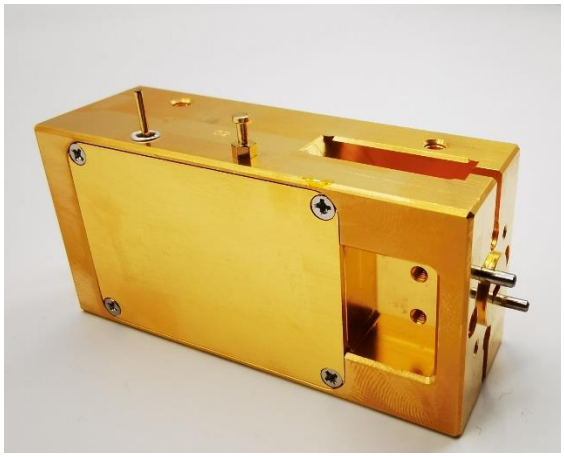
AT-AM4-5590-18T

Active Multiplier x4, 55-90GHz Pout=+18dBm

X4 Full E Band Active Multiplier



Description:

AT-AM4-5590-18T is a full E band, active x4 frequency multiplier. The multiplier has an input frequency of 13.75-22.5 GHz with a typical output +18dBm from 55-90GHz.

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

Feature

- ✓ Frequency: 55-90GHz
- ✓ Pout: +18dBm typical
- ✓ Input: 13.75-22.5GHz
- ✓ Low Harmonics

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	13.75GHz		22.5GHz
Input Power	+10dBm	+13dBm	+15dBm
Multiplier Factor		X4	
Output Frequency	55GHz		90GHz
Output Power	+15dBm	+18dBm	
X3 Suppression vs X4 Pout		-25dBc	
X5 Suppression vs X4 Pout		-40dBc	
Drain Voltage		+5V/0.39A	
Spec Temp		25C	

Shanghai AT Microwave Limited

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Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	190g
Size:	60X30X20 mm

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-AM4-5590-18T	High Input driver +13dBm
AT-AM4-5590-18L	Low Input diver option, +3dBm.

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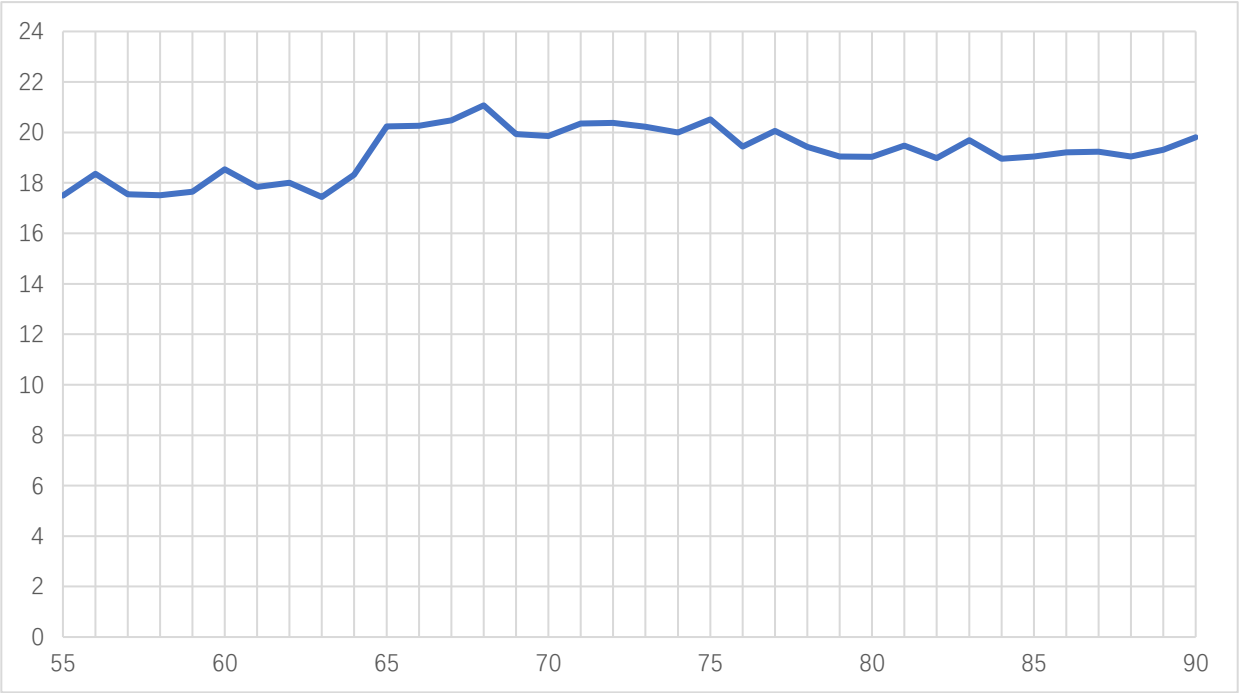
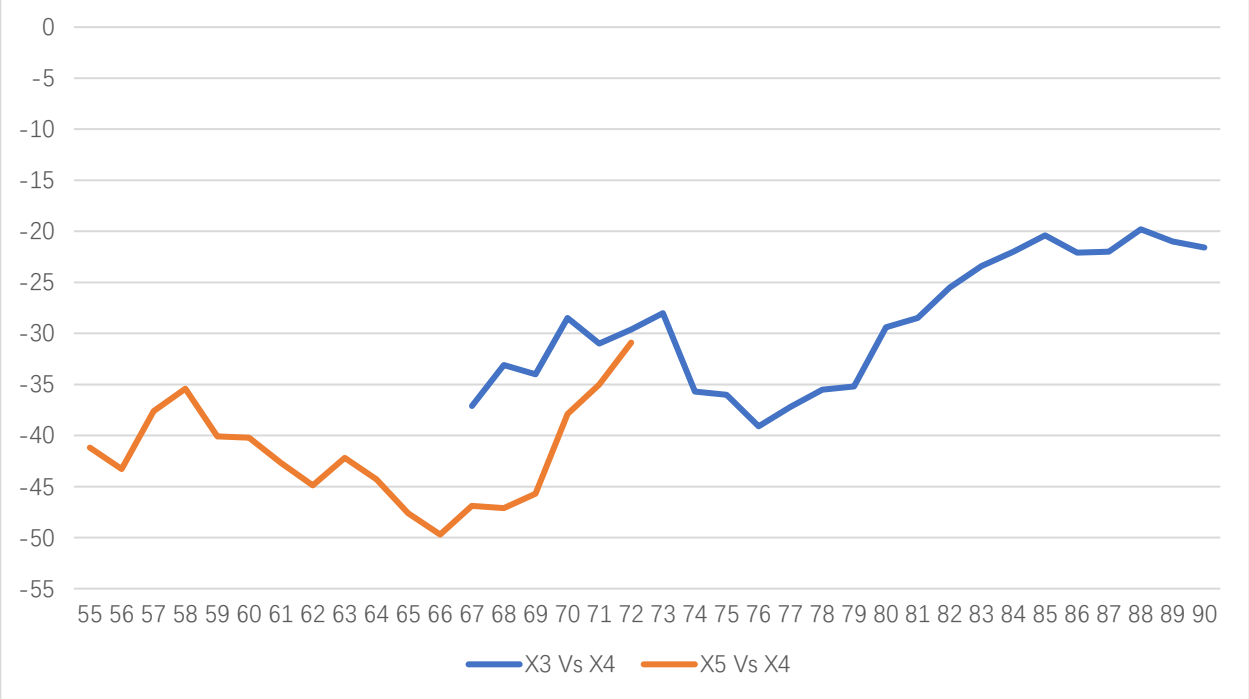
Test Data (25C)

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



Pout vs Frequency



X3/X5 Harmonics suppression vs X4 Pout

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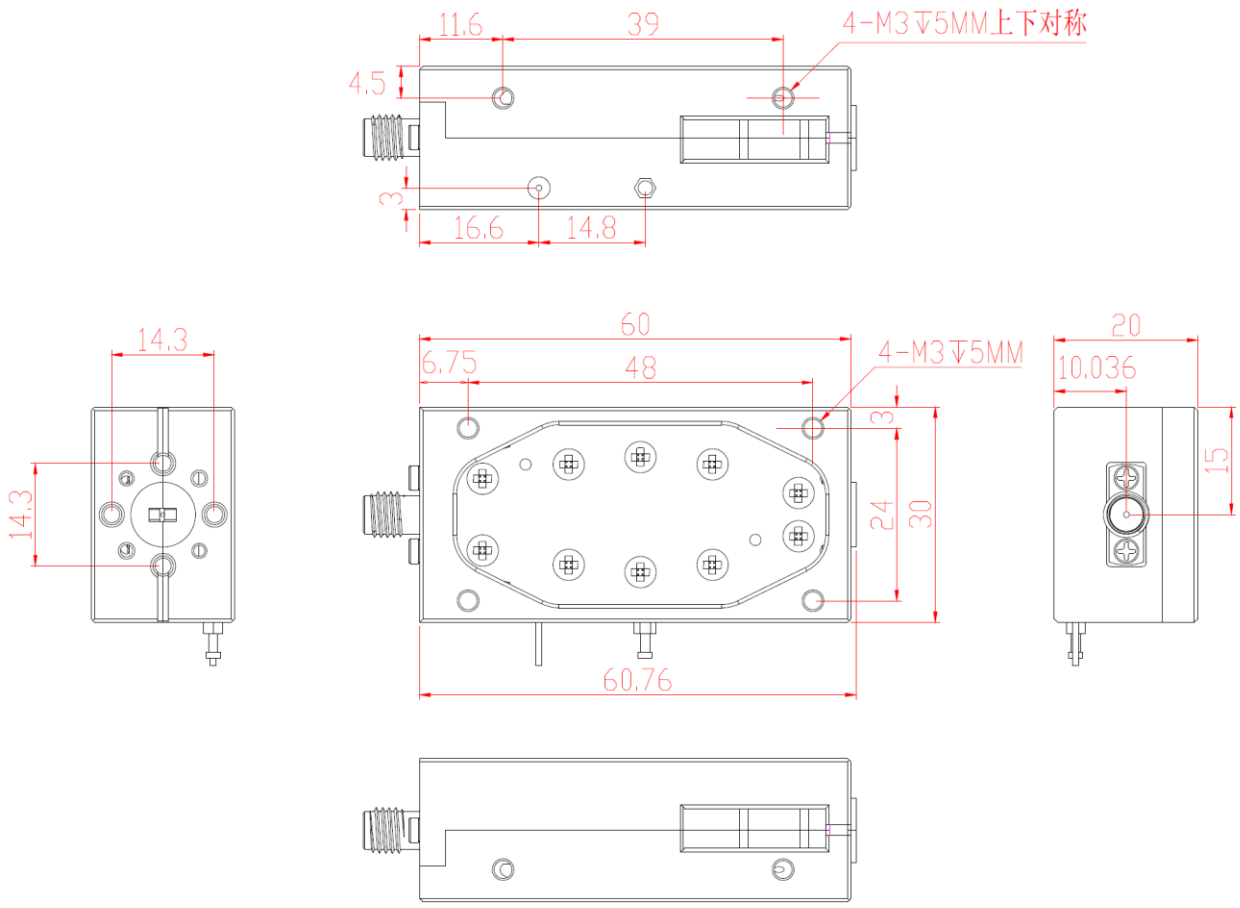
Dimension (unit mm)



PCN Historty

Date	Description
2022-9-1	Outline Updated