

2024-8-20

## V Band Receiver, 57-66GHz



### Product Overview

AT-VRX-5766 is a V Band Receiver, with gain=8dB, NF=5 dB typical.

The Rx is integrated with High Performance GaAs MMIC chips. RF frequency range is 57-66GHz, LO range is 9.1-11GHz with x6 times multiplier inside. IF range is DC-10GHz The receiver is with compact size. LO/IF port is with SMA, and RF port is with standard WR-15.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

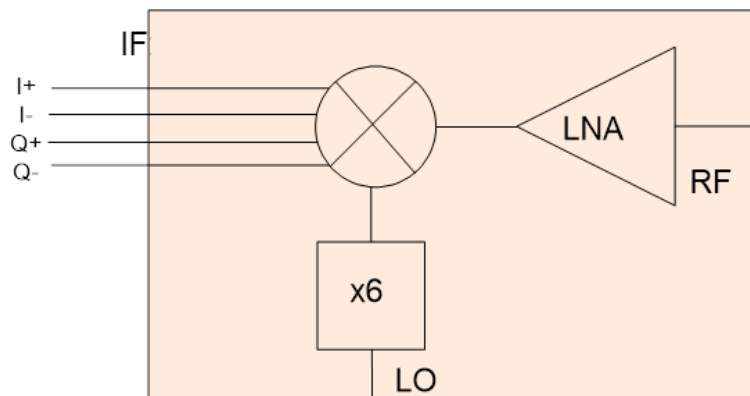
### Feature

- ✓ Frequency: 57-66GHz
- ✓ Gain: 8dB typical
- ✓ IF Range: DC-10GHz
- ✓ NF=5dB Typical
- ✓ Single Power Supply

### Application

- ✓ V Band Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Diagram Block





# AT-VRX-5766

Compact V Band Receiver, 57-66GHz

## Key Features

Parameter	Min	Typical	Max
RF Frequency		57-66GHz	
IF Frequency		DC-10GHz	
LO Frequency	9.1GHz		11GHz
LO Power		+10dBm	
NF		5 dB	
Conversion Gain (Combine IQ)		10 dB	
RF Return Loss		-7dB	
LO Return Loss		-10dB	
Drain Power Supply		+5/300mA	+8V
Spec Temp		25C	





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## Mechanical Information

Parameter	Description
RF Port	WR-15
LO Port	SMA Female
IF Port	SMA Female
Case Material (Note)	Copper
Finish	Gold Plated
Weight	315g
Dimension	See outline

Note: Aluminium for lighter weight is available according to request

## Absolute Maximum Ratings Table

Parameter	Value
RF Power	+7dBm
LO Port	+15dBm
Power Supply	+7V
Operating Temperature	0 to +50C
Storage Temperature	-55 to +125C

## 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.

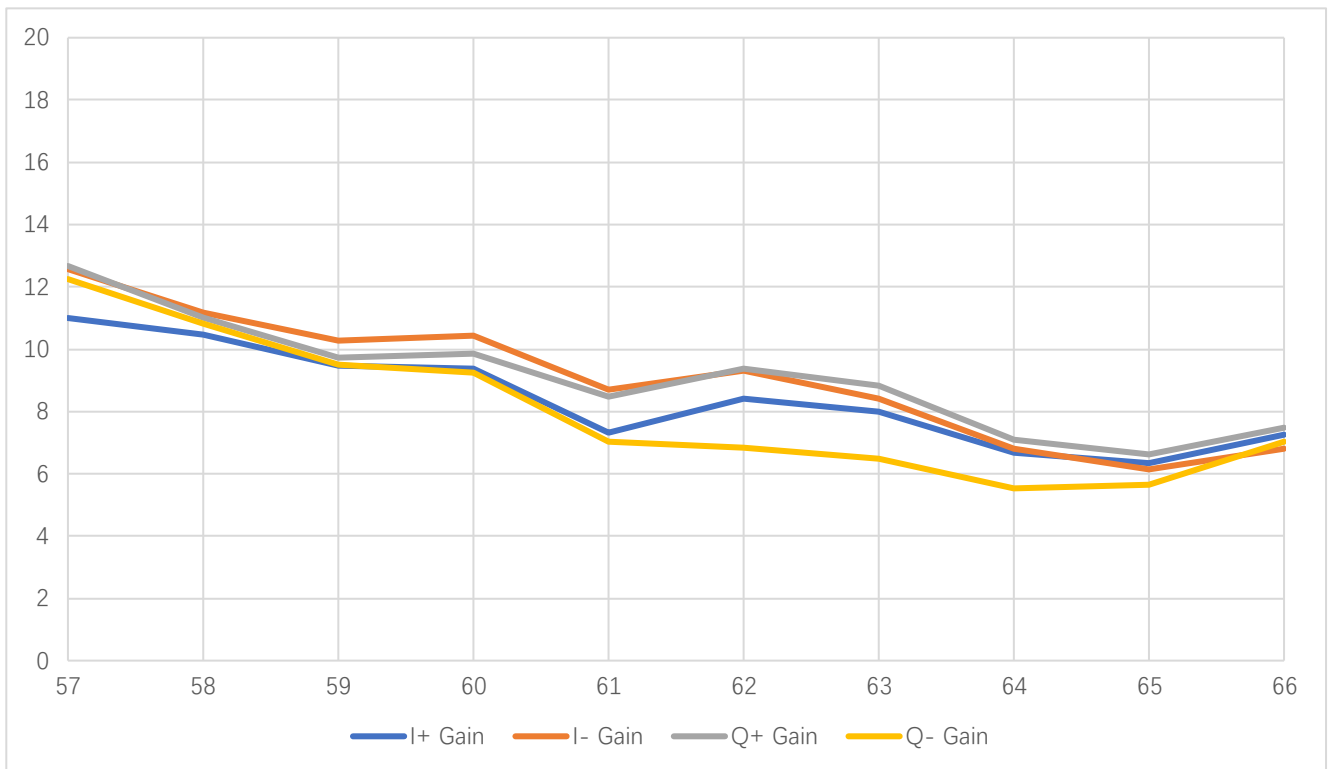


## Test Condition

Parameter	Setting
RF Input Power	-20dBm
LO Power	+10dBm
IF Output	1GHz
Temperature	25C

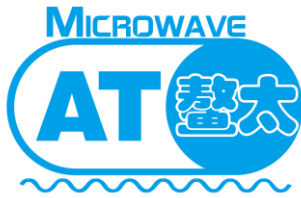
## Test Data (25C)

LO=+10dBm, IF=1GHz, RF Input Power=-20dBm



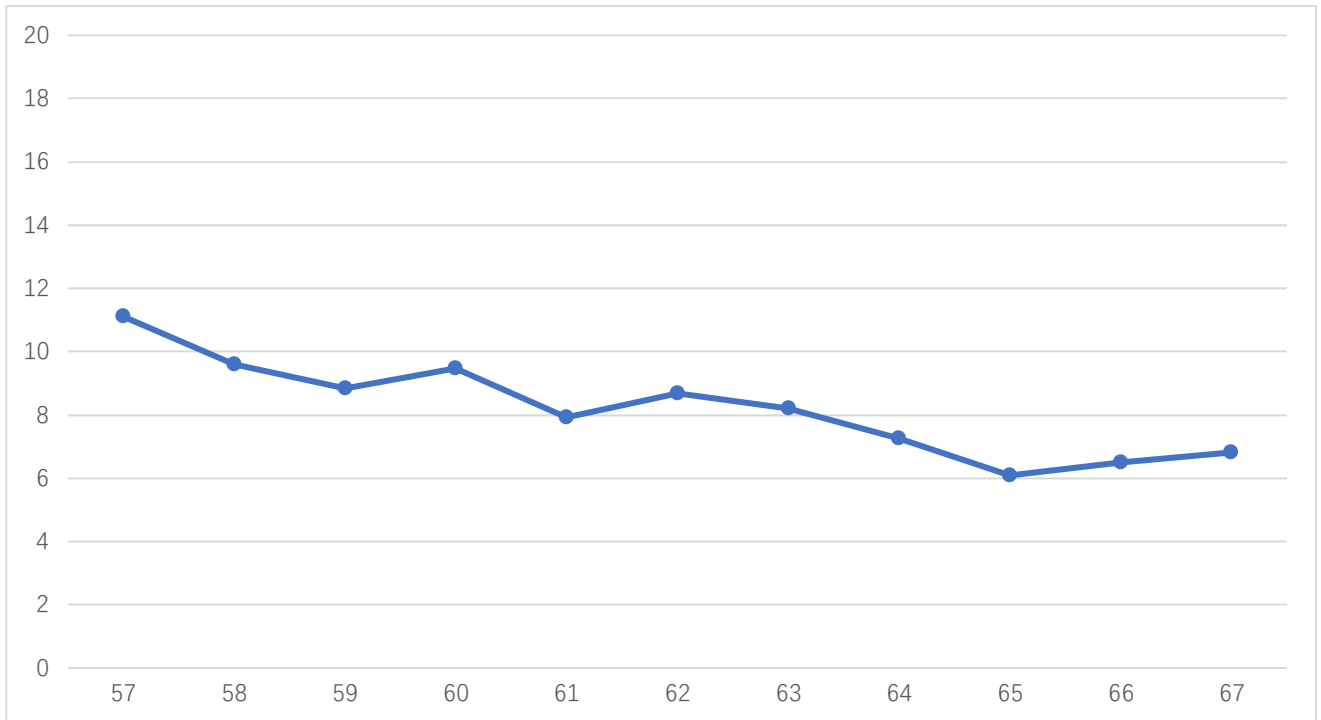
Conversion gain vs Frequency





# AT-VRX-5766

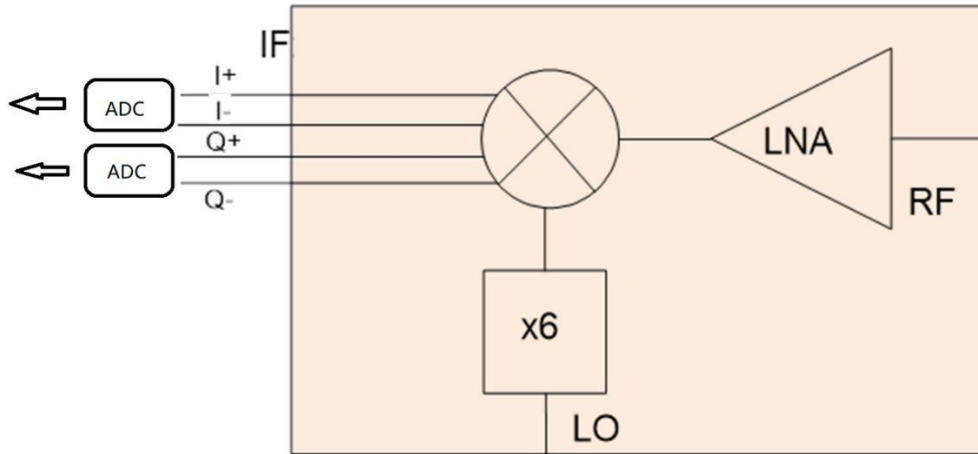
Compact V Band Receiver, 57-66GHz



I+ Single Port Gain, IF Response vs Frequency, LO=56GHz, LO=+10dBm

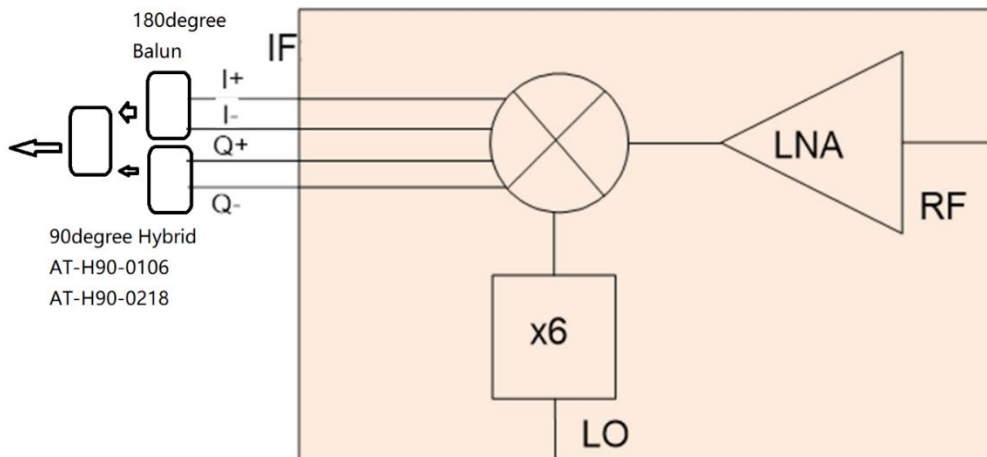


## Applicaiton1:



Zero IF Direct Conversion

## Applicaiton2:



Imaging Rejection Single IF Application

Contact with us for 180degree balun and 90degree hybrid.



## Dimension (mm)

