

## Full F Band Active Multiplier



### Description:

AT-AM8-90140C is a full F band, active x8 frequency multiplier. The multiplier has an input frequency of 11.25-17.5 GHz with a typical output +3dBm from 90-140GHz.

The X8 Multiplier is combined by AT-AM4-4575-18 and AT-PM2-90140C. The input port is SMA female, and the output is WR-08. Other port configurations are available under different requirement.

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

### Feature

- ✓ Frequency: 90-140GHz
- ✓ Pout: +3dBm typical
- ✓ Input: 11.25-17.5GHz
- ✓ Low Harmonics

### Application

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

### Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	11.25GHz		17.5GHz
Input Power	+3dBm	+5dBm	+7dBm
Multiplier Factor		X8	
Output Frequency	90GHz		140GHz
Output Power		+3dBm	
X7/X9 Harmonic Suppression		-25dBc	
Drain Voltage		+5V	+6V
Current NO RF/Psat		0.66/0.8A	
Spec Temp		25C	





# AT-AM8-90140C

Active Multiplier x8, 90-140GHz Pout=+3dBm

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-08
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	245g
Dimension	See Outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+8V
RF Input Power	+15dBm
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.



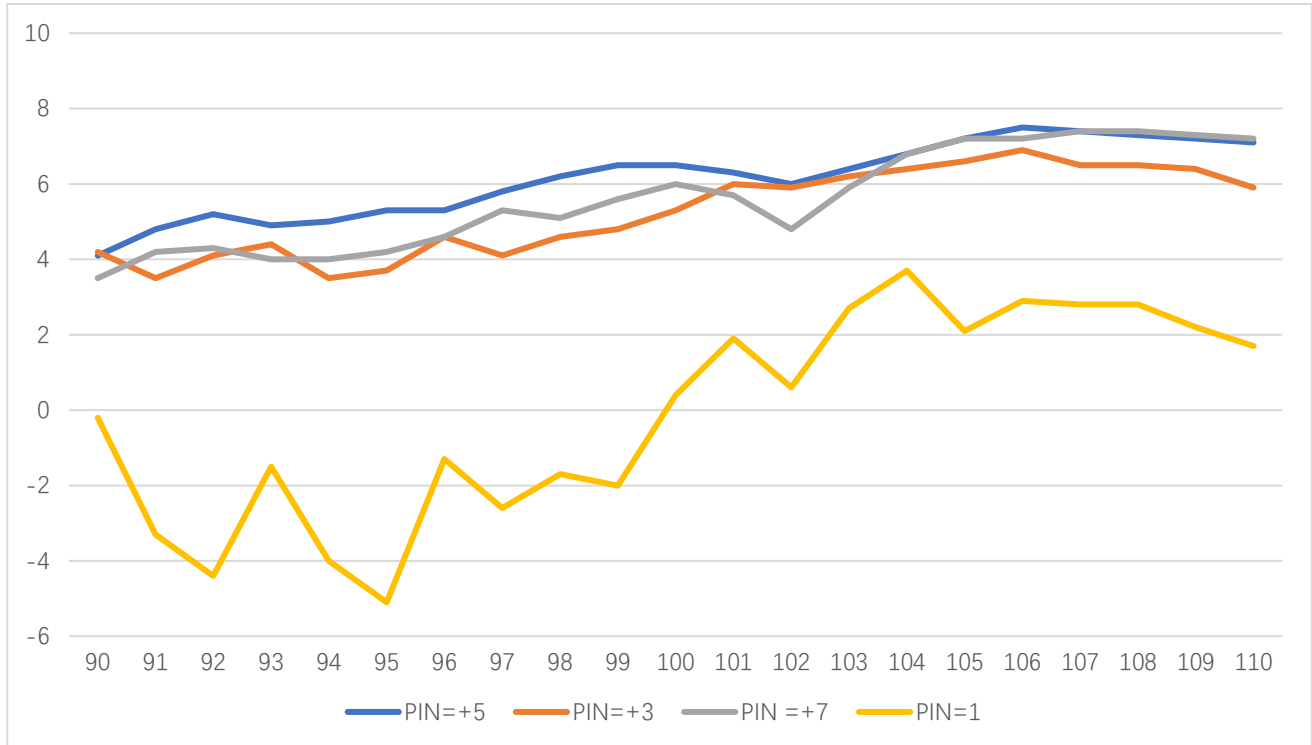


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Active Multiplier x8, 90-140GHz Pout=+3dBm

## Test Data:

Only test up to 110GHz due to test limit at present.

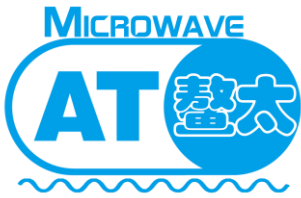


Pout vs Frequency at Pin=+1/3/5/7dBm



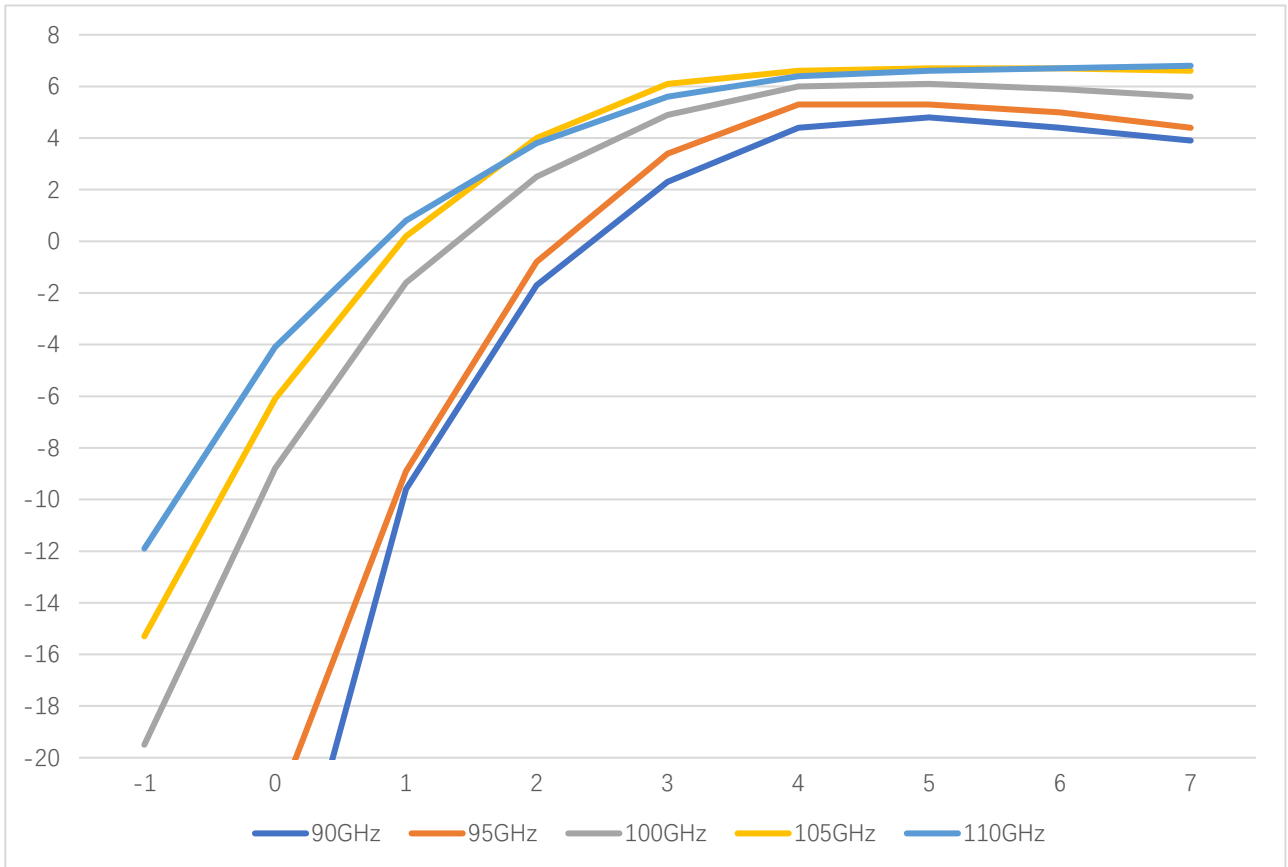
X7/X9 Suppression vs X8 Pout





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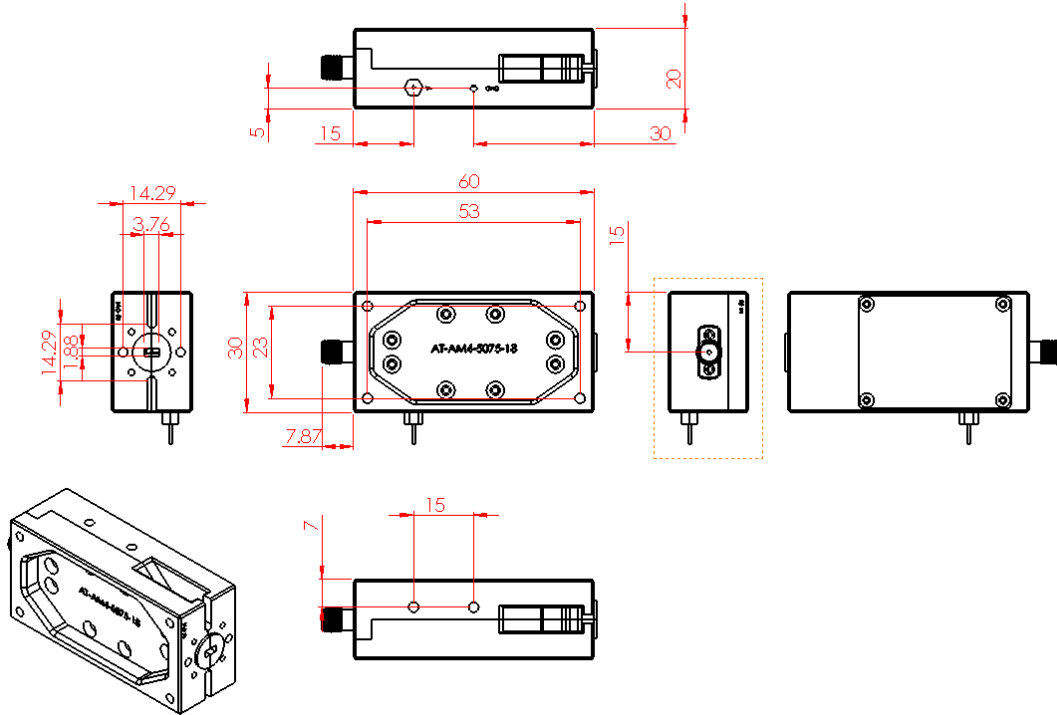
Active Multiplier x8, 90-140GHz Pout=+3dBm



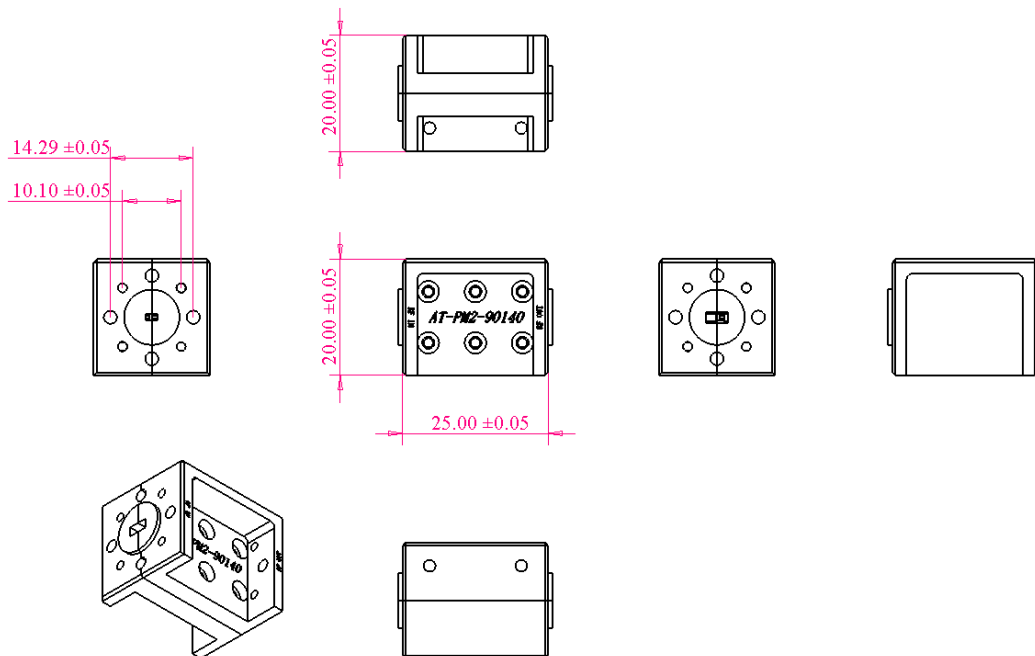
Pout vs Pin at 90/95/100/105/110GHz



## Dimension



AT-AM4-4570-18 Outline



AT-PM2-90140C Outline

