

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

2023-5-5



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

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





AT-AM6-6090-12

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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 | -45 to +85C |

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.



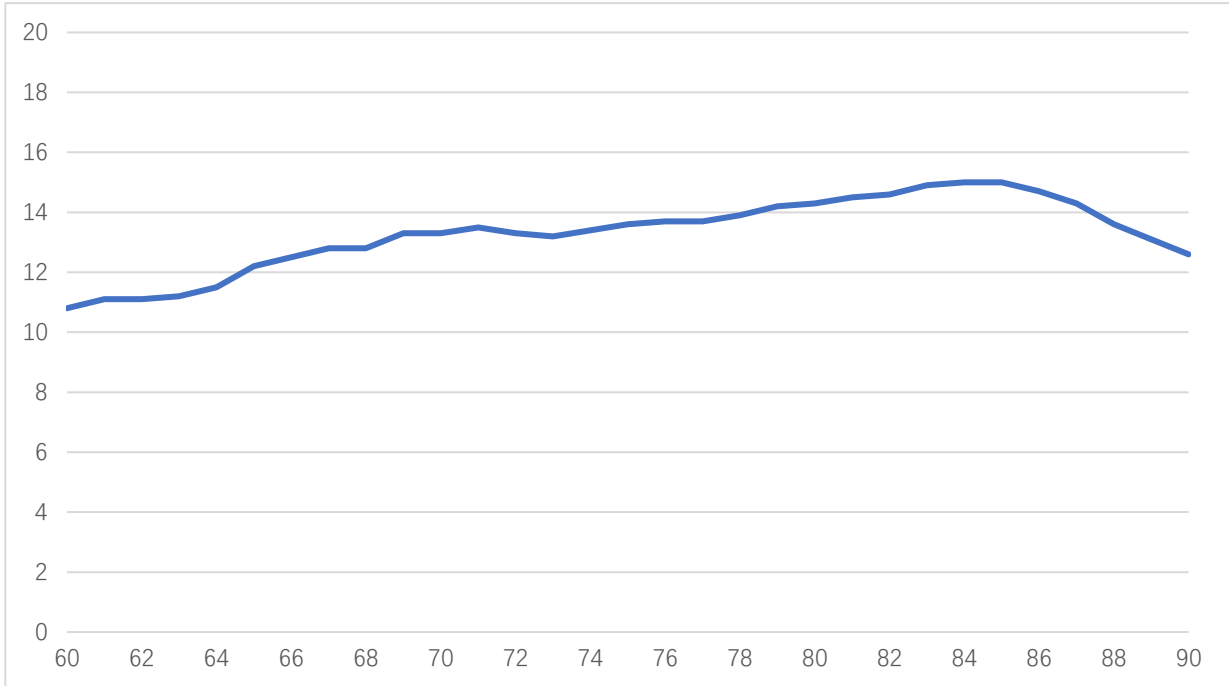


AT-AM6-6090-12

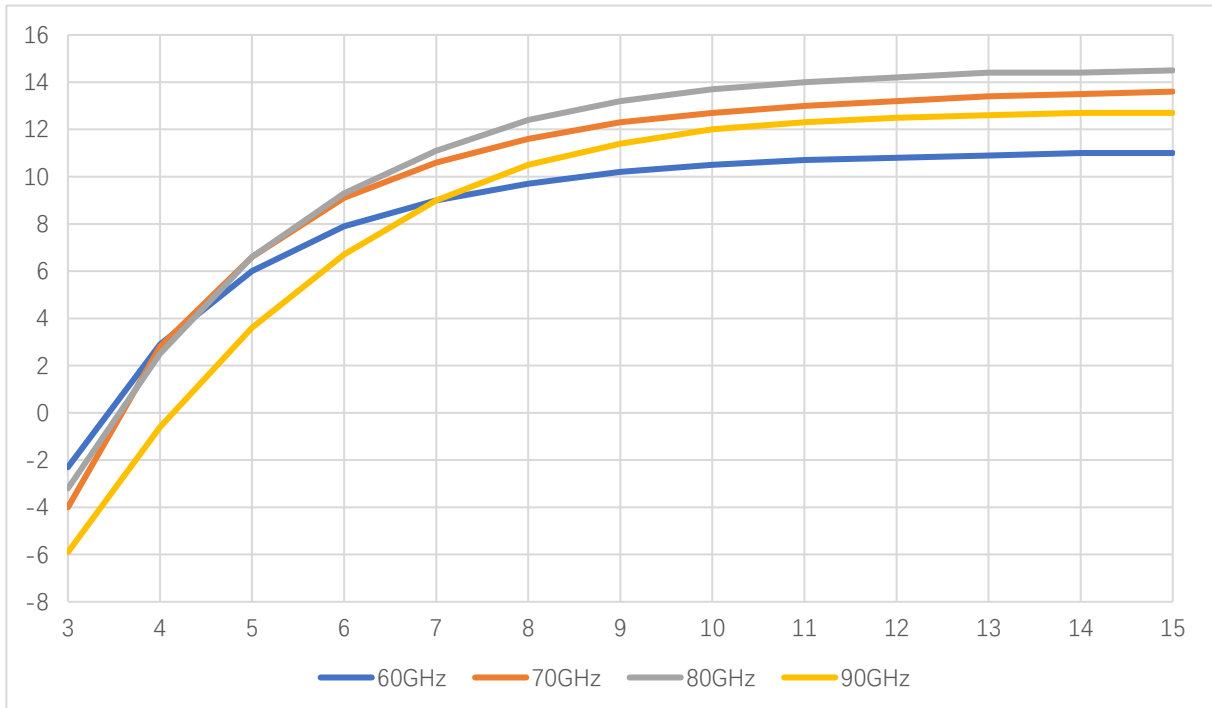
Active Multiplier x6, 60-90GHz Pout=+12dBm

Test Data (25C)

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



Pout vs Frequency



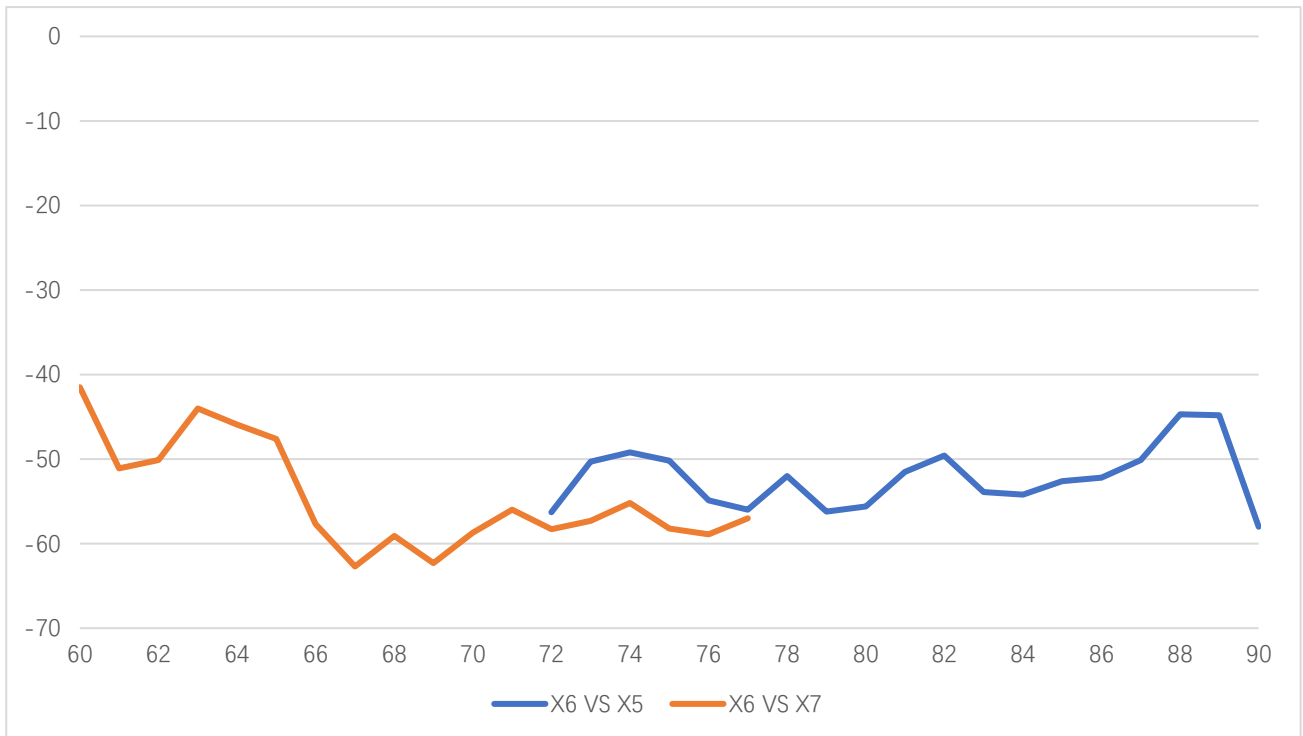
Pout vs Pin





AT-AM6-6090-12

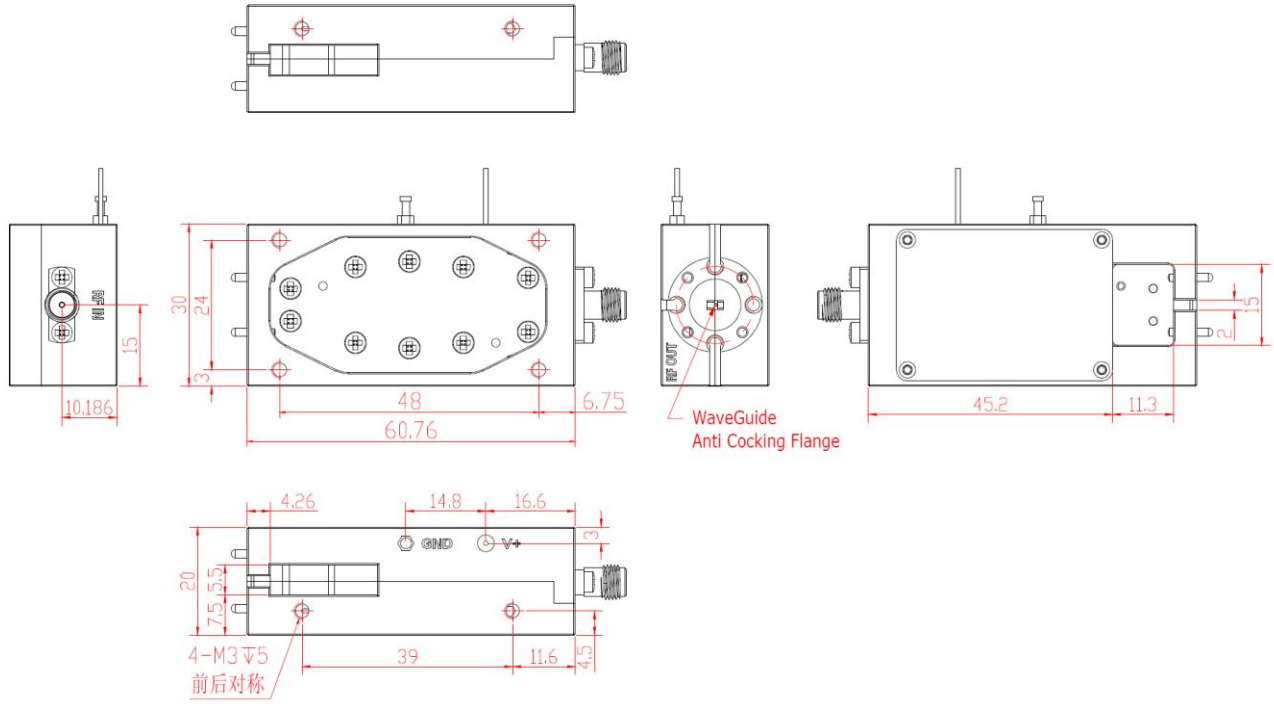
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X5/X7 Harmonics suppression vs X6 Pout



Dimension (unit in mm)



PCN History

| Date | Description |
|-----------|-------------------|
| 2022-10-1 | Test Data Updated |

