

E Band Receiver, 71-86GHz



Product Overview

AT-ERX-7186 is a E Band Receiver, with gain=3dB, NF=5 dB typical.

The Rx is integrated with High Performance GaAs MMIC chips. RF frequency range is 71-86GHz, LO range is 9.5-11.83GHz 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-12.

More information, please visit www.atmicrowave.com

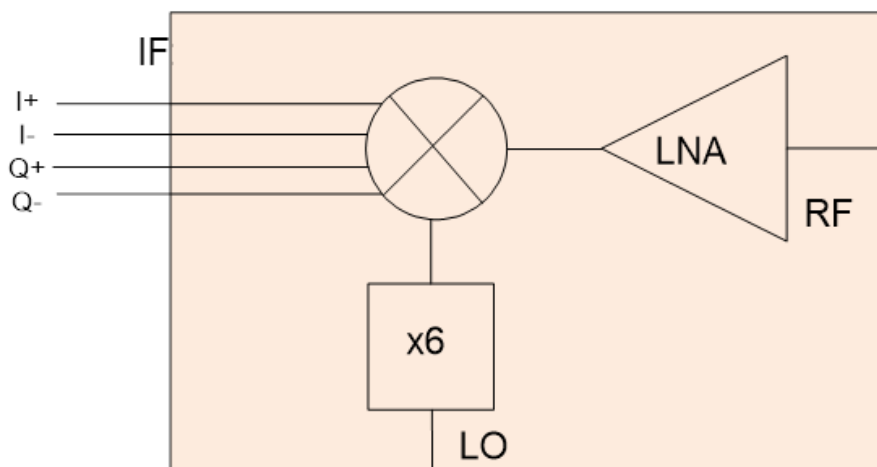
Feature

- ✓ Frequency: 71-86GHz
- ✓ Gain: 10dB typical
- ✓ IF Range: DC-10GHz
- ✓ NF=4dB Typical
- ✓ Single Power Supply

Application

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

Diagram Block





AT-ERX-7186

Compact E Band Receiver, 71-86GHz

Key Features

Parameter	Min	Typical	Max
RF Frequency		71-86GHz	
IF Frequency (Note1)		DC-10GHz	
LO Frequency	11.8GHz		14.4GHz
LO Power		+10dBm	
NF		4 dB	6dB
OIP3		+20dBm	
Conversion Gain		3 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-12
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

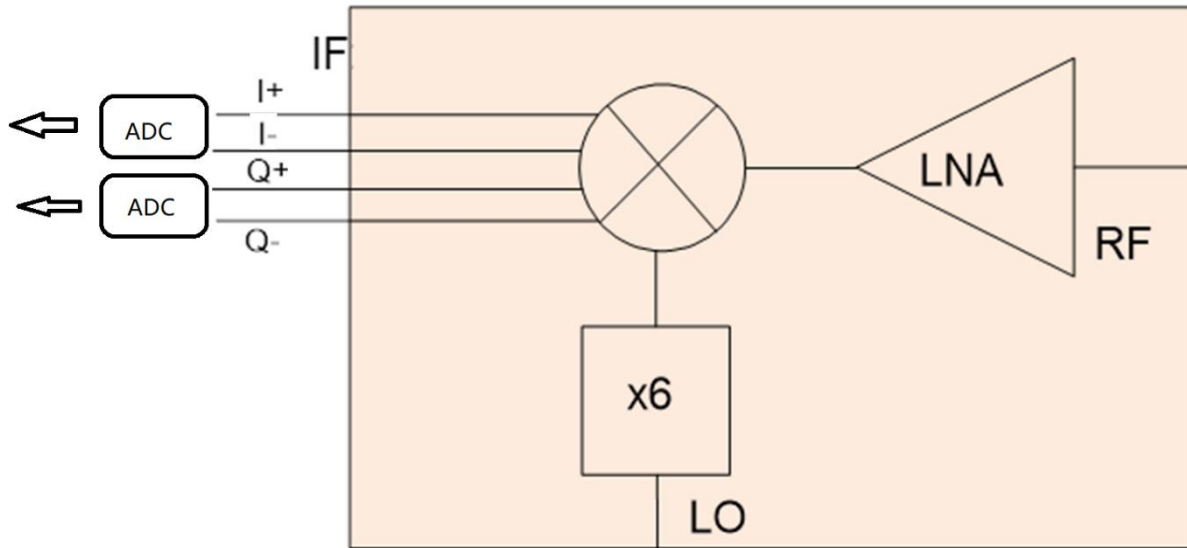
Parameter	Value
RF Power	+7dBm
LO Port	+15dBm
Power Supply	+7V
Operating Temperature	0 to +50C
Storage Temperature	-55 to +125C

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.

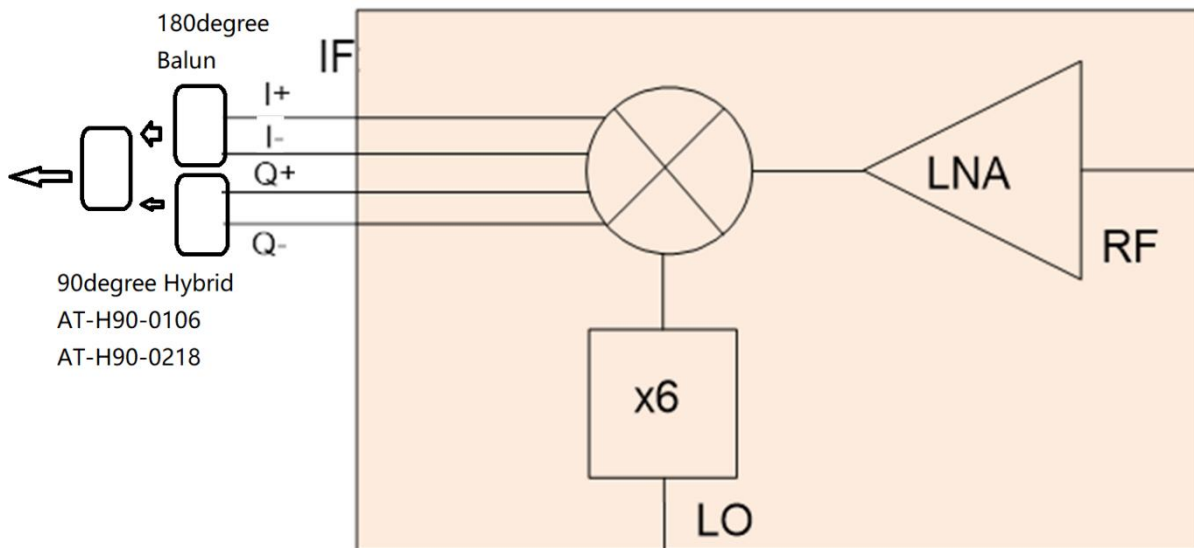


Applicaiton1:



Zero IF Direct Conversion

Applicaiton2:



Imaging Rejection Single IF Application

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



Dimension (mm)

