

## Full E Band Active Multiplier Pout=+17dBm, WR-12

2022-8-1



### Description:

AT-AM6-6090-17T is a full E band, active x6 frequency multiplier. The multiplier has an input frequency of 10-15 GHz with a typical output +17dBm 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: +17dBm 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	+13dBm	+15dBm
Multiplier Factor		X6	
Output Frequency	60GHz		90GHz
Output Power	+14dBm	+17dBm	
X5/x7 Suppression vs X6		-35dBc	
Drain Voltage		+5V	+8V
Idd/Current		450mA	550mA
Spec Temp		25C	





# AT-AM6-6090-17T

Active Multiplier x6, 60-90GHz Pout=+17dBm

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-12
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	-65 to +150C

### 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.

## Part Number Selection Guide

Part Number	Description
AT-AM6-6090-17T	High Input driver +13dBm
AT-AM6-6090-17L	Low Input diver option, +3dBm

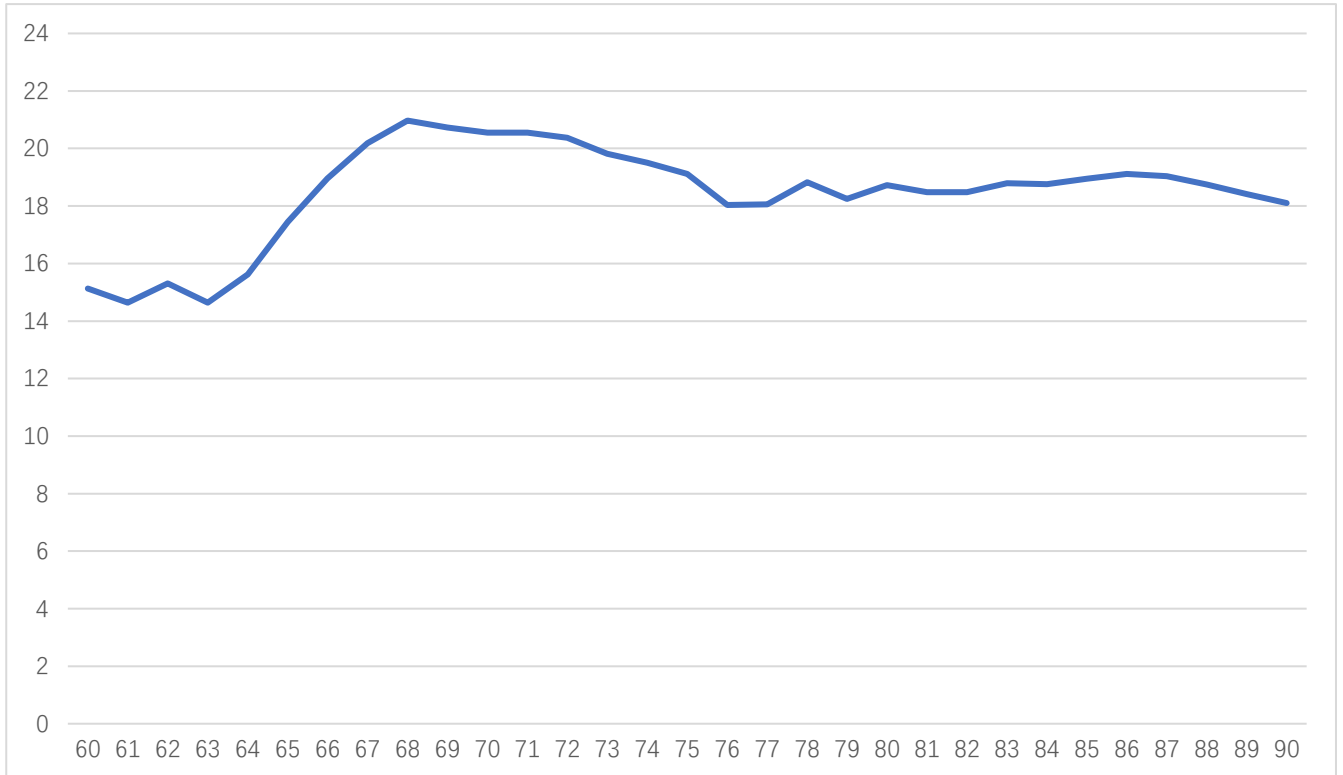




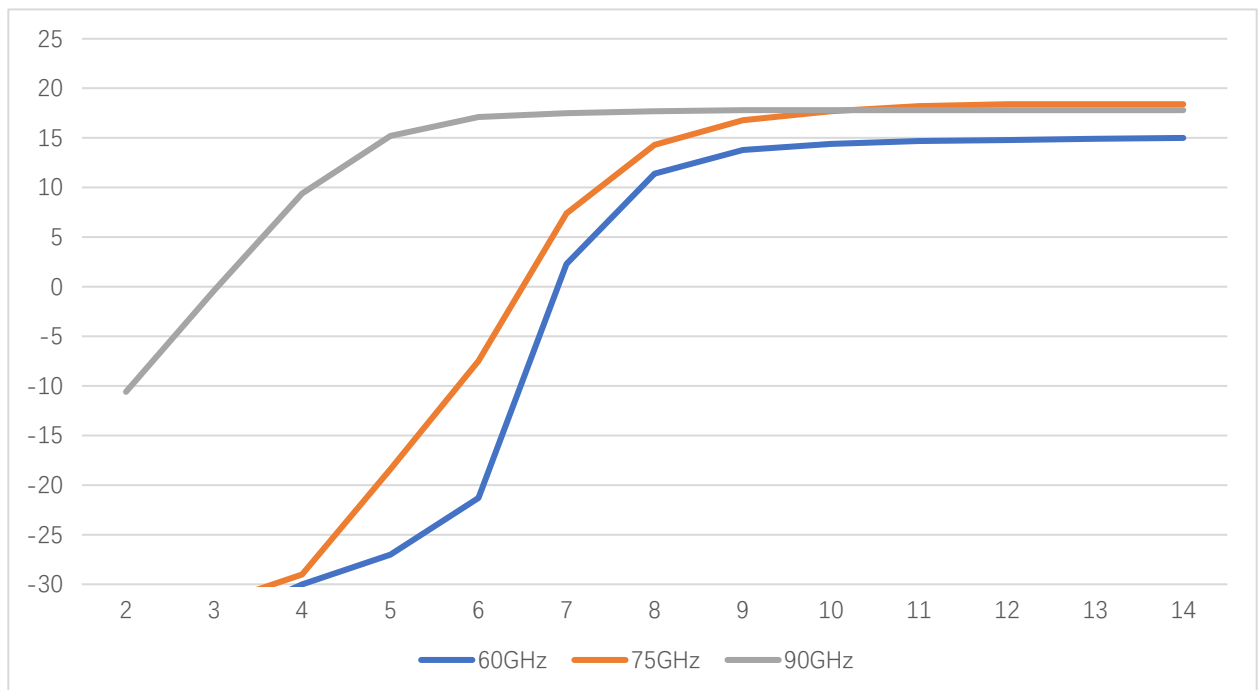
# AT-AM6-6090-17T

Active Multiplier x6, 60-90GHz Pout=+17dBm

## Test Data:

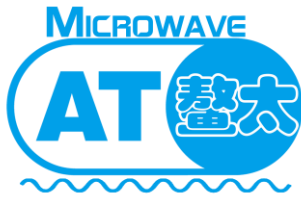


Pout vs Frequency



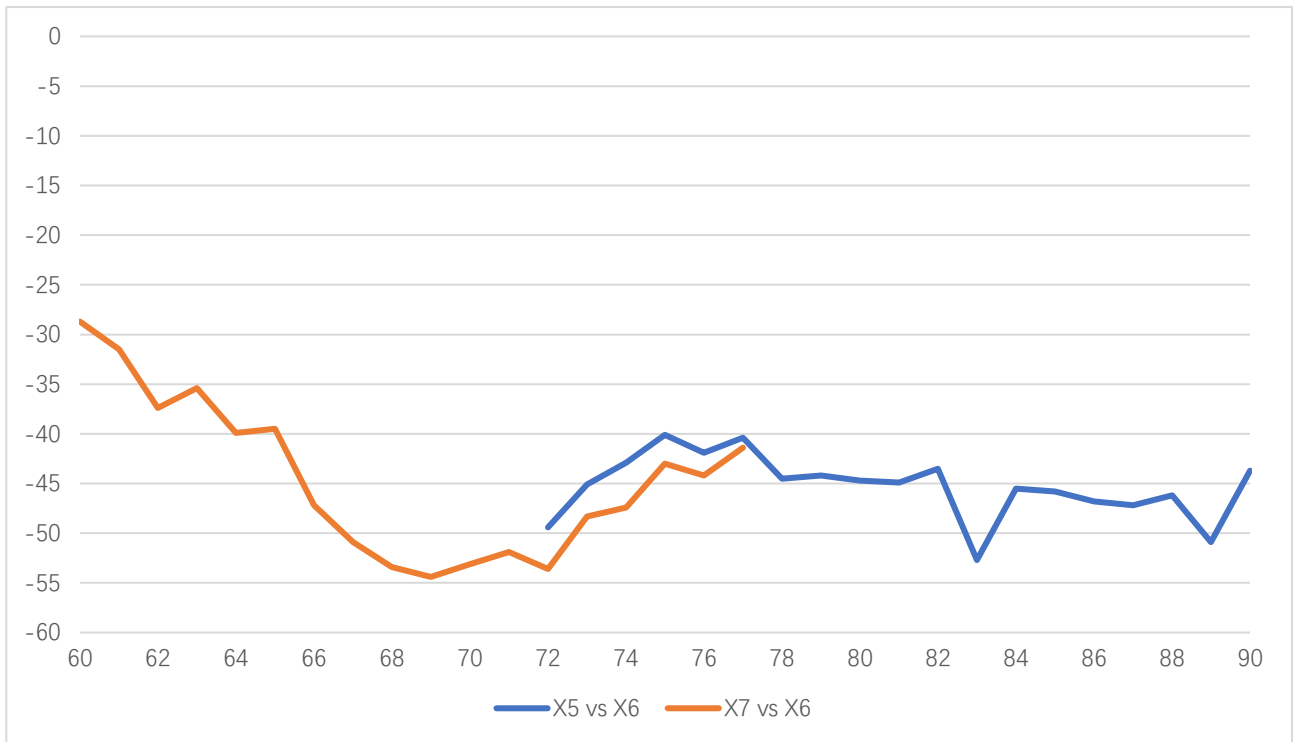
Pout vs Pin





# AT-AM6-6090-17T

Active Multiplier x6, 60-90GHz Pout=+17dBm



X5/X7 Harmonics vs X6 Pout



## Dimension (unit in mm)

