

Full F Band Passive Multiplier 90-140GHz, WR-08

2022-12-1



Description:

AT-PM2-90140C is a full F band, passive frequency multiplier. The multiplier has an input frequency of 45-70 GHz with a typical output +3dBm from 90-140GHz when Pin=+18dBm.

The multiplier also has a typical harmonic suppression. The input port is WR-15, and the output is WR-08. Other port configurations are available under different requirement.

AT-AM4-4570-18C and AT-AM4-4580C-15 can be used as a driver for this passive module.

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 90-140GHz
- ✓ Low Conversion Loss
- ✓ Input: 45-70GHz
- ✓ Low Harmonics

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency	45GHz		70GHz
Input Power	+15	+18dBm	+20dBm
Multiplier Factor		X2	
Output Frequency	90GHz		140GHz
Conversion Loss /Pin=+18dBm	-18dB -22dB	90-125GHz: -15dB 125-140GHz: -18dB	
Harmonic Suppression		-25dBc	
Drain Voltage		NO	
Spec Temp		25C	





AT-PM2-90140C

Passive Multiplier x2, 90-140GHz

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-08
Case Material	Copper
Finish	Gold Plated
Weight	65g
Size:	See outline

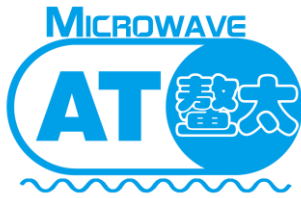
Absolute Maximum Ratings Table

Parameter	Value
RF Input Power	+23dBm
Operating Temperature	0 to +50C
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.

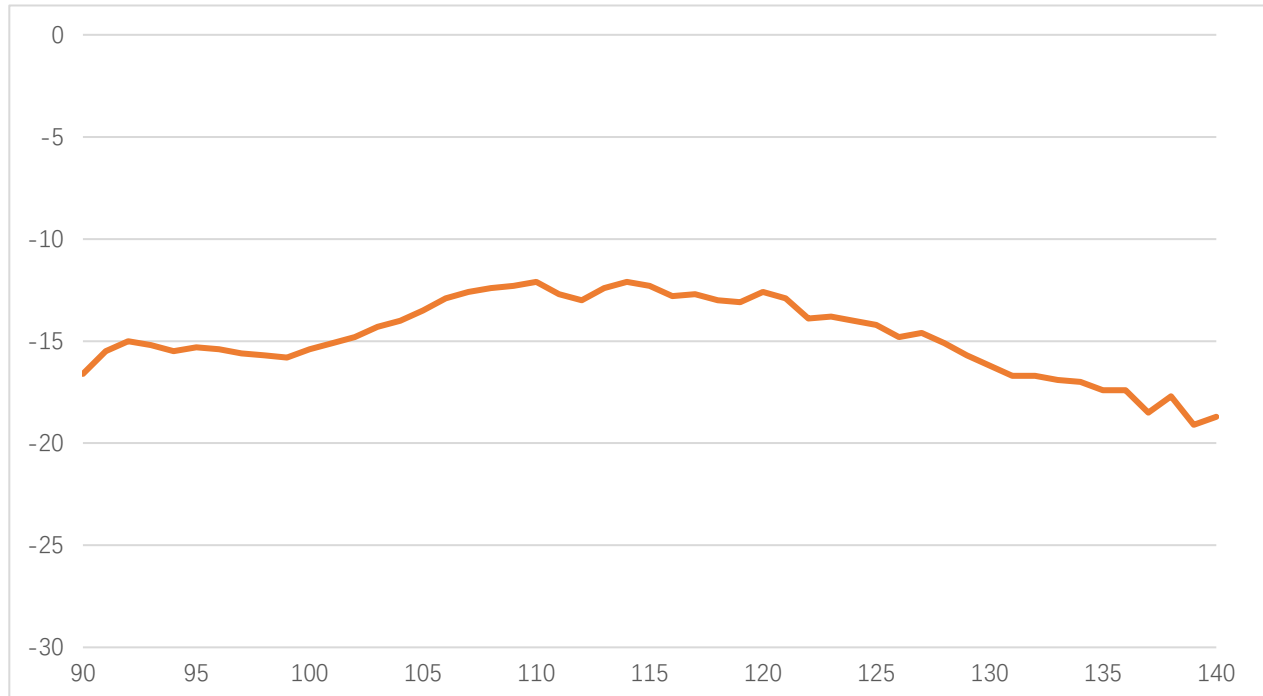




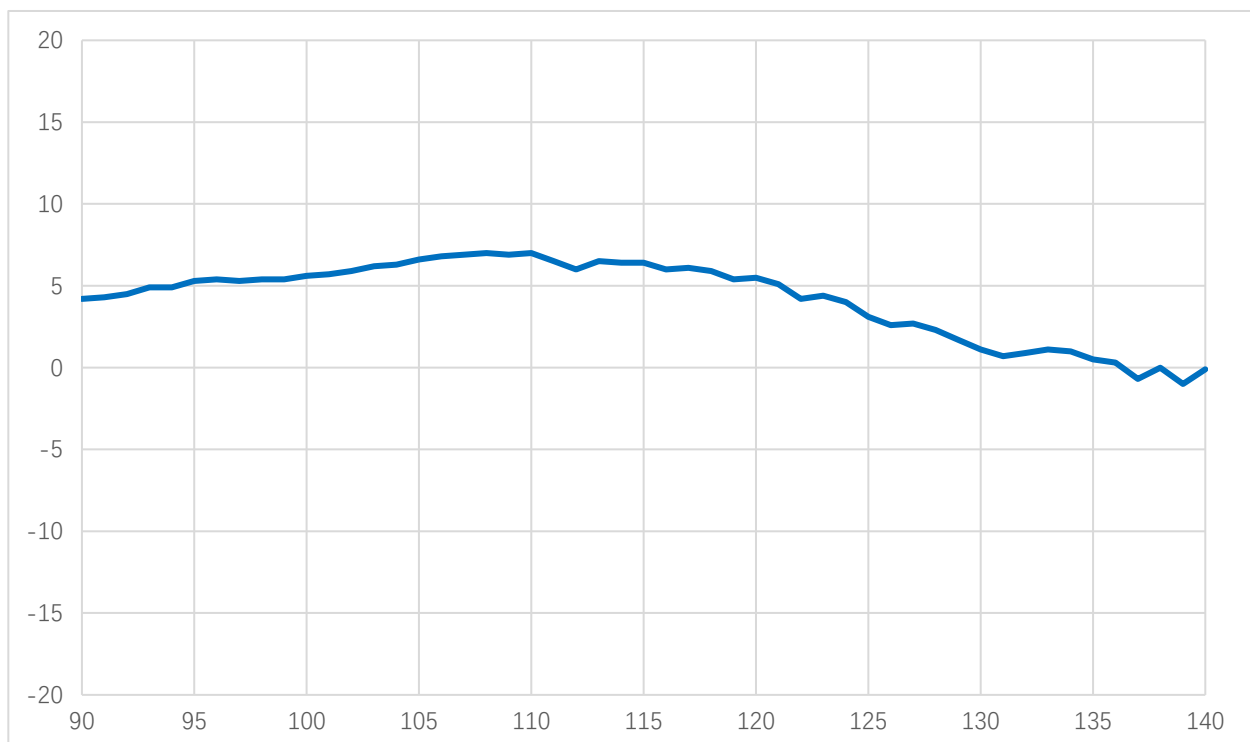
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Test Data(25C)

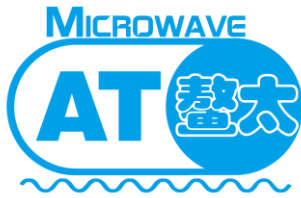


Conversion Loss vs Frequency at Pin=+18dBm



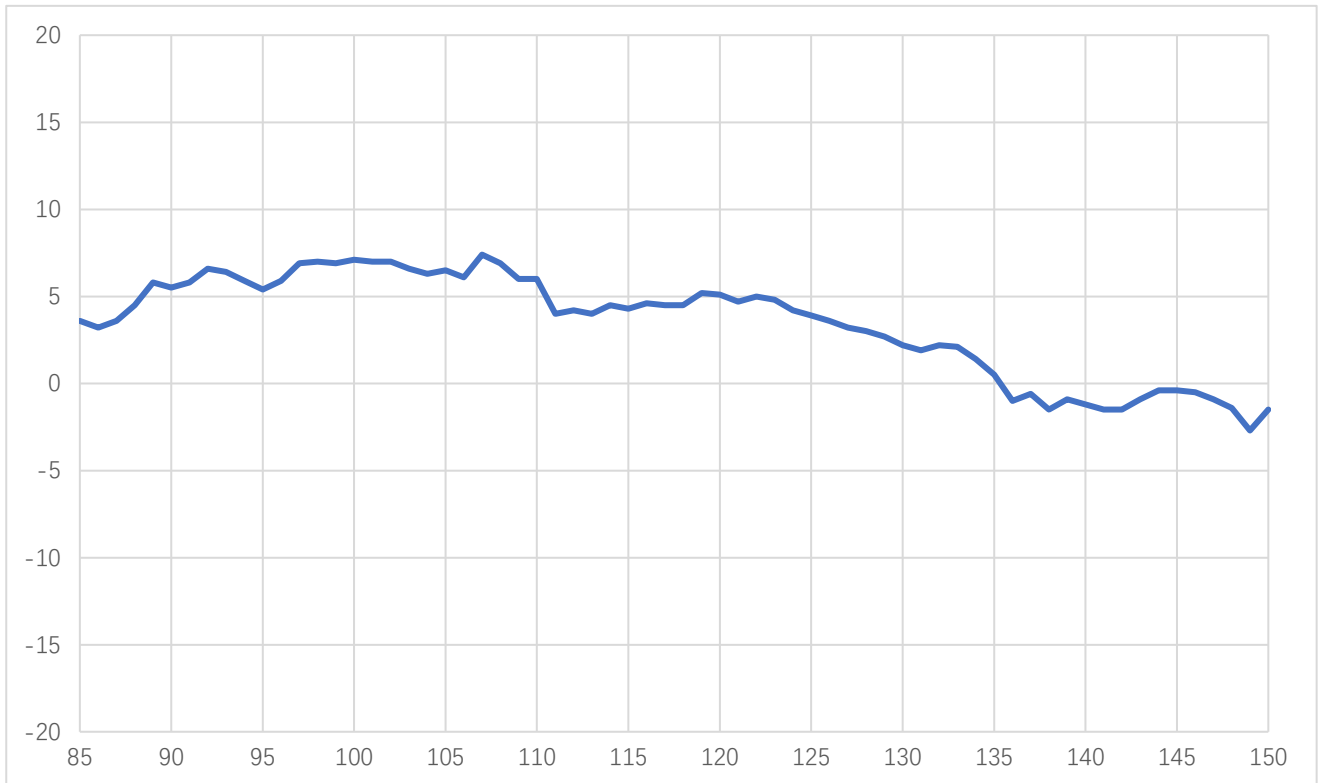
Pout vs Frequency
AT-AM4-4570-18C as LO Driver





AT-PM2-90140C

Passive Multiplier x2, 90-140GHz



Pout vs Frequency
AT-AM4-4580C-15L used as Driver



Dimension(mm)

