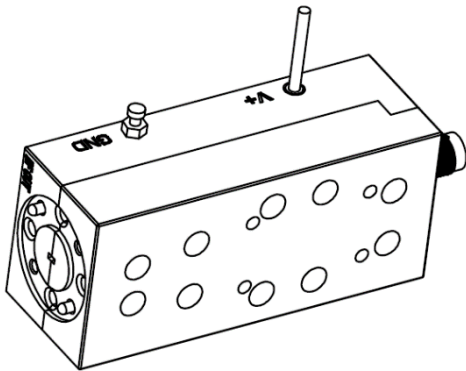


High Power x8 Active Multiplier, +20dBm

2025-3-25

Product Overview



AT-AM8-9098-20 is a W band FMCW transmitter subsystem. The input is 11.25-12.5GHz, with x8 multiplier, and the output frequency is 90-98GHz. With a high power amplifier inside, the output power is more than +20dBm.

The input port is SMA female, and the output is a WR-10 waveguide. Other port configurations are available under different requirement. The multiplier can be used from 85-100GHz with some change of the performance.

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 90-98GHz
- ✓ Pout +20dBm Typ
- ✓ Input: 11.25-12.5GHz, 0dBm
- ✓ Single Power Supply

Application

- ✓ W band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Input Frequency		11.25-12.5GHz	
Multiplier Factor		X8	
Input Power	0	+3dBm	+8
Output Frequency		90-98GHz	100GHz
Output Power	+17	+20dBm	
Harmonic Suppression		-30dBc	
Drain Voltage		+5V/0.9A	1.1A
Specification Temp		25C	





AT-AM8-9098-20

x8 Active Multiplier, Pout=+20dBm

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight	190g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-45 to +85C

Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

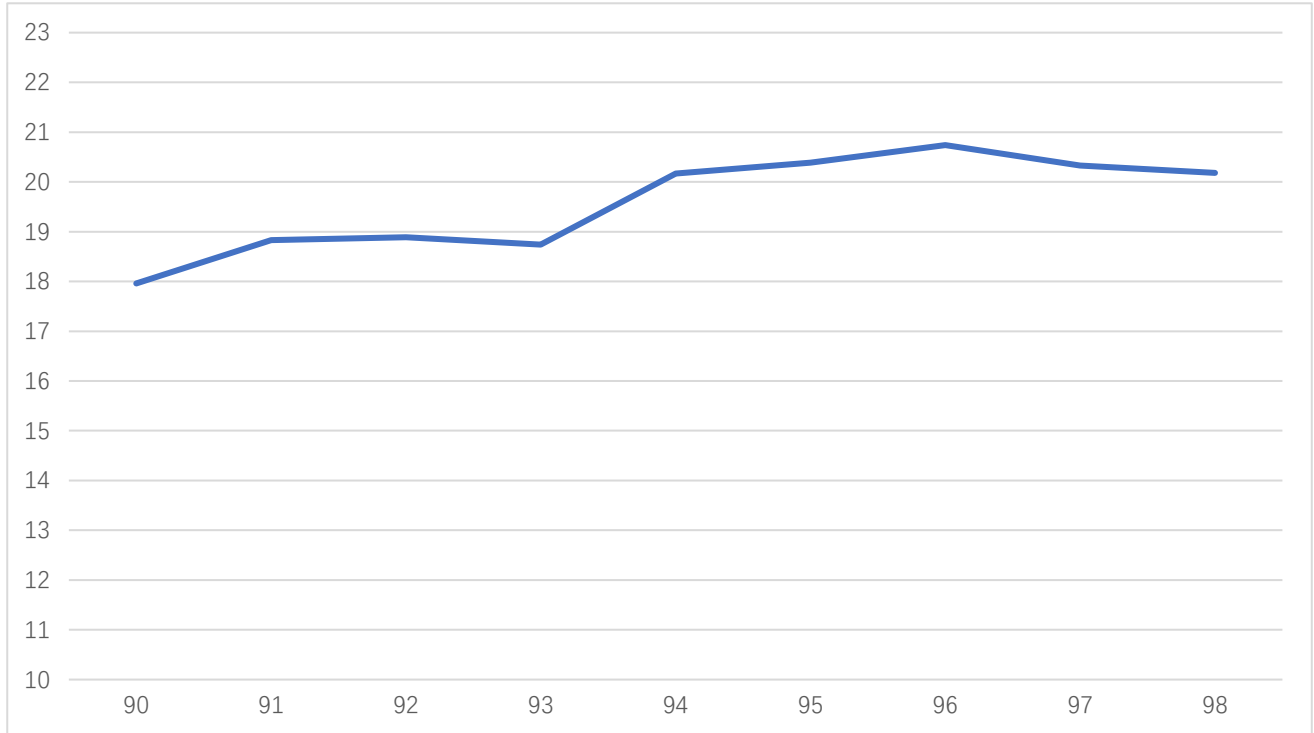




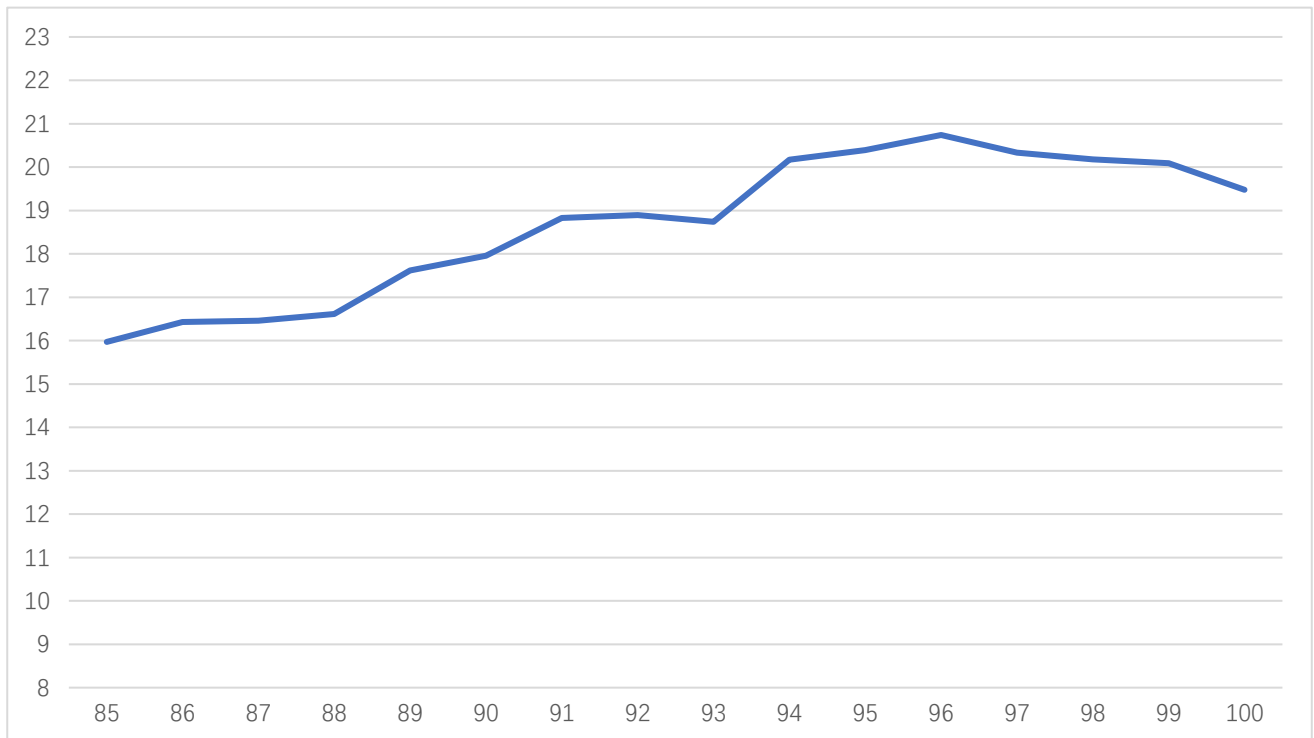
AT-AM8-9098-20

x8 Active Multiplier, Pout=+20dBm

Pout vs. Frequency (+25C, +3dBm driver)



Pout vs Frequency 90-98GHz



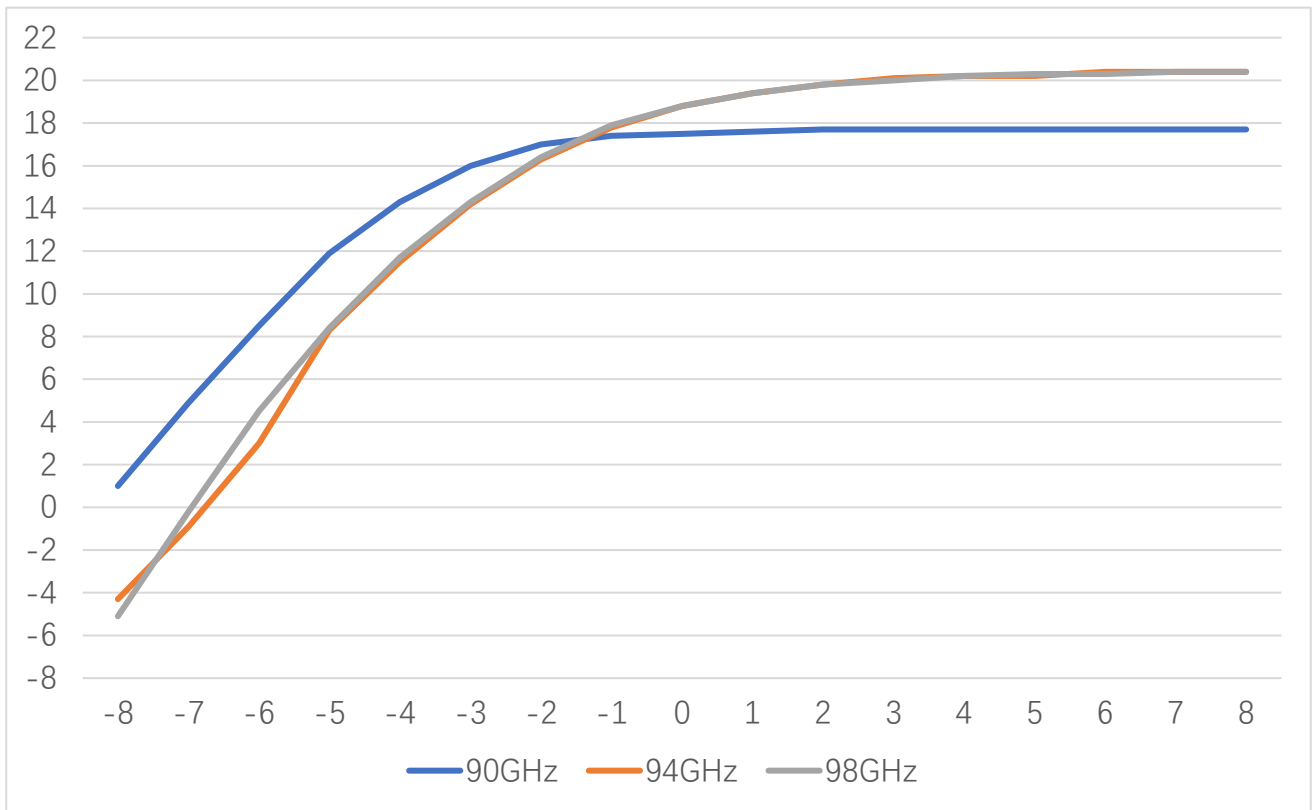
Pout vs Frequency 85-100GHz



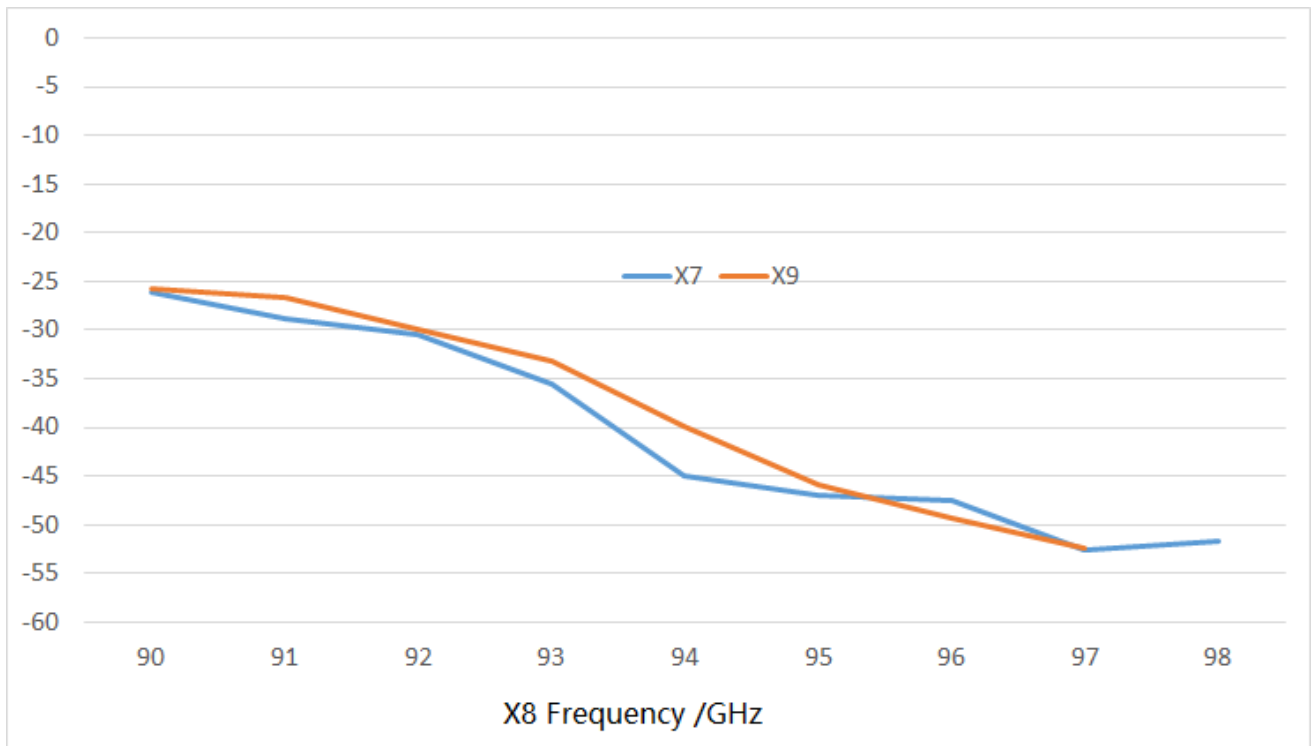


AT-AM8-9098-20

x8 Active Multiplier, Pout=+20dBm



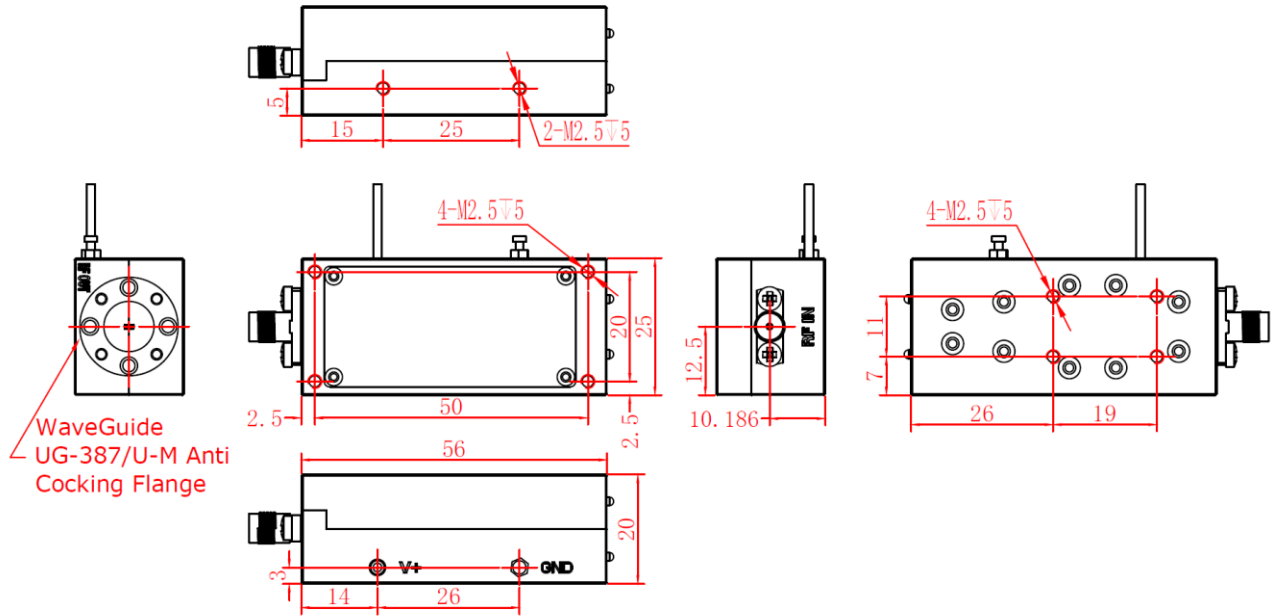
Pout vs Pin at 90/94/98GHz



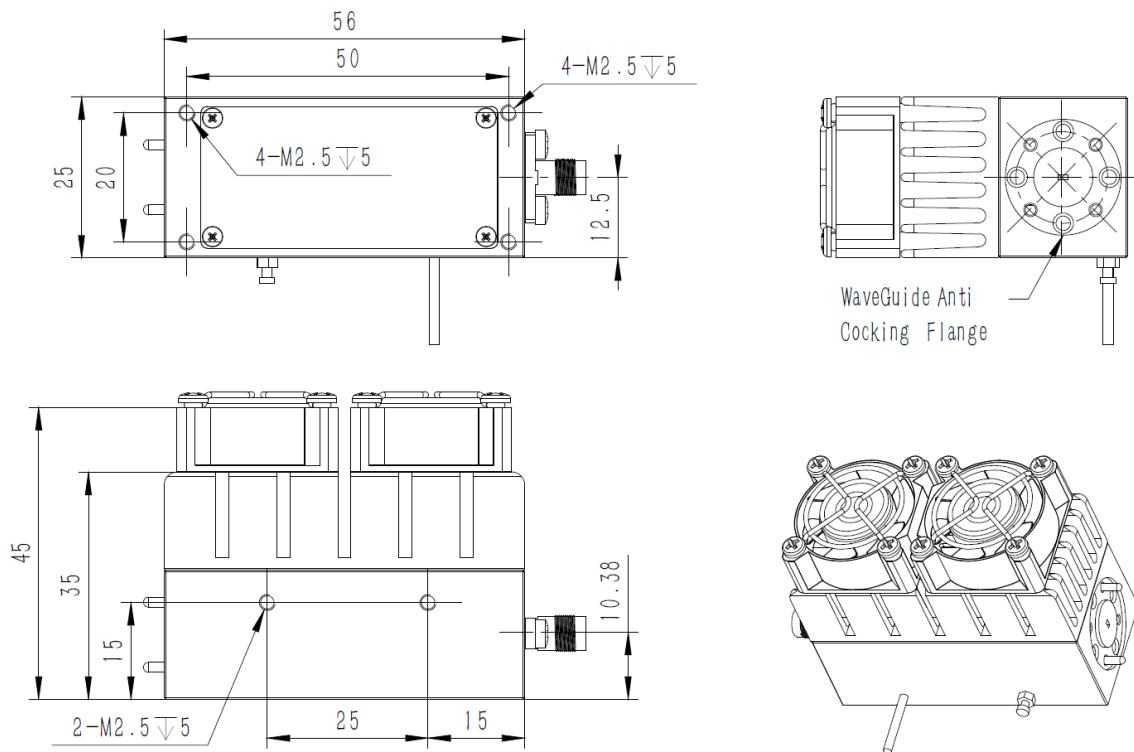
X7/X9 Harmonics VS X8 Pout



Dimension (unit in mm)



Heatsink Required during operation.



AT Microwave provides heatsink and Fan in default for this module.

Customer can remove it if using own heatsink.

