

Full W Band Active Multiplier

2022-9-1

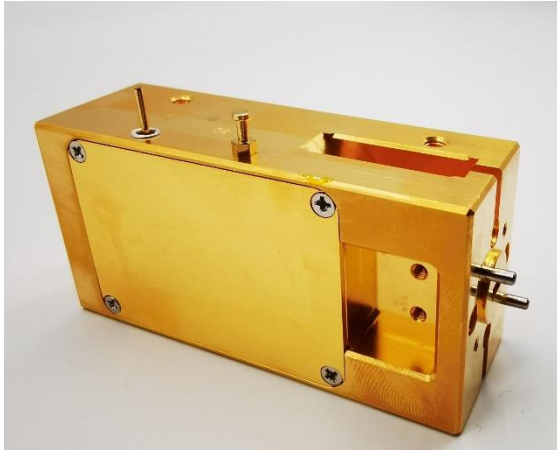
Pout=+13dBm, Low Input Power, WR-10

Description:

AT-AM6-75110-13L is a full W band, active x6 frequency multiplier with low input power. The multiplier has an input frequency of 12.5-18.33 GHz with a typical output +13dBm from 75-110GHz.

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, +3dBm
- ✓ 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	+3dBm	+5dBm	+8dBm
Multiplier Factor		X6	
Output Frequency	75GHz		110GHz
Output Power	+10dBm	+13dBm	
X5/X7 Harmonic Suppression		-20dBc	
Drain Voltage		+5V	+6V
Current		0.5A	
Spec Temp		25C	





AT-AM6-75110-13L

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	+15dBm
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.

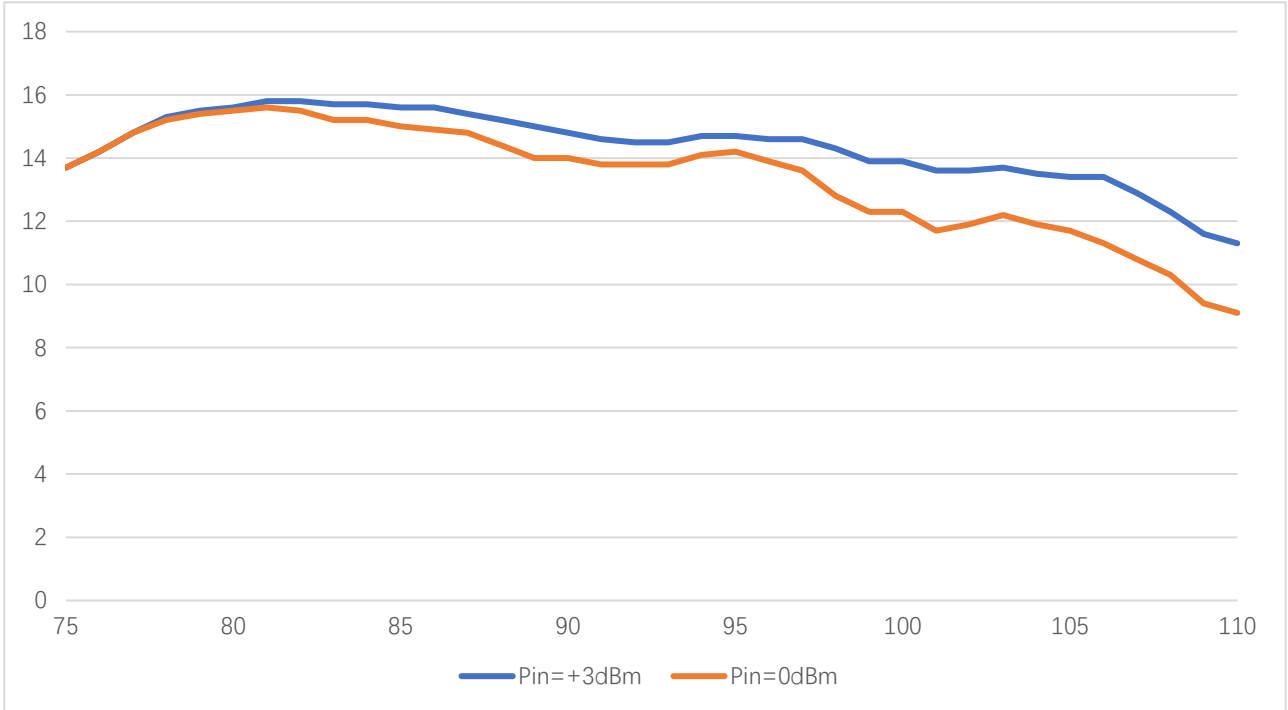




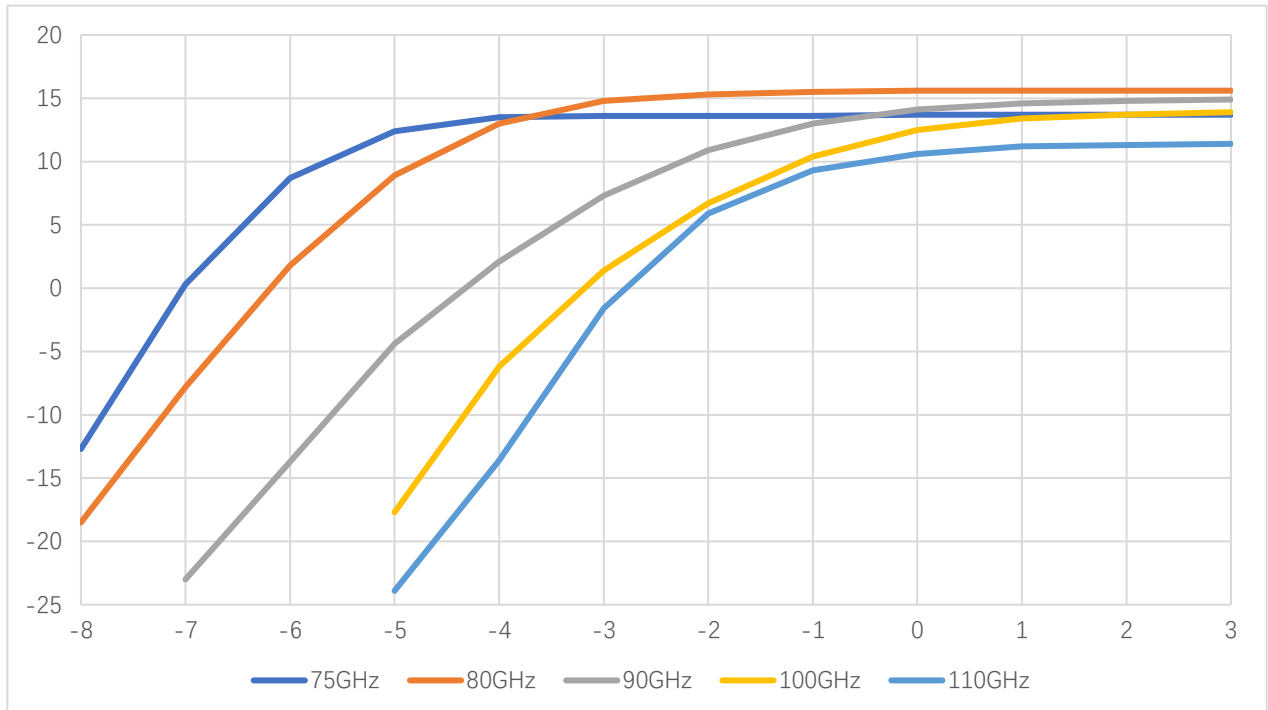
AT-AM6-75110-13L

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

Test Data(25C)



Pout vs Frequency



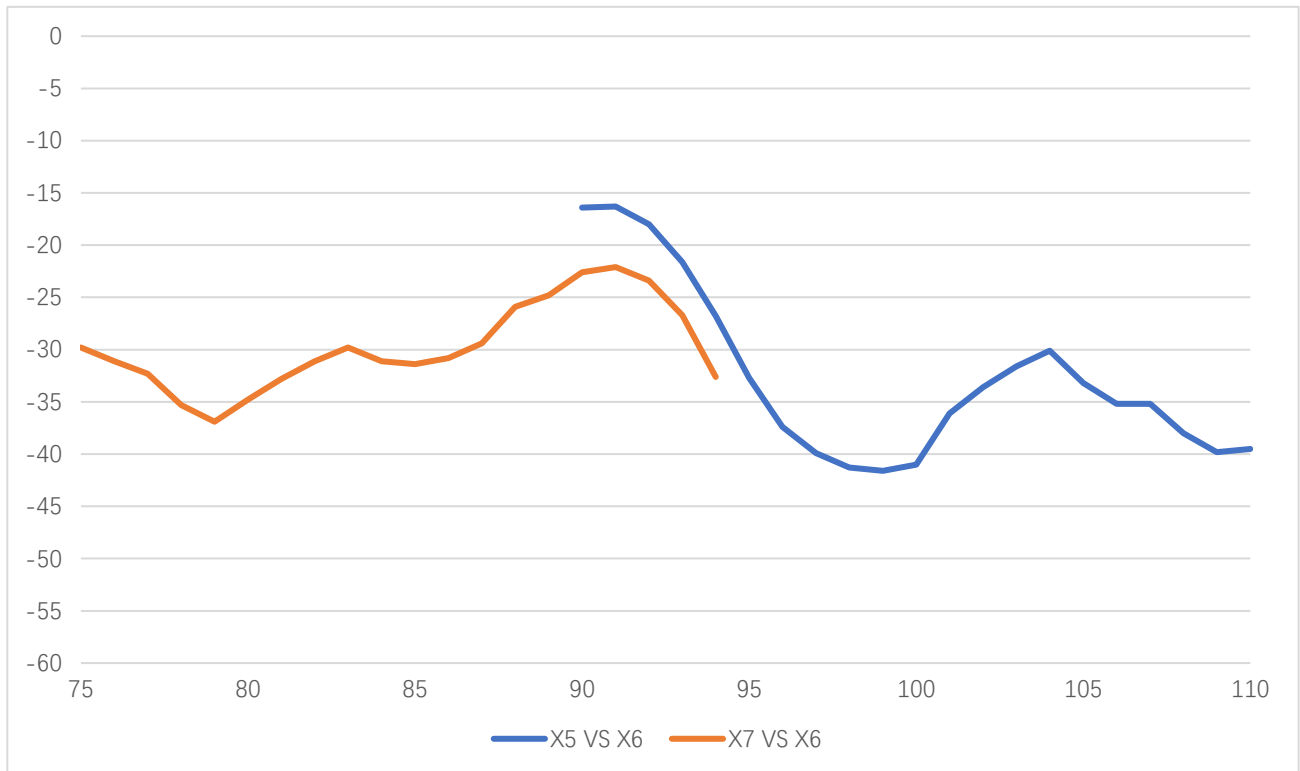
Pout vs Pin





AT-AM6-75110-13L

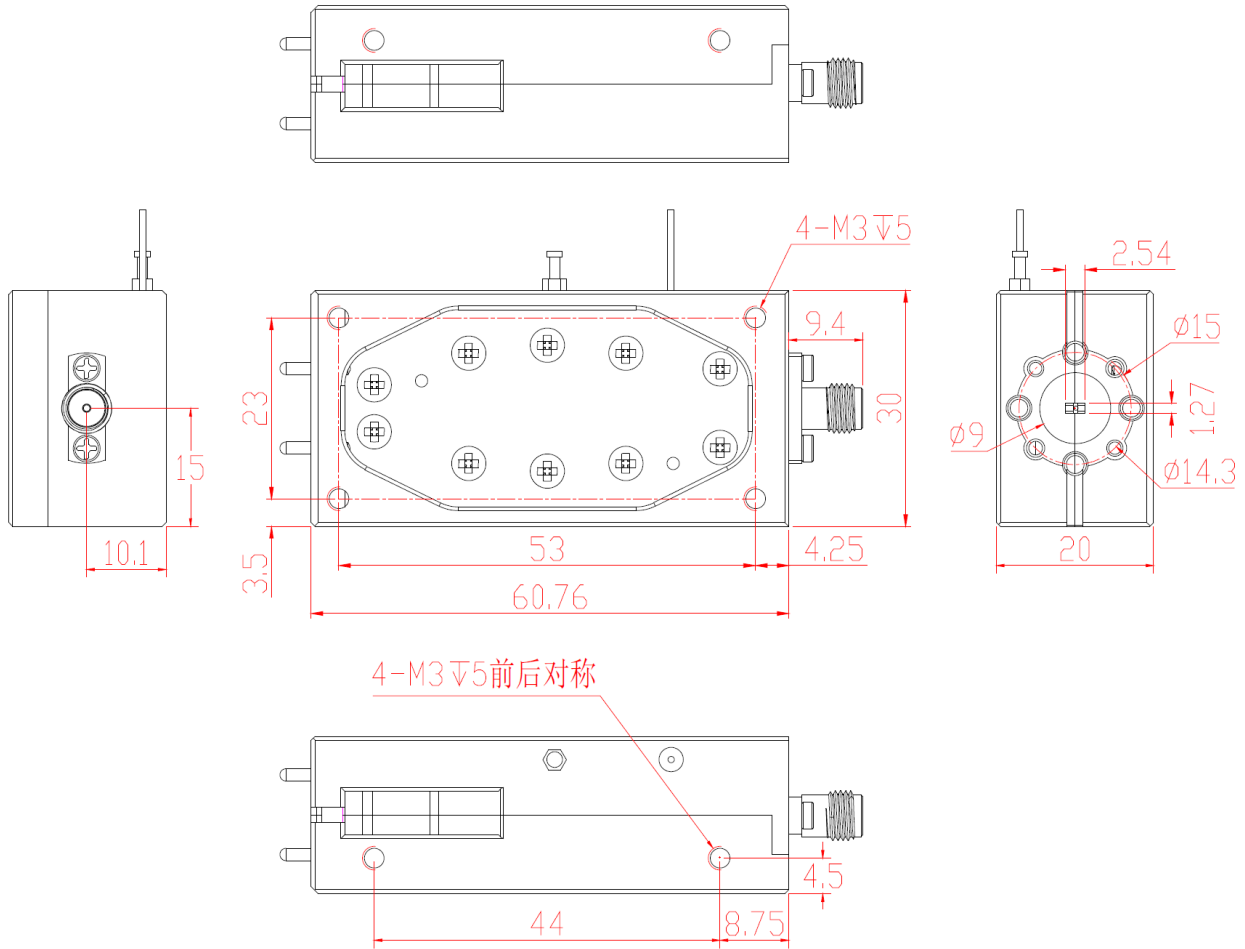
Active Multiplier x6, 75-110GHz Pout=+13dBm



X5/X7 Harmonics vs X6 Pout



Dimension (unit in mm)



PCN History

Date	Description
2022-9-1	Outline Updated

