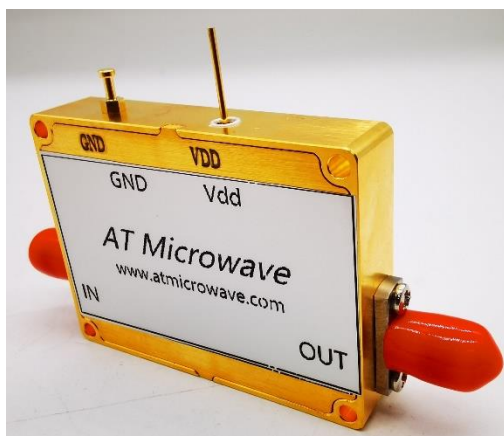


Active X4 Frequency Multiplier 20-40GHz Broadband



Description:

AT-AM4-2040-13 is a broadband frequency multiplier. The multiplier has an input frequency of 5-10 GHz with a typical output +13dBm from 20-40GHz.

The integrated input and output buffers deliver high output power at a low drive level. The input port is SMA female, and the output is 2.92mm Female. Other port configurations are available under different requirements.

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 20-40GHz
- ✓ Pout: +13dBm typical
- ✓ Input: 5-10GHz
- ✓ Low Harmonics

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	5GHz		10GHz
Input Power	+10	+13dBm	+15
Multiplier Factor		X4	
Output Frequency	20GHz		40GHz
Output Power		+13dBm	
1 st Suppression, vs 4 th Pout		-50dBc	
2 nd Suppression, vs 4 th Pout		-25dBc	
3 rd Suppression, vs 4 th Pout		-35dBc	
Drain Voltage		+5V	+8V
Current		280mA	
Spec Temp		25C	





AT-AM4-2040-13

Active Multiplier x4, 20-40GHz Pout=+13dBm

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Nickel Plated
Weight (Without Heatsink)	80g
Size:	45x34x8.5mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+20dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

Note: -40 to 85C operating Temp range is available according to request.

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.

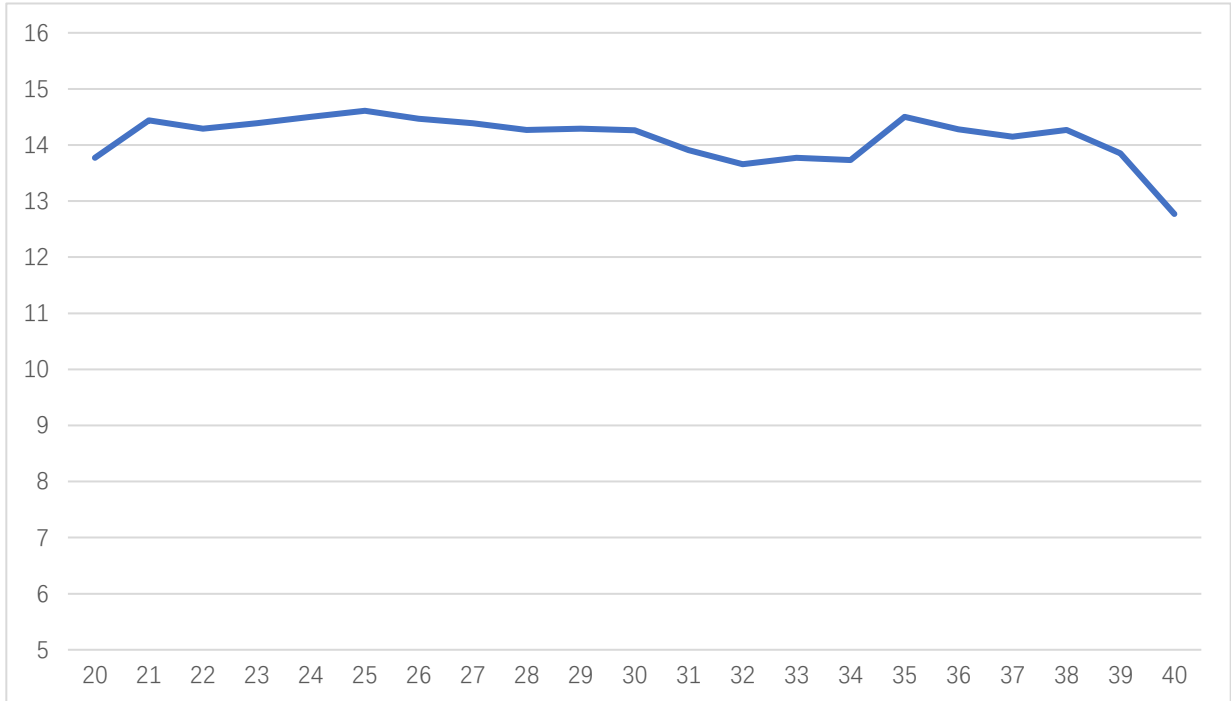




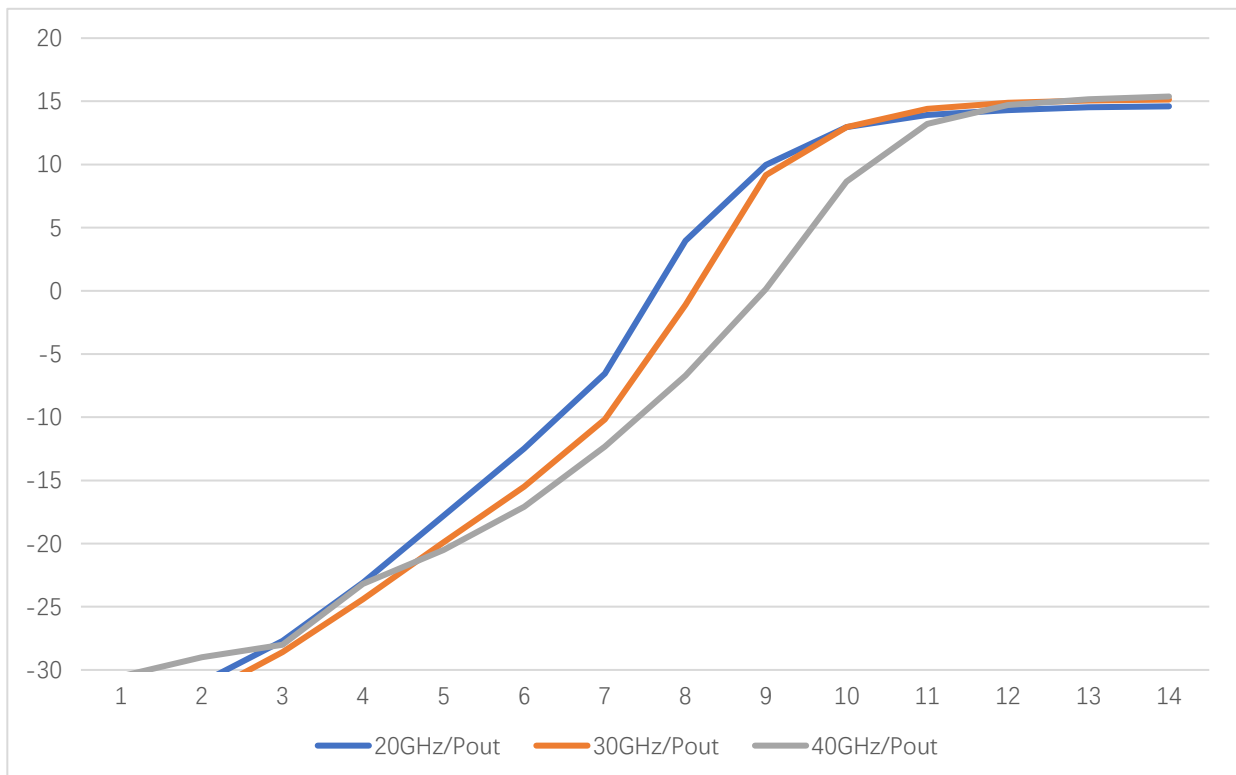
AT-AM4-2040-13

Active Multiplier x4, 20-40GHz Pout=+13dBm

Test Data:



Pout vs Frequency, Pin=+13dBm



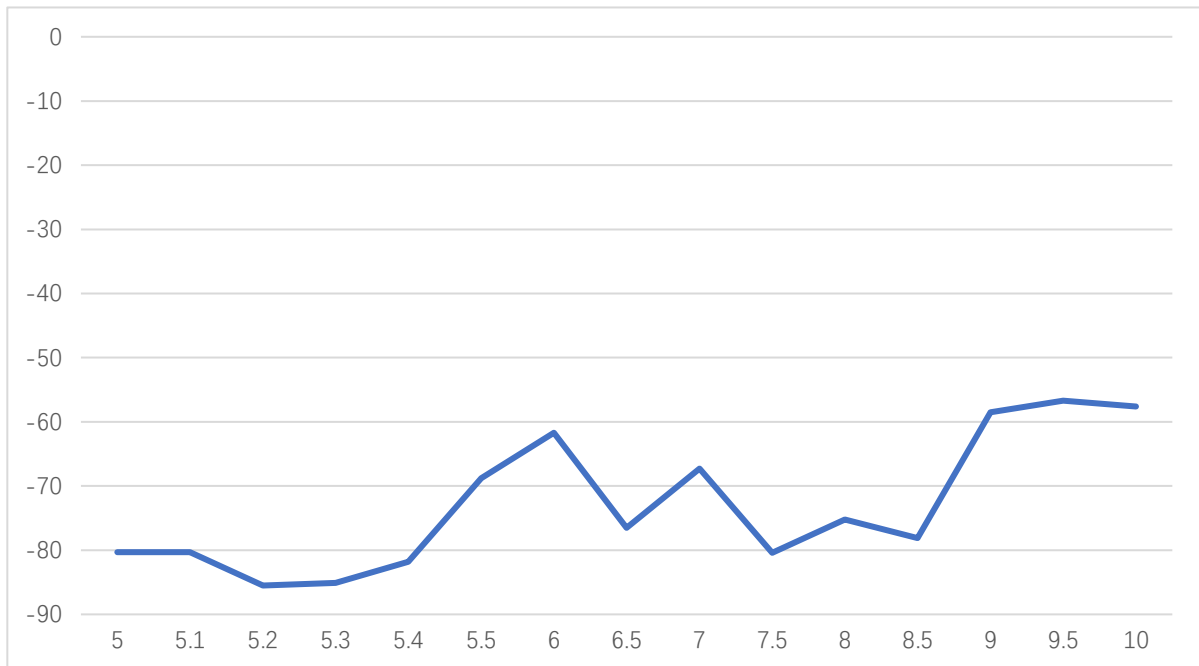
Pout vs Pin at 20/30/40GHz



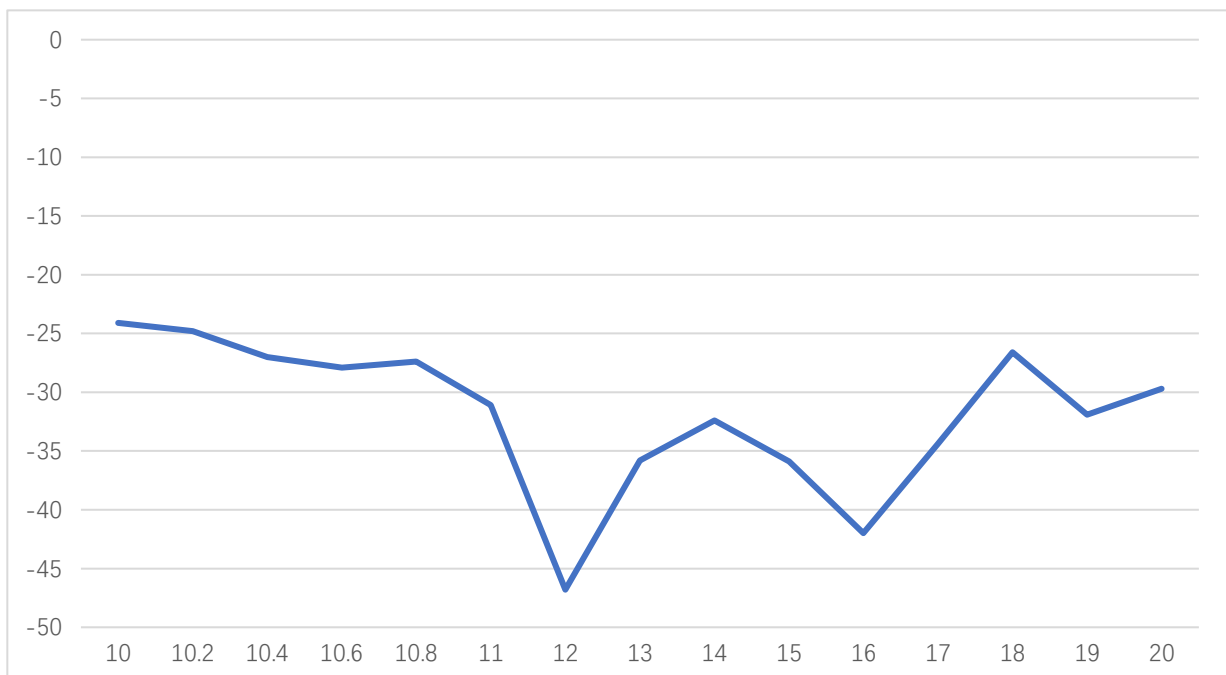


AT-AM4-2040-13

Active Multiplier x4, 20-40GHz Pout=+13dBm



1st Suppression, vs 4th Pout



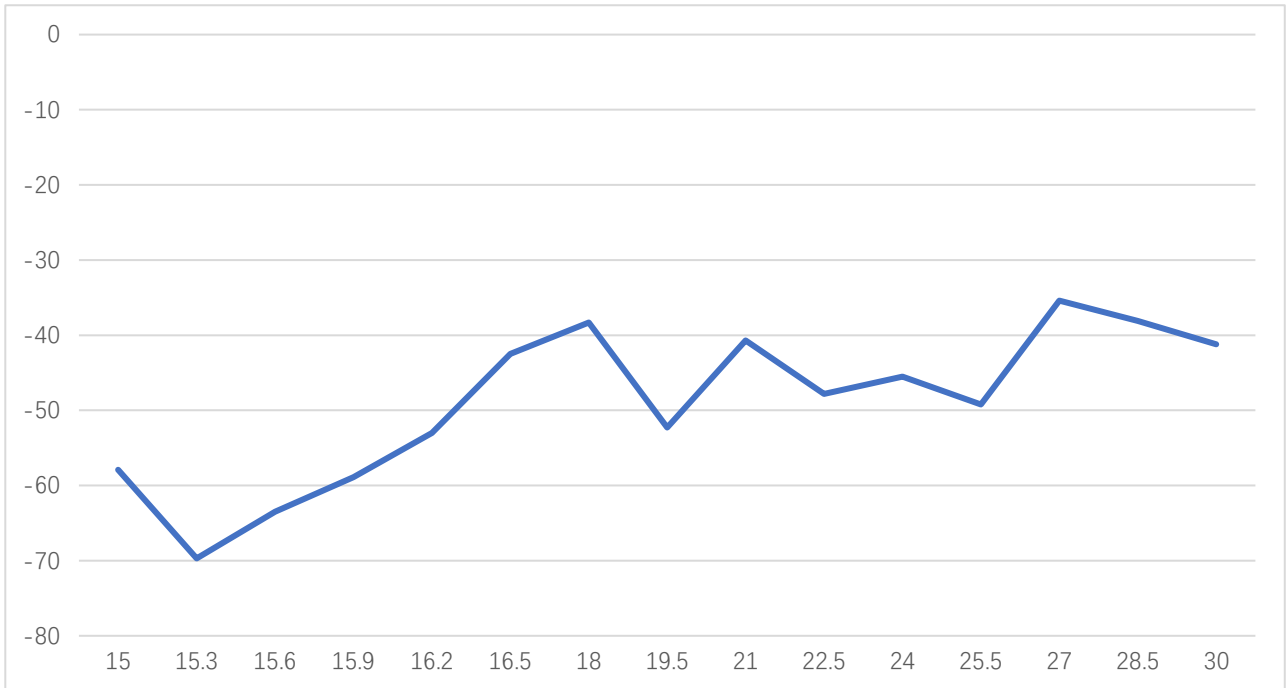
2nd Suppression, vs 4th Pout





AT-AM4-2040-13

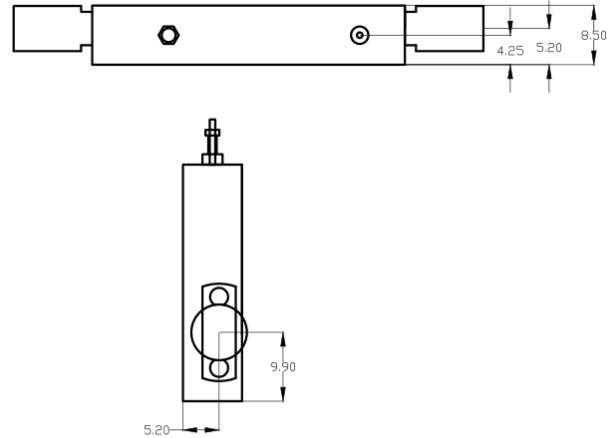
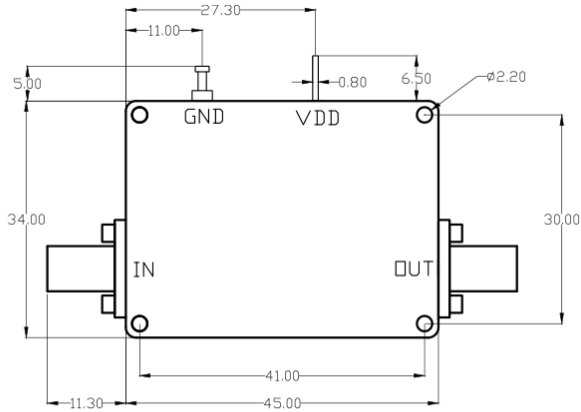
Active Multiplier x4, 20-40GHz Pout=+13dBm



3rd Suppression, vs 4th Pout



Dimension: (Unit:mm)



In millimetres

The 11.30 size marked is 1.85mm female connector

if use SMA female the size is 9.4 and 2.92mm female is 9.5

Heat Sink Required If Case Temp Higher Than 50C

