

## Full E Band X6 Active Multiplier 60-90GHz, Pout=+12dBm, WR-12

2021-10-1



### Description:

AT-AM6-6090-12 is a full E band, active x6 frequency multiplier. The multiplier has an input frequency of 10-15 GHz with a typical output +12dBm from 60-90GHz.

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-12. Other port configurations are available under different requirement.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Feature

- ✓ Frequency: 60-90GHz
- ✓ Pout: +12dBm typical
- ✓ Input: 10-15GHz
- ✓ Low Harmonics

### Application

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

### Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	10GHz		15GHz
Input Power	+10dBm	+12dBm	+15dBm
Multiplier Factor		X6	
Output Frequency	60GHz		90GHz
Output Power	+9dBm +10dBm	60-63GHz: +10dBm 63-90GHz: +12dBm	+16dBm
X5/X7 Harmonic Suppression	-30dBc	-40dBc	
Drain Voltage		+5V	+8V
Idd/Current		350mA	0.5A
Spec Temp		25C	





# AT-AM6-6090-12

Active Multiplier x6, 60-90GHz Pout=+12dBm

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-12 Waveguide with UG-387/U 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.



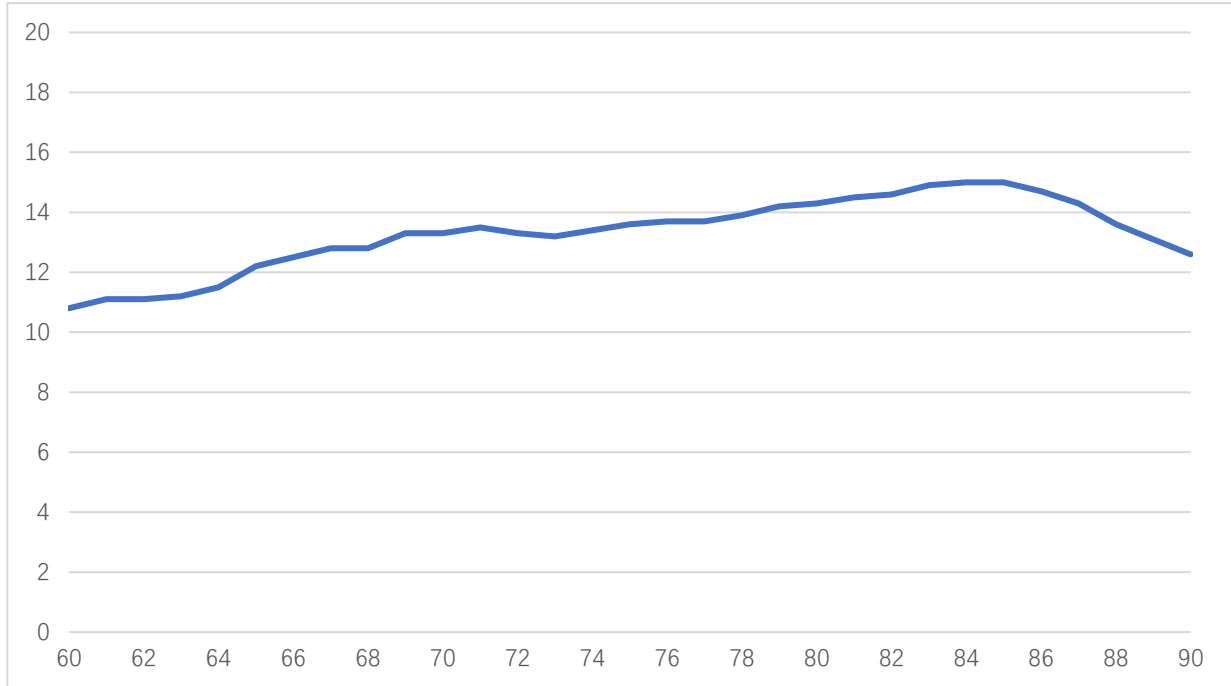


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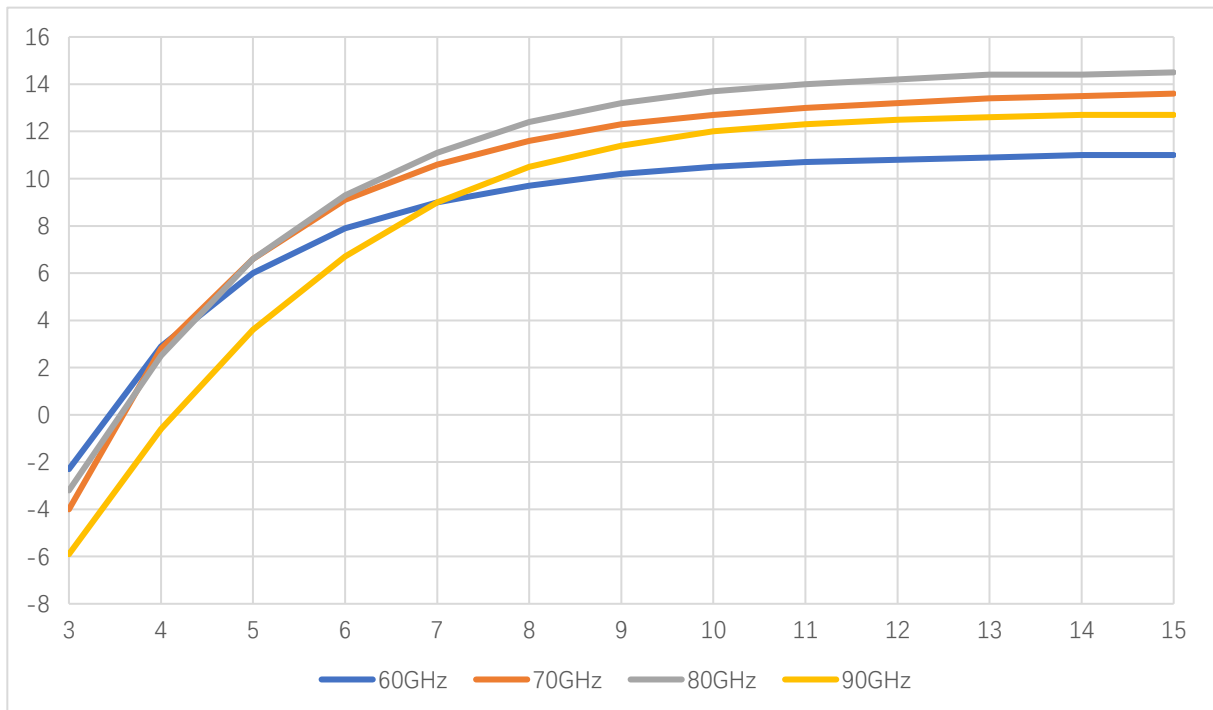
Active Multiplier x6, 60-90GHz Pout=+12dBm

## Test Data (25C)

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



Pout vs Frequency



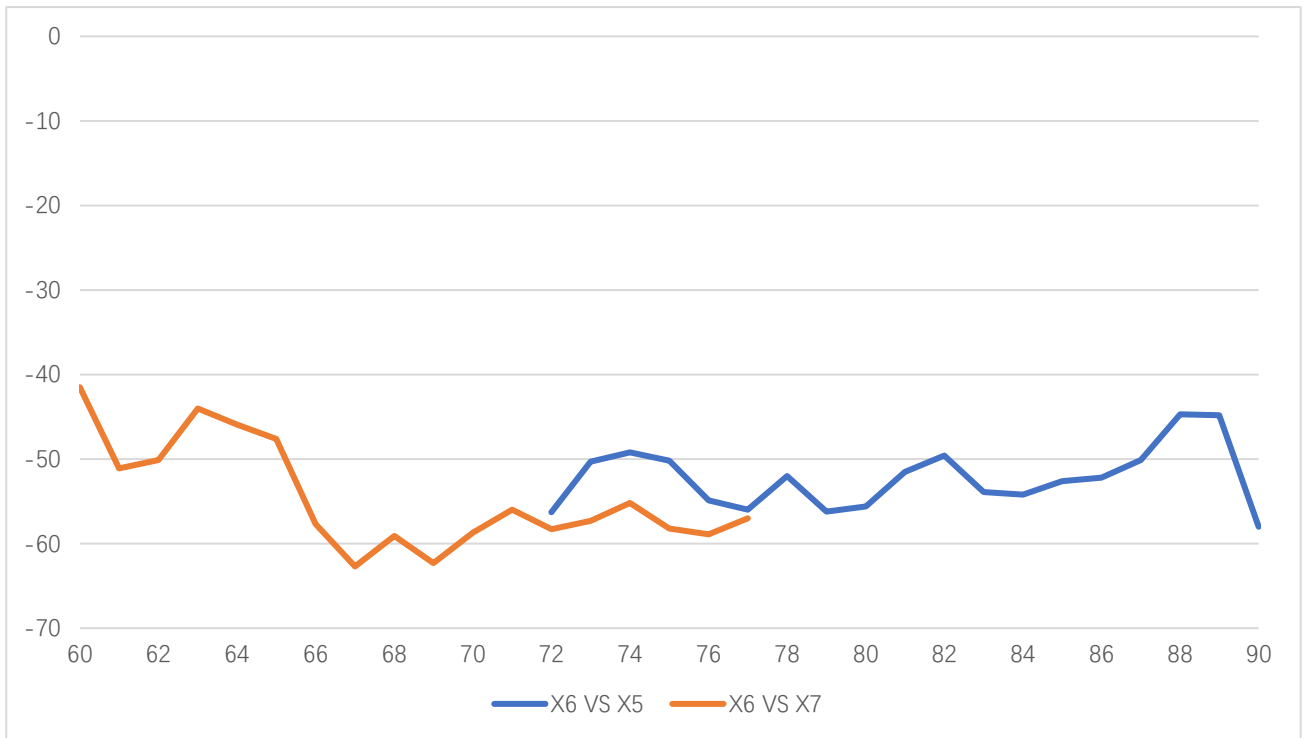
Pout vs Pin





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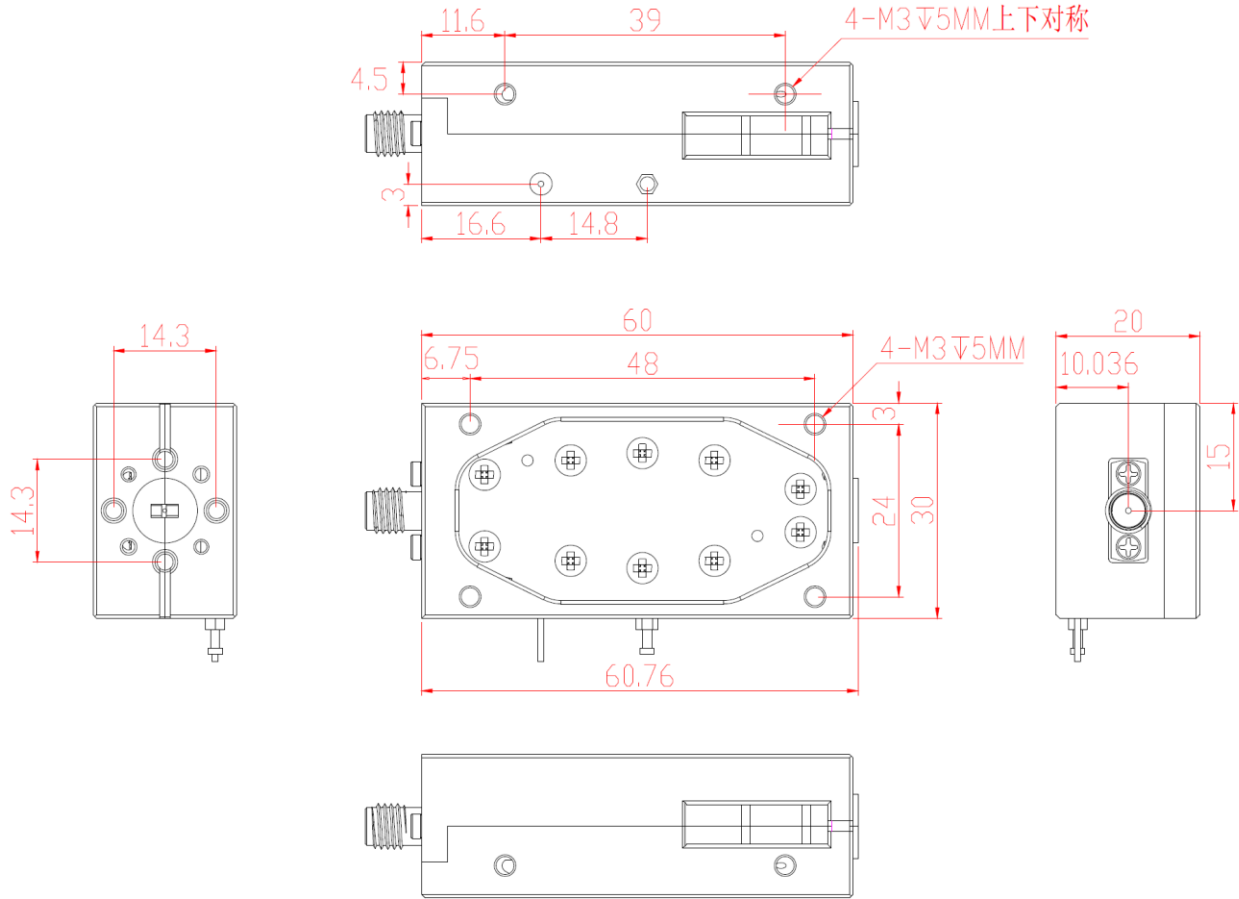
Active Multiplier x6, 60-90GHz Pout=+12dBm



X5/X7 Harmonics suppression vs X6 Pout



## Dimension (unit in mm)



## PCN History

Date	Description
2022-10-1	Test Data Updated

