

## 90-96GHz IQ Receiver, High Gain, NF=4dB



### Product Overview

AT-WRX-9096IQ is high gain W-Band IQ receiver. The receiver is integrated with High Performance GaAs MMIC chips, with Gain=23dB, NF=4dB. RF frequency range is 90-96GHz, LO range is 10.7-13.3GHz with x8 time 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-10.

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

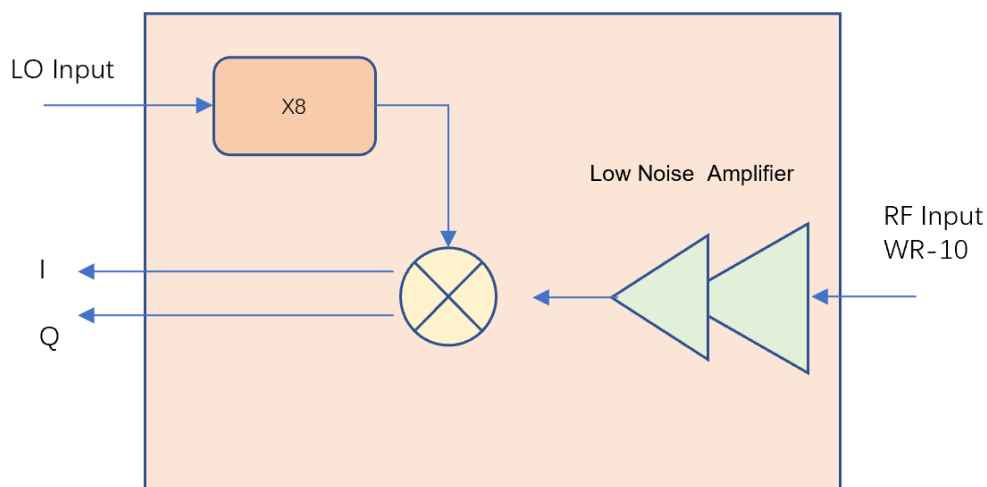
### Feature

- ✓ Frequency: 90-96GHz
- ✓ Gain: +23dB typical
- ✓ IF Range: DC-10GHz
- ✓ Single Power Supply

### Application

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

### Diagram Block





# AT-WRX-9096IQ

IQ Receiver, 90-96GHz, Gain 23dB

## Key Features

Parameter	Min	Typical	Max
RF Frequency		90-96GHz	
Input Power		-40 dBm	-15
LO Frequency	10.7GHz		13.3GHz
LO Multiplier Factor		X8	
LO Power	0	+3dBm	+5dBm
IF Frequency		DC-10GHz	
RF to IF Gain	20	23 dB	
NF		4 dB	6
Drain Power Supply		+5V	+8V
Current		300mA	
Spec Temp		+25C	

## Mechanical Information

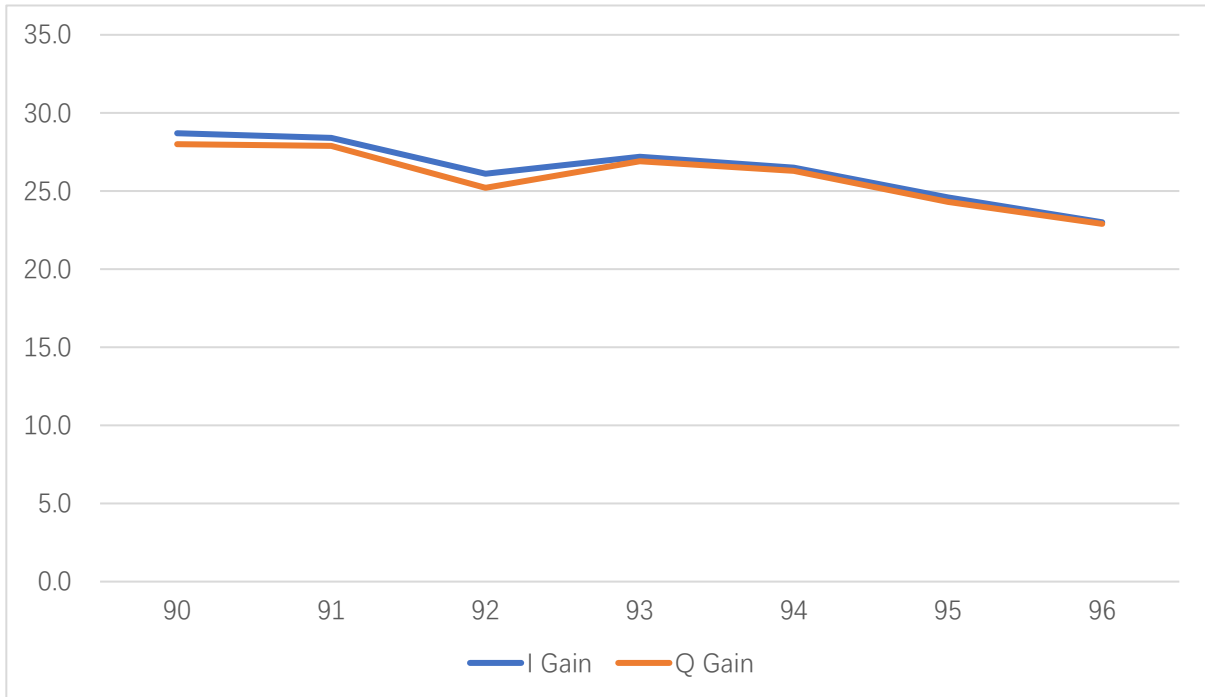
Item	Description
RF Port	WR-10
IF Port	SMA Female
LO Port	SMA Female
Finish	Gold Plated
Weight (Without Heatsink)	225g
Size:	75x40x20mm

## Absolute Maximum Ratings Table

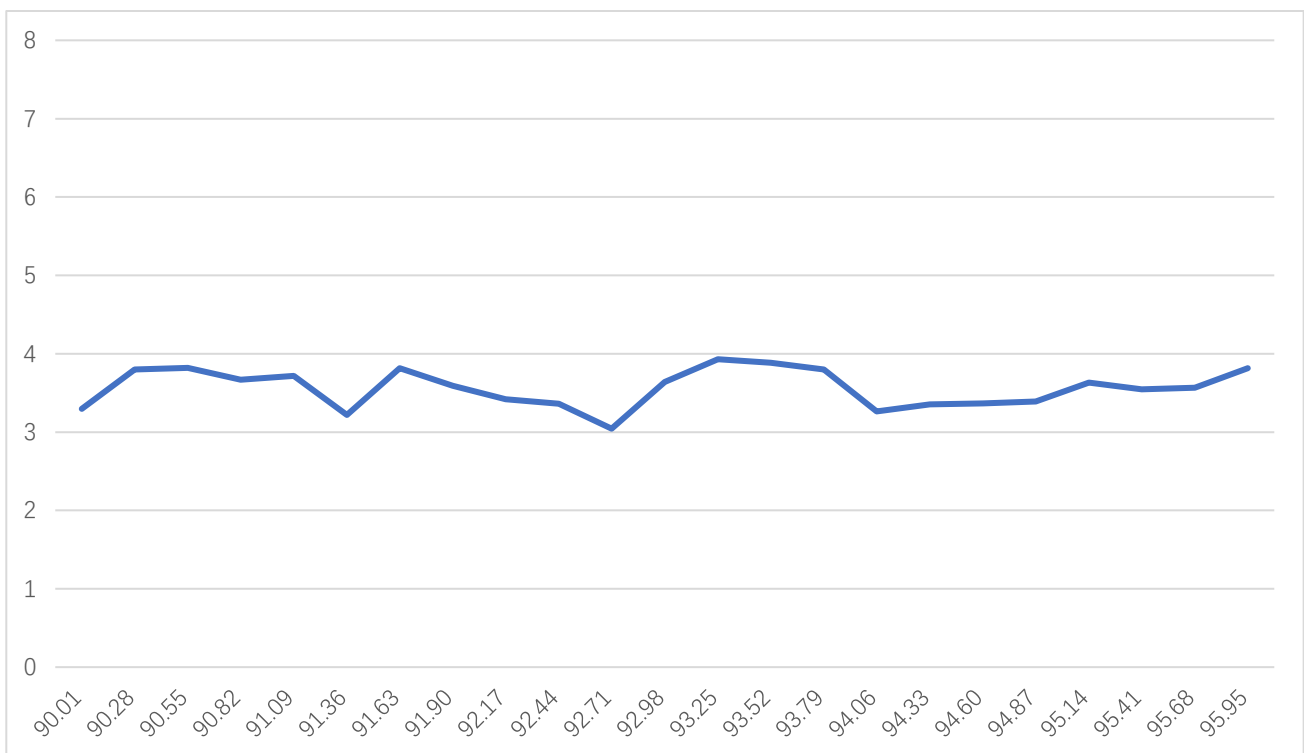
Parameter	Value
Drain Supply	+9V
RF Input Power	+10 dBm
LO Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C



## Test Data:



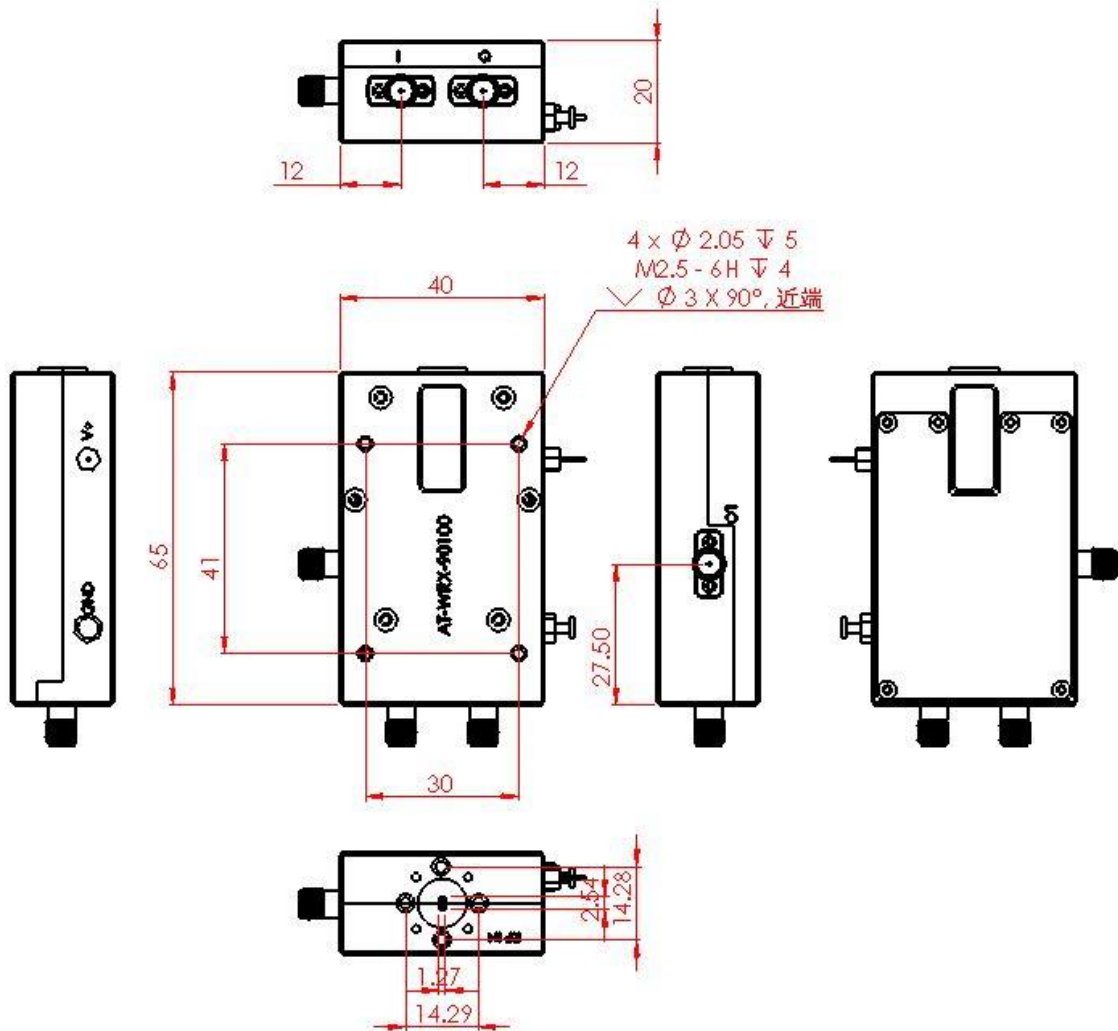
Rx I/Q Gain vs Frequency, IF=1GHz



RX NF Test vs Frequency



## Dimension (unit mm)



## 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.

