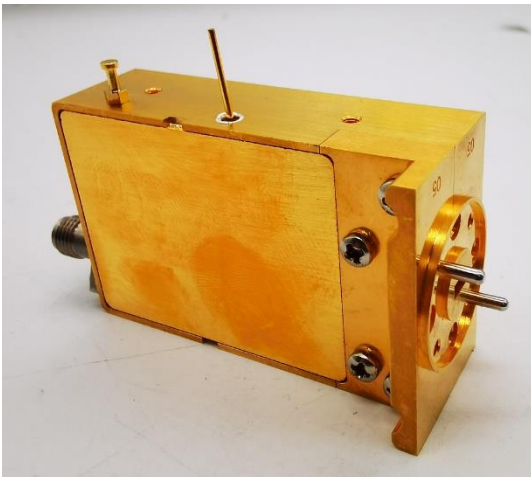


X4 Full V Band Active Multiplier 50-75GHz, Pout=+18dBm, WR-15

2022-9-1



Description:

AT-AM4-5075-18TY is a full V band, active x4 frequency multiplier. The multiplier has an input frequency of 12.5-18.75 GHz with a typical output +18dBm from 50-75GHz.

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-15. Other port configurations are available under different requirement.

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 50-75GHz
- ✓ Pout: +18dBm typical
- ✓ Input: 12.5-18.75GHz
- ✓ Low Harmonics

Application

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

Electrical Specifications:

Parameter	Min	Typical	Max
Input Frequency	12.5GHz		18.75GHz
Input Power		+10dBm	+13
Multiplier Factor		X4	
Output Frequency	50GHz		75GHz
Output Power	+15dBm	+18dBm	
X3/X5 Suppression		-25dBc	
Drain Voltage		+5V	+8V
I _{dd} Quiescent		0.43A	
ID _D Psat		0.68A	0.8A
Spec Temp		25C	





AT-AM4-5075-18TY

Active Multiplier x4, 50-75GHz Pout=+18dBm

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-15
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	-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-AM4-5075-18TY	High Input driver +10dBm
AT-AM4-5075-18TL	Low Input diver option, +3dBm.



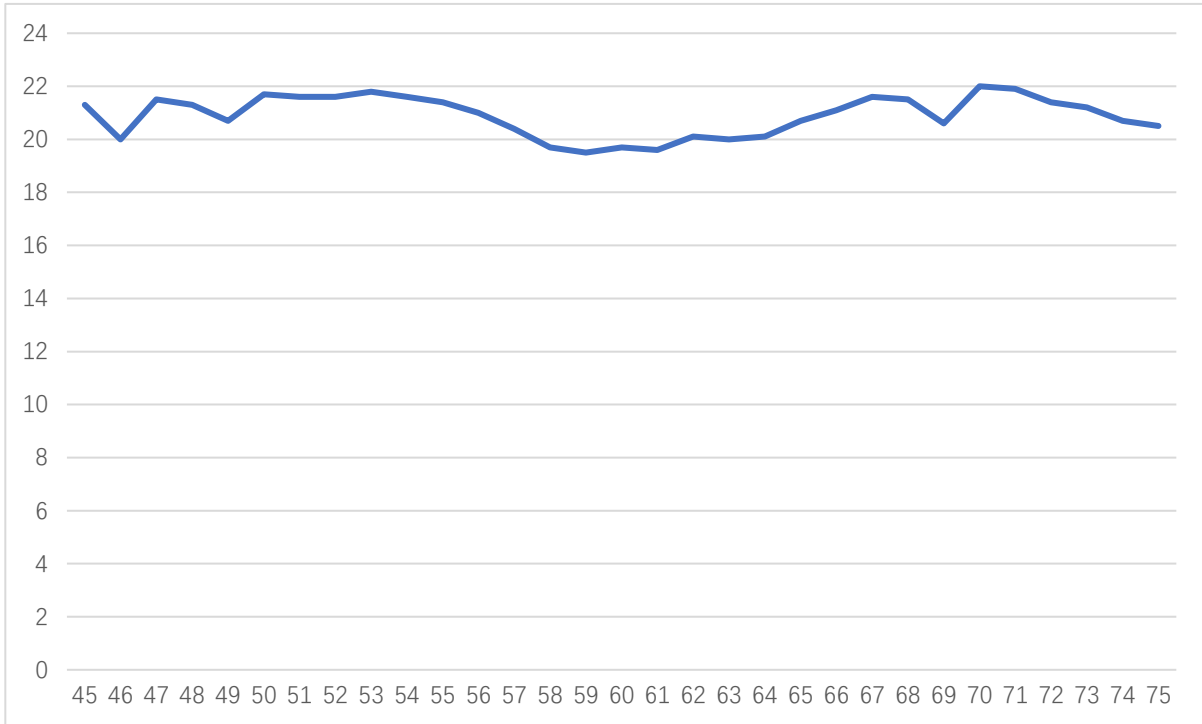


AT-AM4-5075-18TY

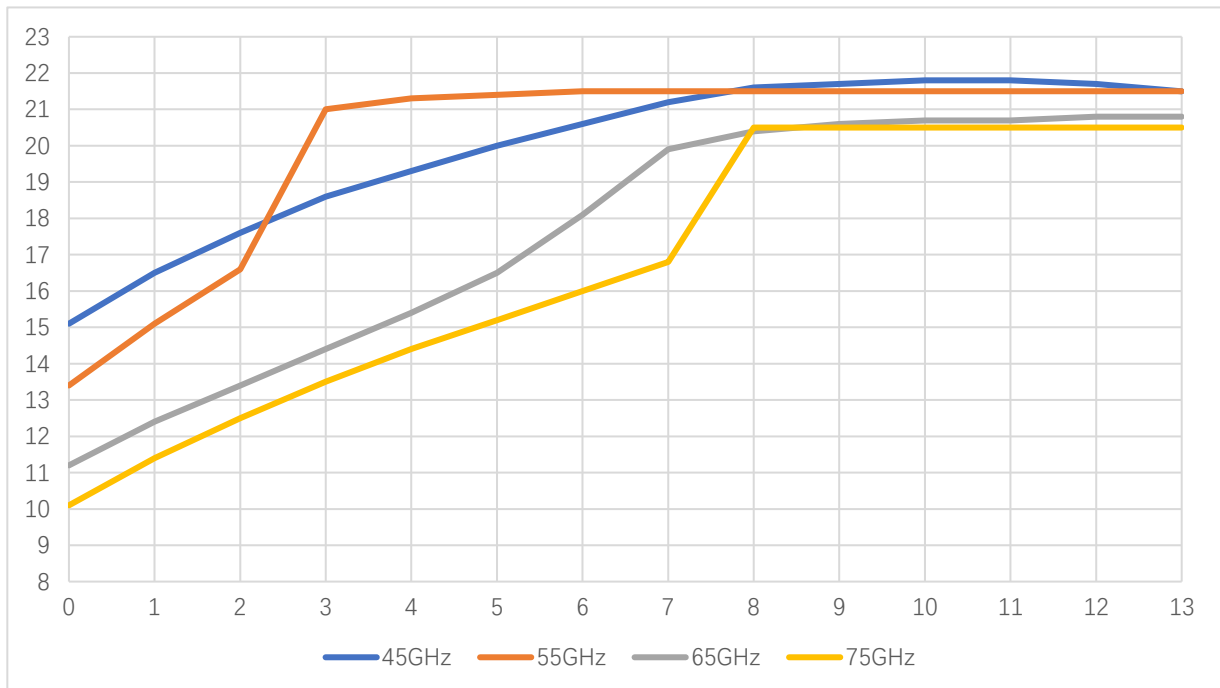
Active Multiplier x4, 50-75GHz Pout=+18dBm

Test Data (25C)

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



Pout vs Frequency Pin=+13dBm



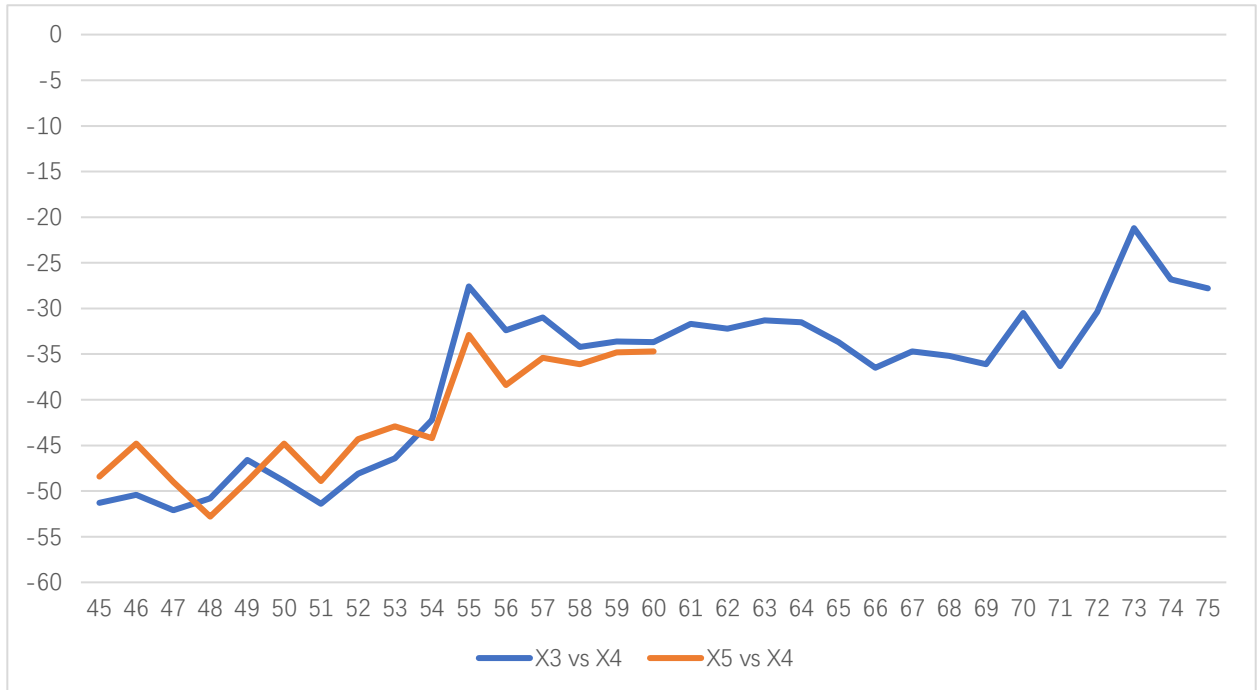
Pout vs Pin





AT-AM4-5075-18TY

Active Multiplier x4, 50-75GHz Pout=+18dBm



Harmonics suppression vs X4 Pout



Dimension (in mm)

