



# AT-AM3-2044N-18XC

Active Multiplier x3, 20-44GHz Pout=+18dBm

## Active X3, 20-44GHz Broadband, High Power Pout=+18dBm, Low Input Power

2022-10-10



### Description:

AT-AM3-2044N-18XC is a broadband X3 frequency multiplier with low input power. The multiplier has an input frequency of 6.67-14.66 GHz with a typical output +18dBm from 20-44GHz.

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 2.92mm Female. Other port configurations are available under different requirement.

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

### Feature

- ✓ Frequency: 20-44GHz
- ✓ Pout: +18dBm typical
- ✓ Input: 6.67-14.66GHz
- ✓ Low Harmonics

### Application

- ✓ 28/39GHz 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency		6.67-14.66GHz	
Input Power	+0dBm	+3dBm	+7dBm
Multiplier Factor		X3	
Output Frequency		20-44GHz	
Output Power	+16dBm	+18dBm	
X2/X4 Harmonic Suppression		-25dBc	
Drain Voltage		+5V	+8V
Current		250mA	350mA
Spec Temp		25C	





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## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Weight	80g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+15dBm
Operating Temperature	-40 to +85C
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.

## Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter



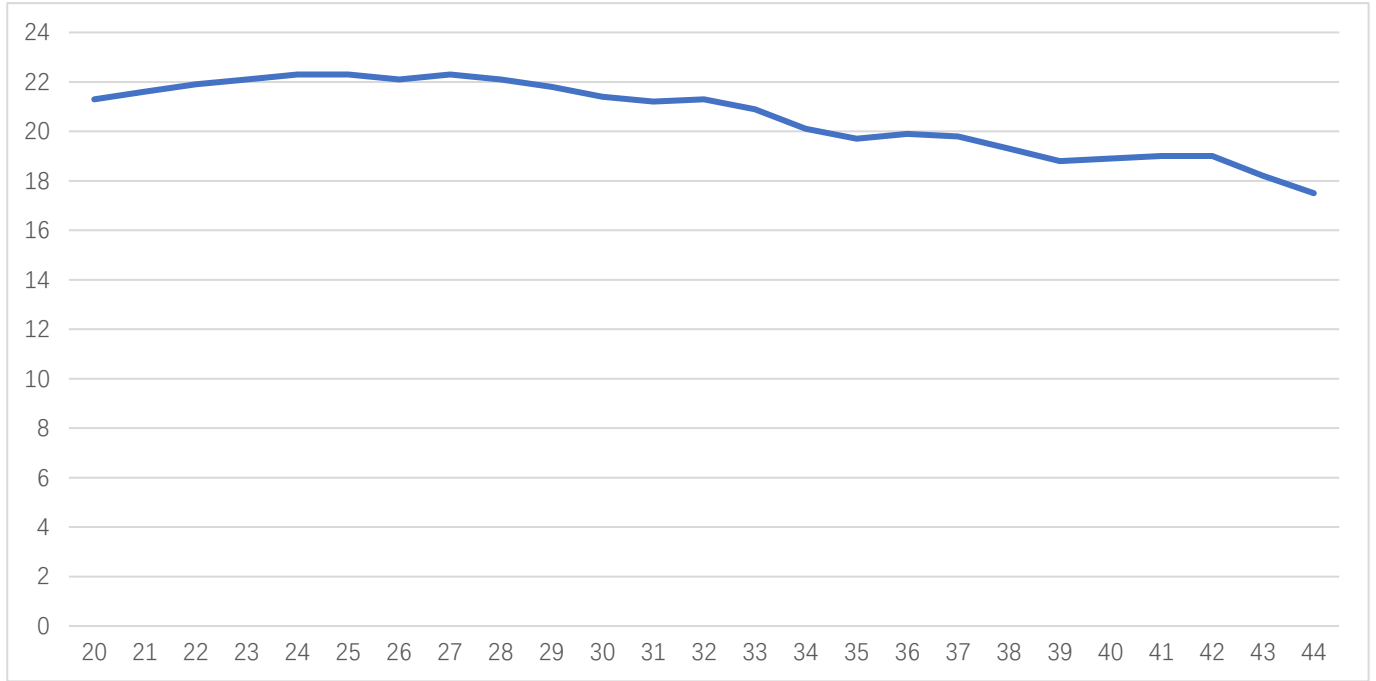


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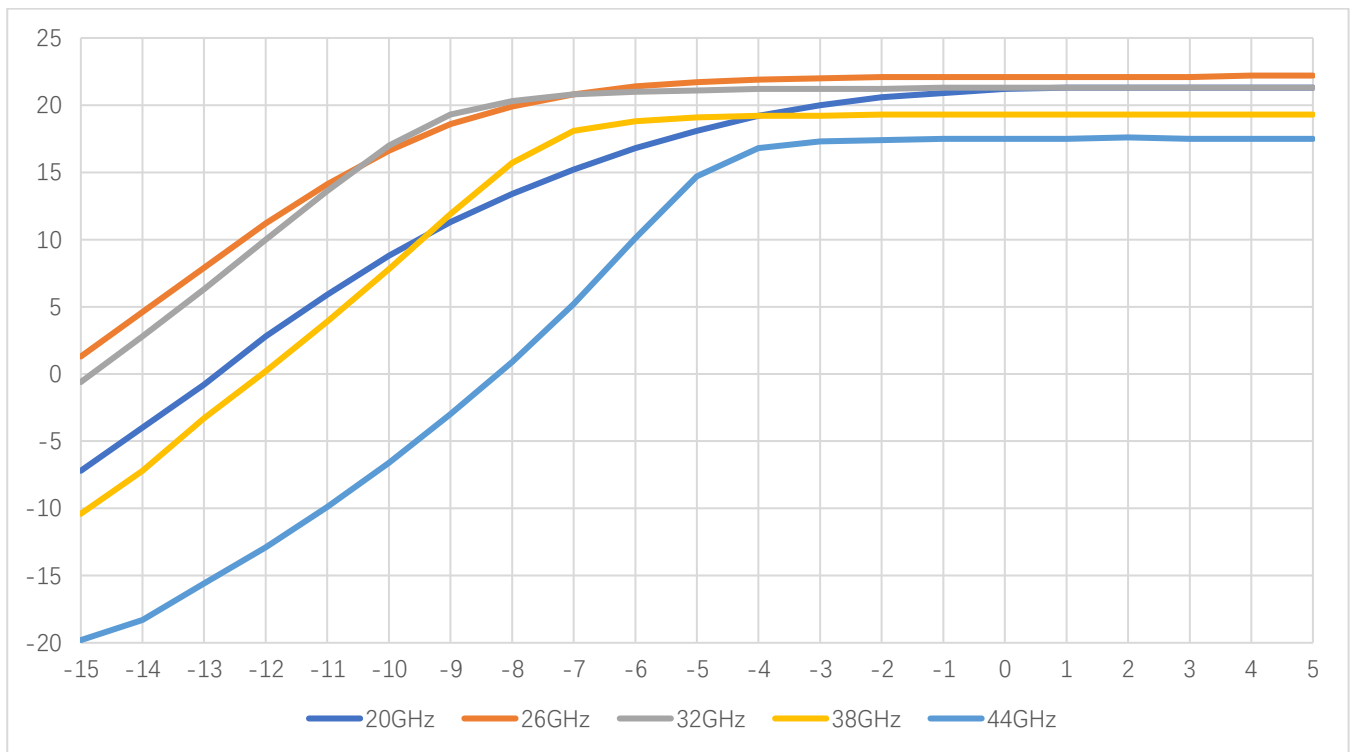
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## Test Data (25C)

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



Pout vs Frequency



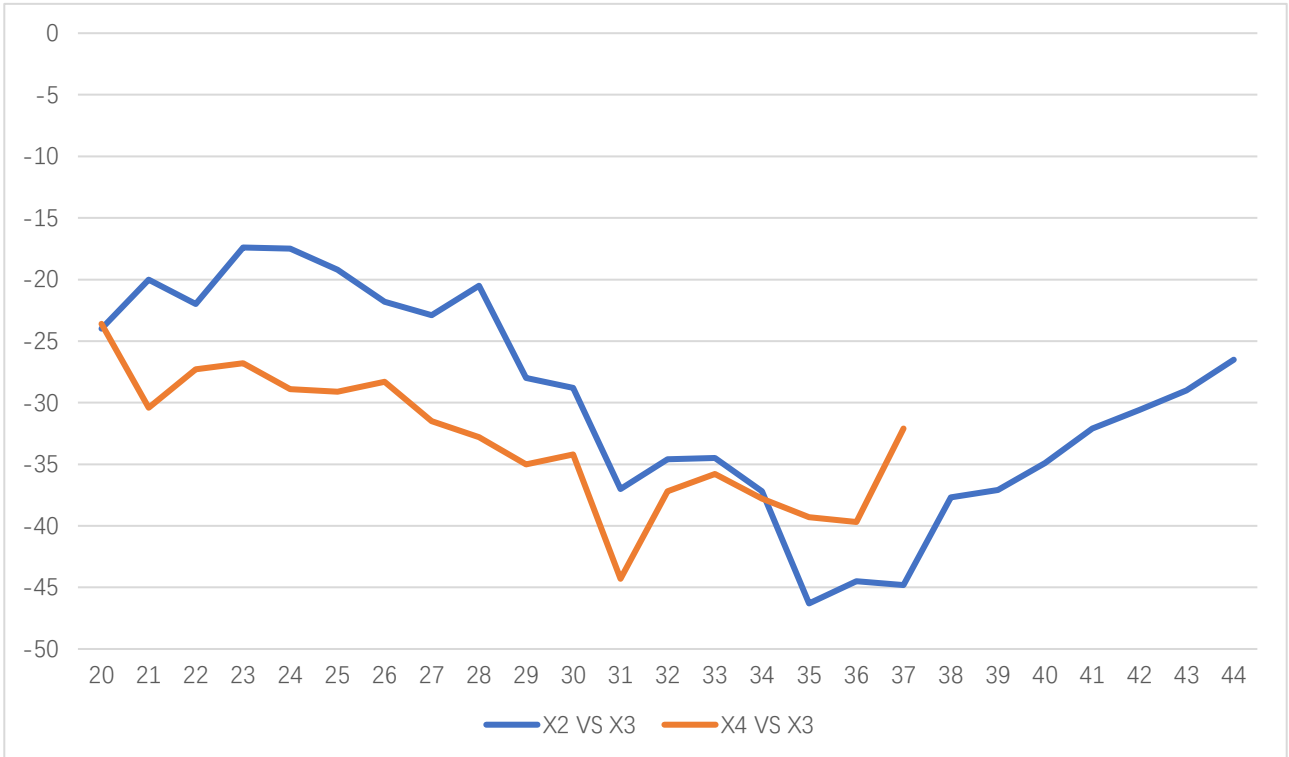
Pout vs Pin





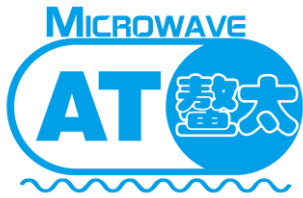
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X2/X4 Harmonics vs X3 Pout

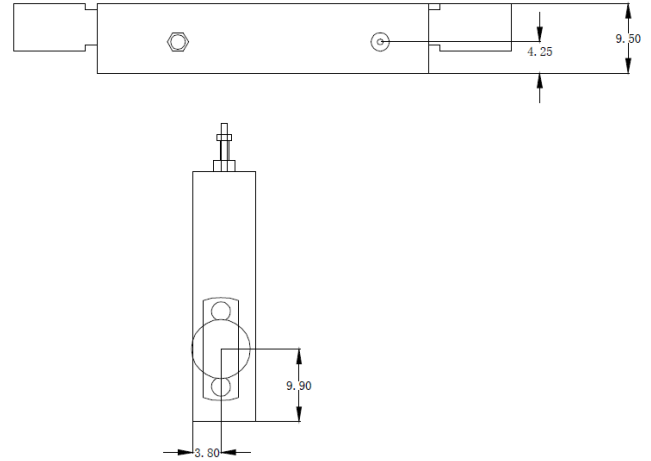
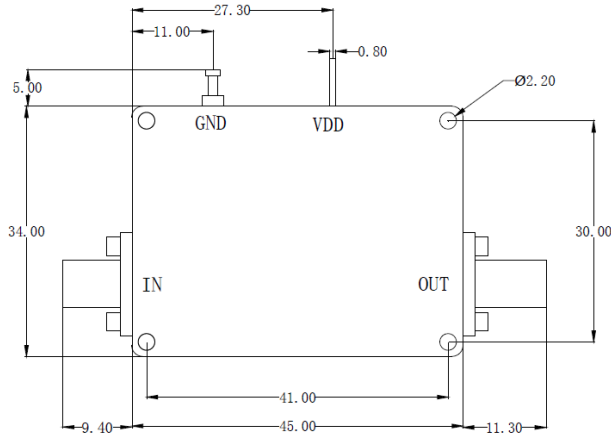




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**Dimension:** (Unit:mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Length of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

Heat Sink Required During Operation if case Temp higher than 50C

