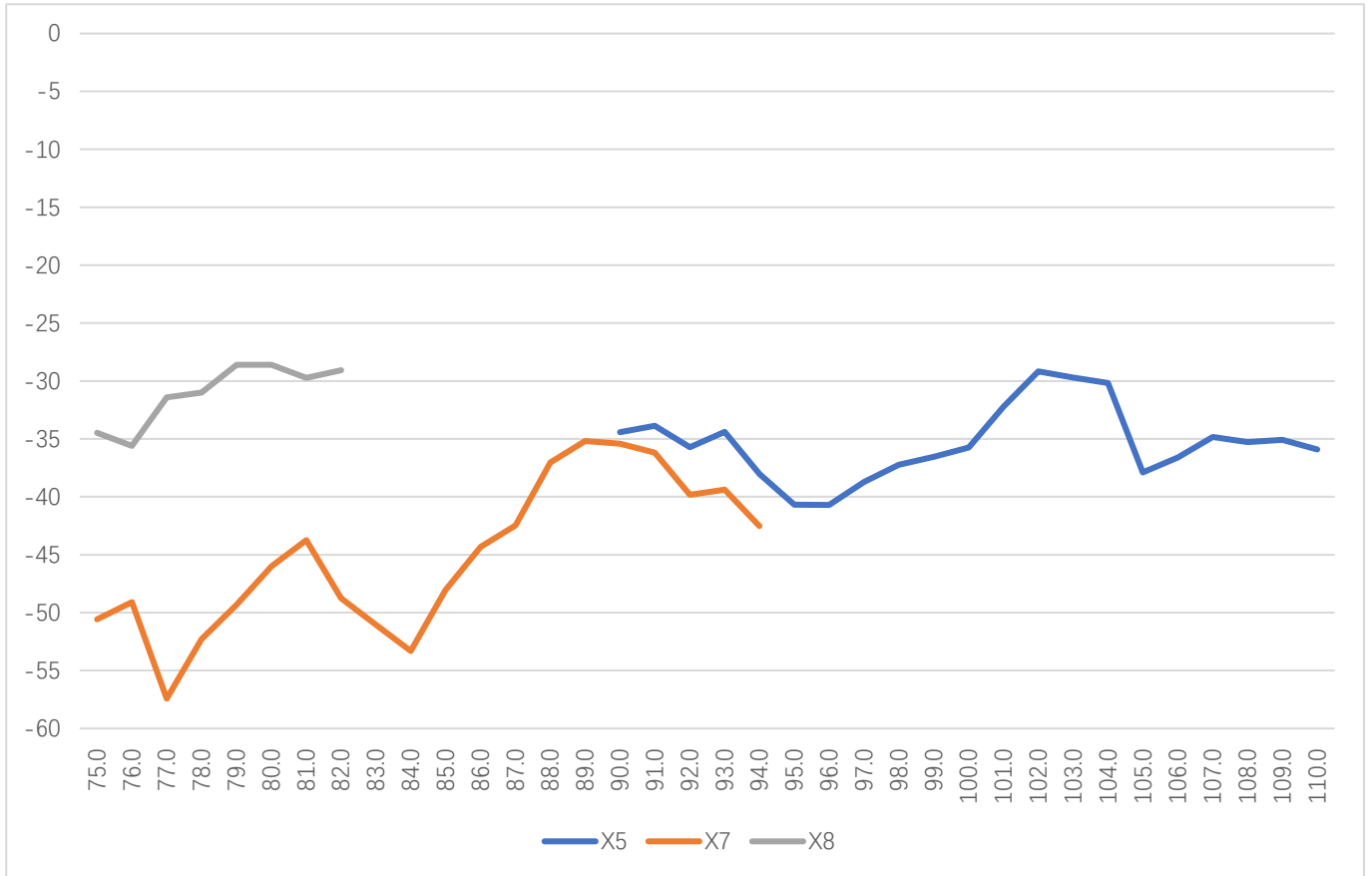
Pout vs Pin at 75/90/110GHz





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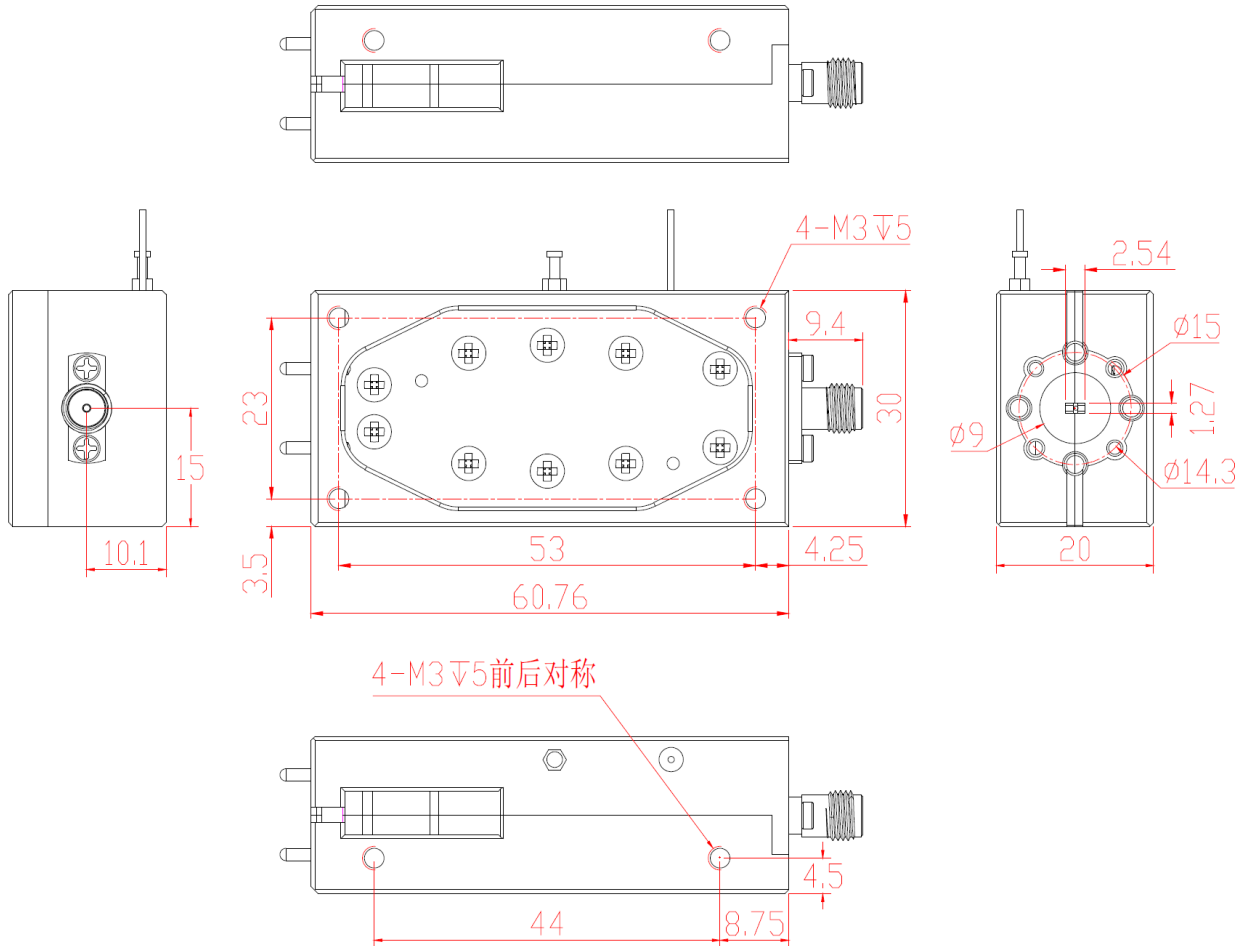
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X5/X7/x8 Harmonics Suppression vs X6 Pout



Dimension (unit in mm)



PCN History

Date	Description
2022-9-1	Outline Updated

