

2020-11-27

V Band Receiver, 57-66GHz



Product Overview

AT-VRX-5766 is a V Band Receiver, with gain=12dB, 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

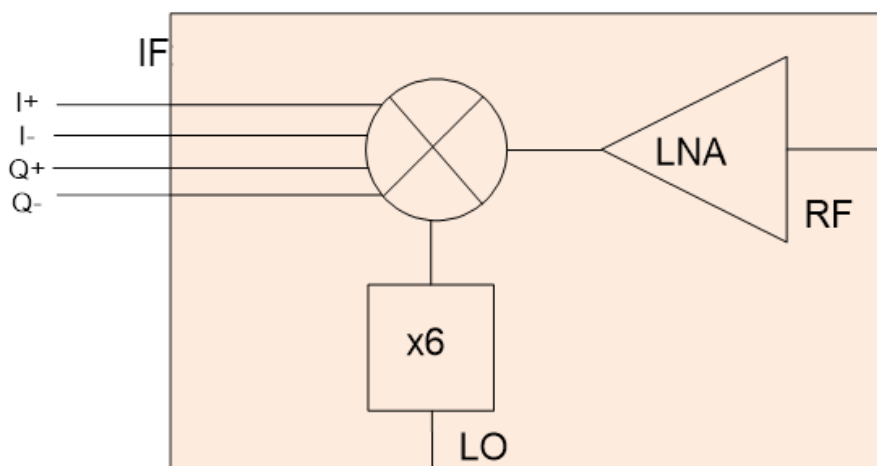
Feature

- ✓ Frequency: 57-66GHz
- ✓ Gain: 12dB 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)		12 dB	
RF Return Loss		-7dB	
LO Return Loss		-10dB	
Drain Power Supply		+5/300mA	+8V
RF Port Connector		WR-15	
IF/LO Port Connector		SMA Female	
Weight		310g	
Dimension		50x60x20mm	

Test Condition

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

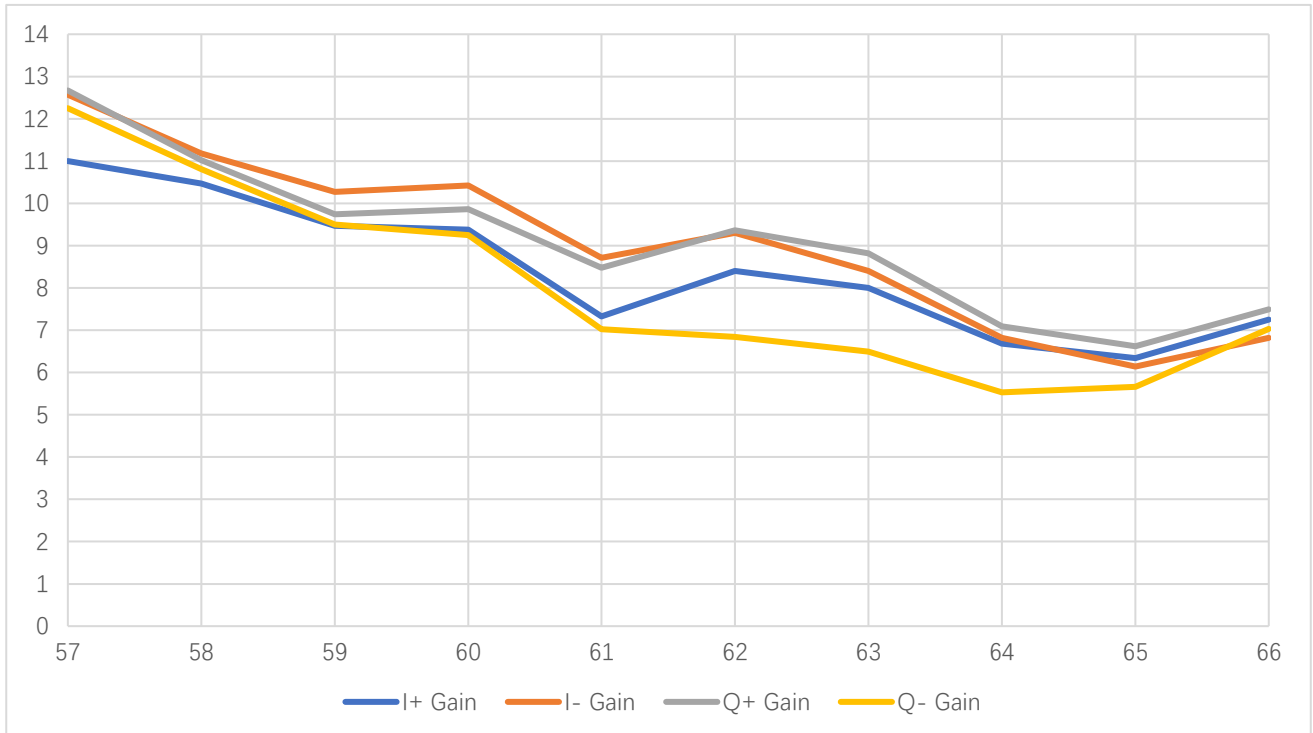
Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+7dBm
LO Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

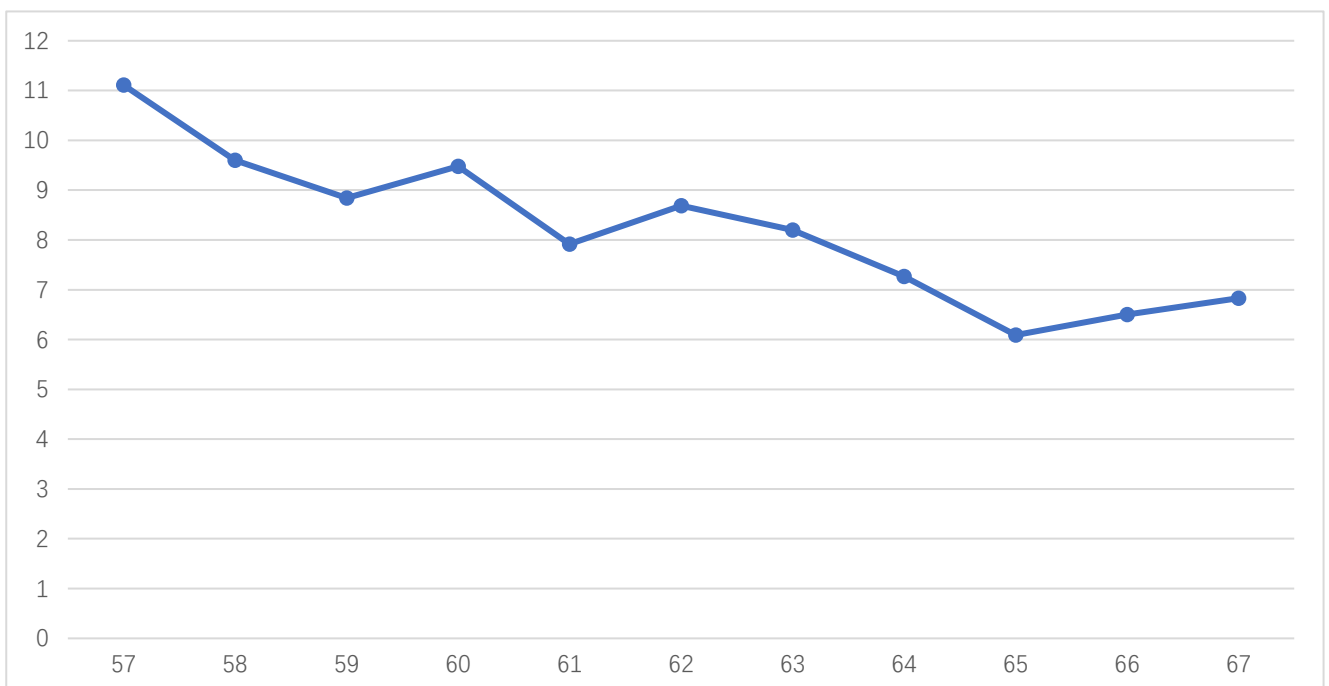


Test Data:

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



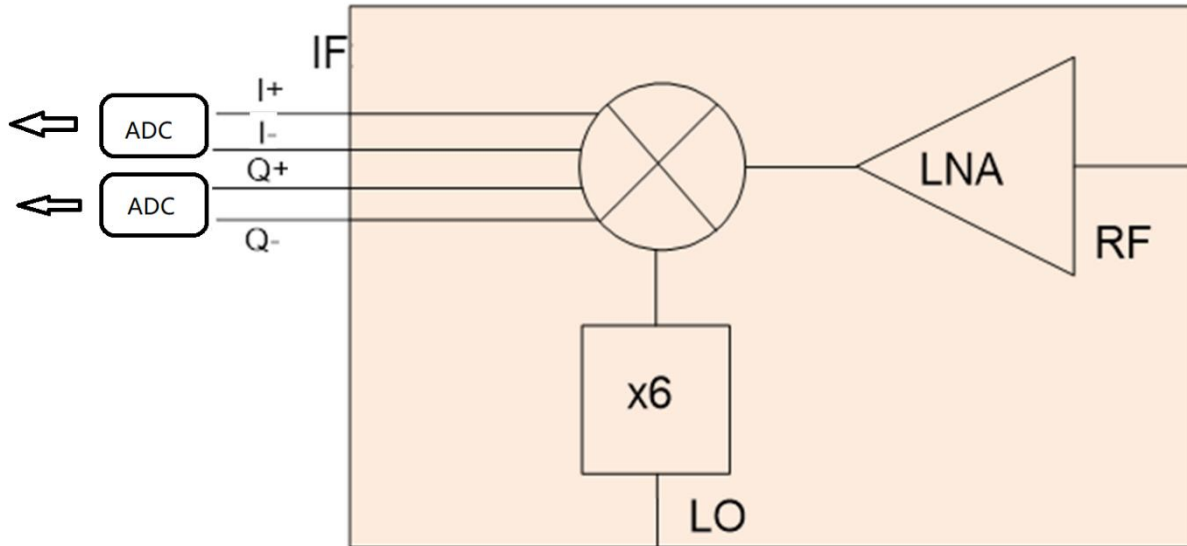
Conversion Loss vs Frequency



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

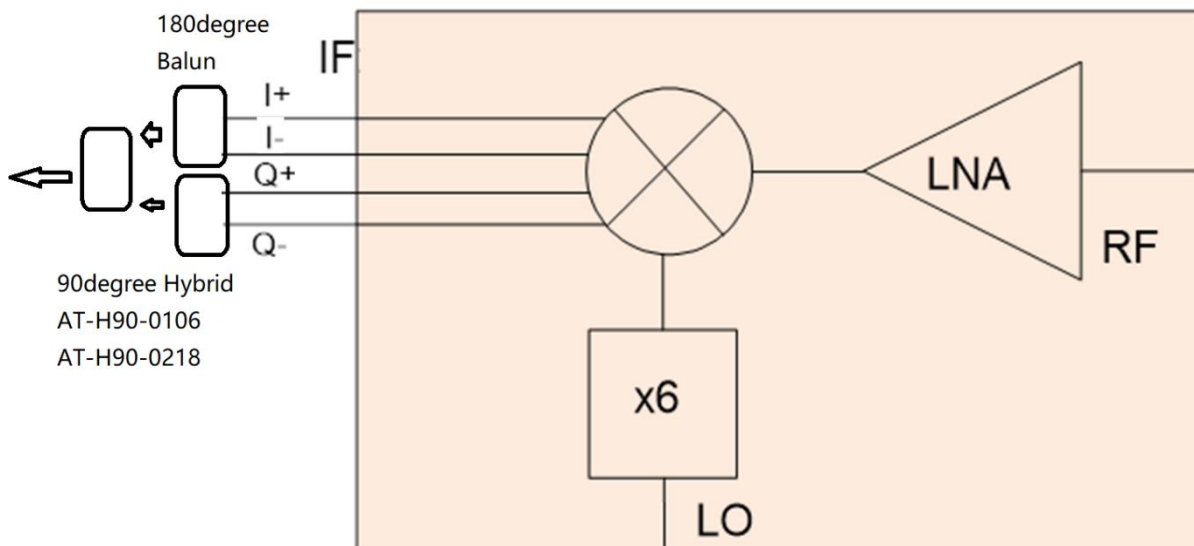


Applicaiton1:



Zero IF Direct Conversion

Applicaiton2:



Imaging Rejection Single IF Application

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



