

High Power x8 Active Multiplier, +20dBm

2020-10-12



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 (Without Heatsink)	190g
Size:	50X25X20 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

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.

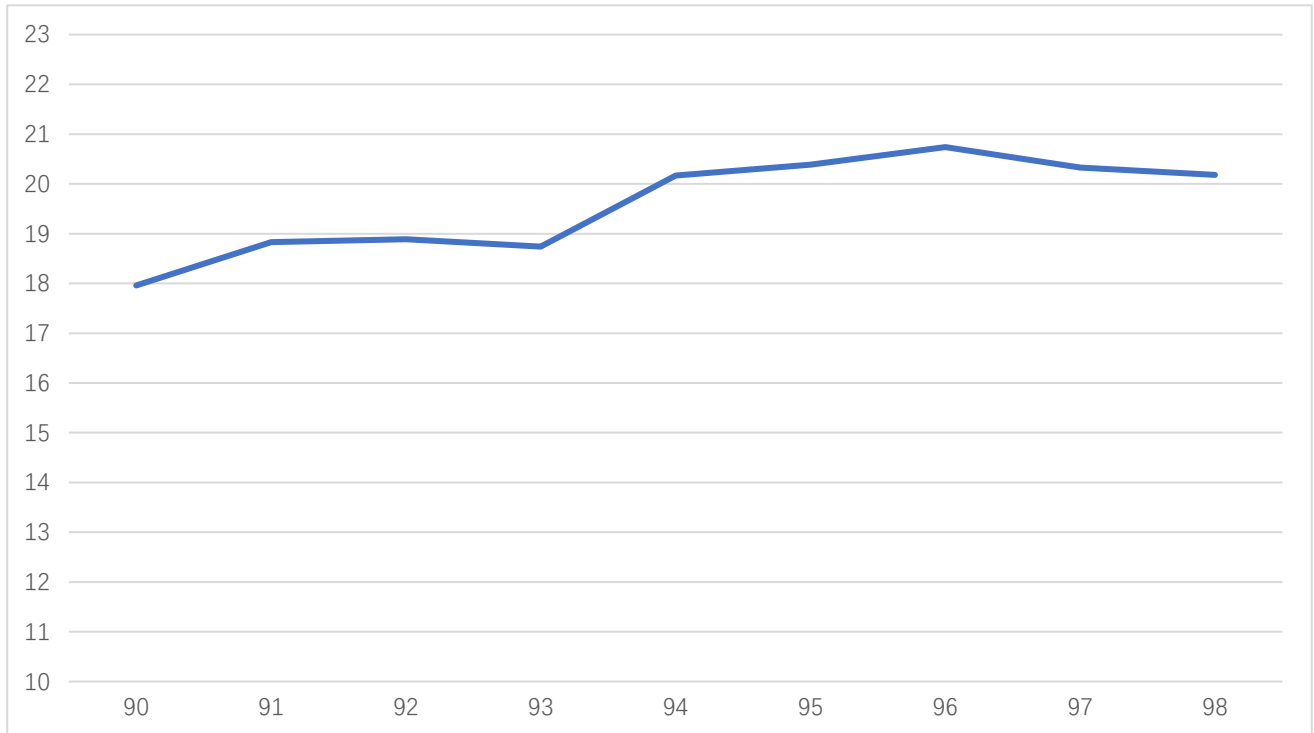




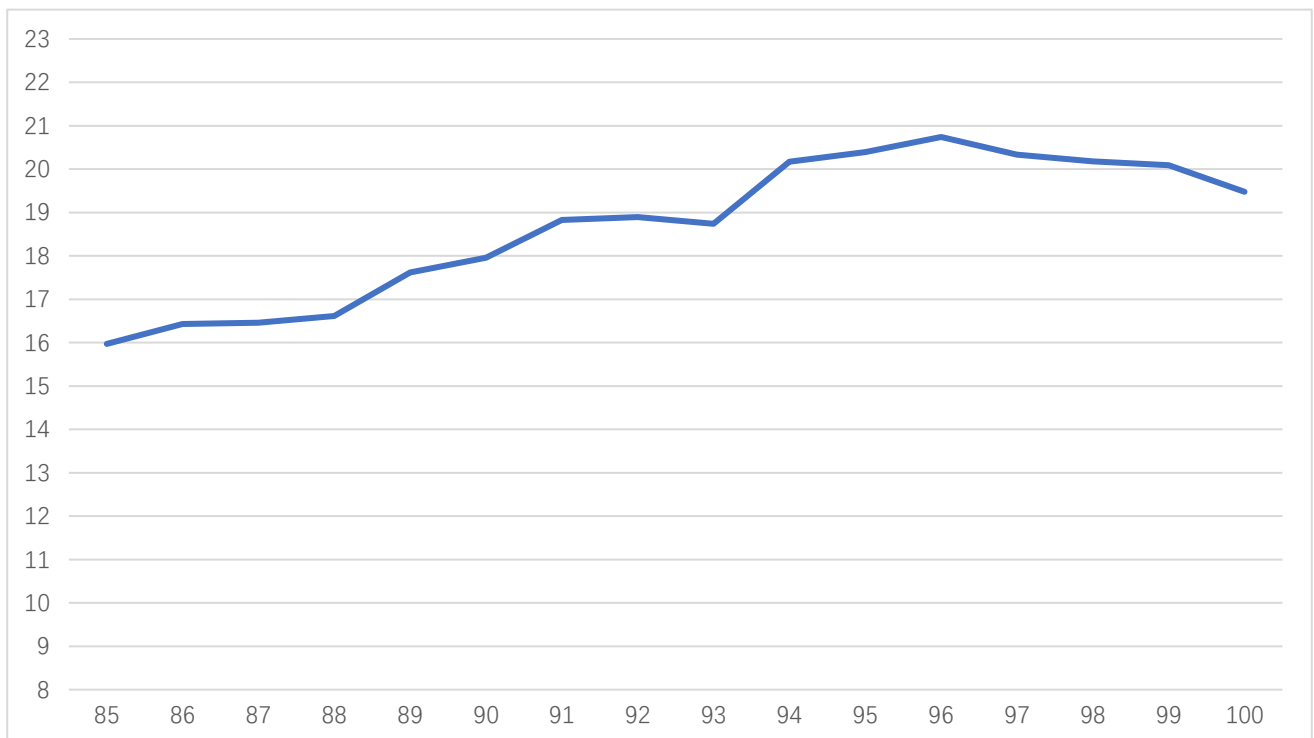
AT-AM8-9098-20

x8 Active Multiplier, Pout=+20dBm

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

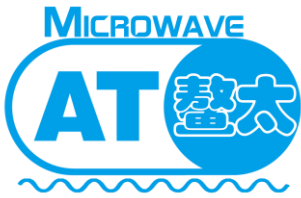


Pout vs Frequency 90-98GHz



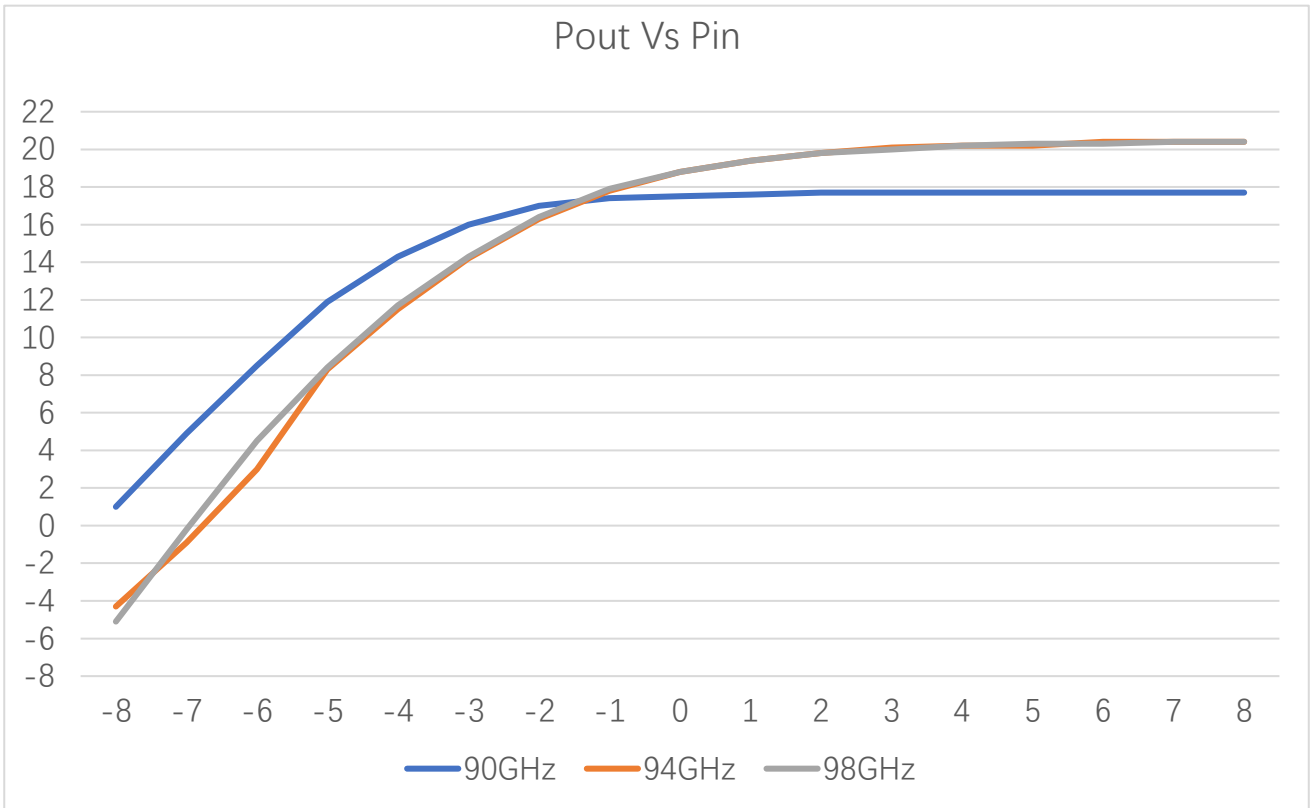
Pout vs Frequency 85-100GHz



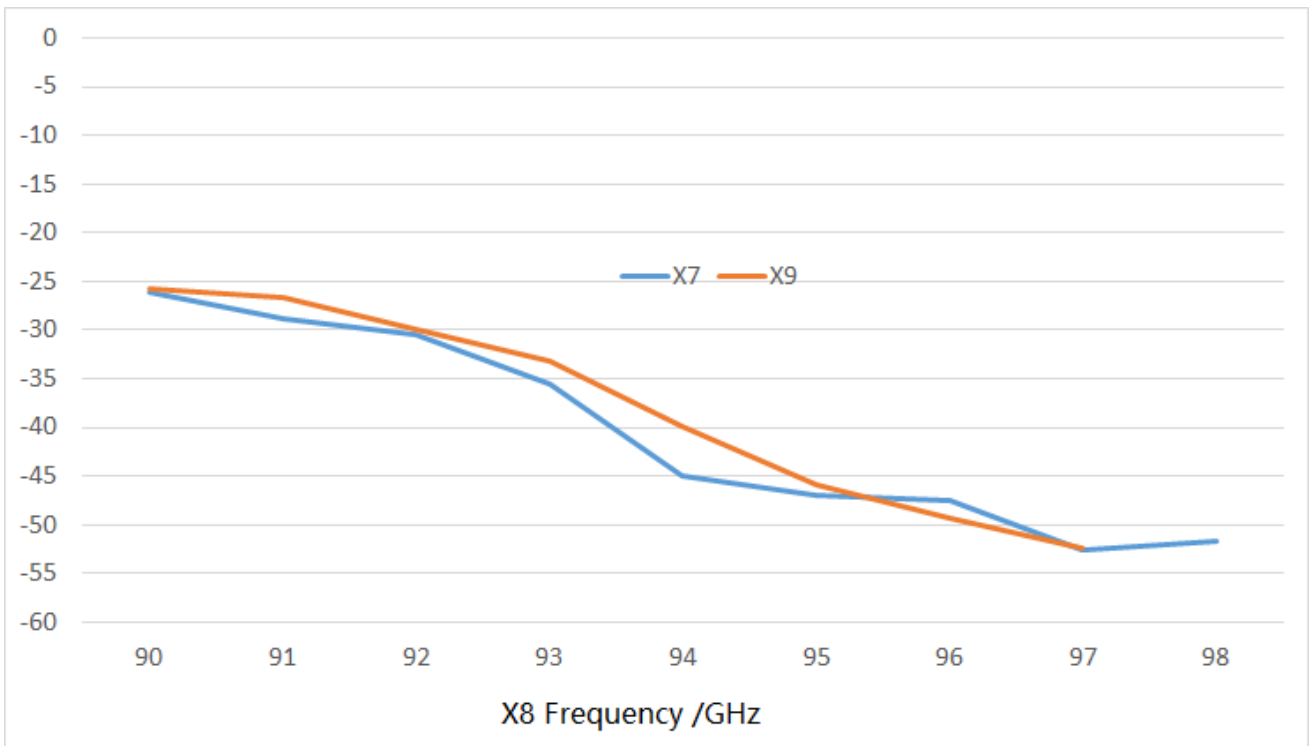


AT-AM8-9098-20

x8 Active Multiplier, Pout=+20dBm



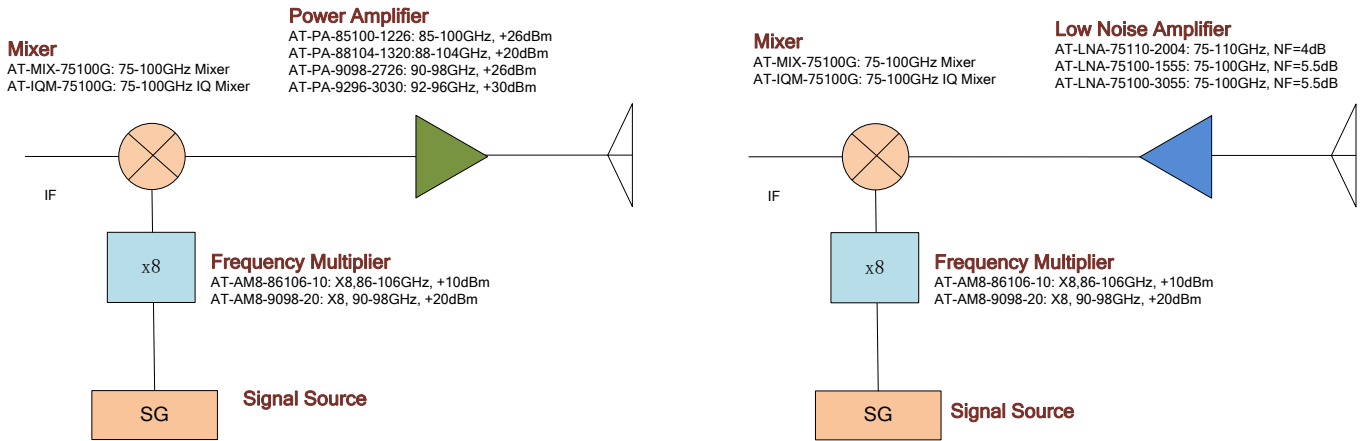
Pout vs Pin at 90/94/98GHz



X7/X9 Harmonics VS X8 Pout



W Band Solution:



Dimension

