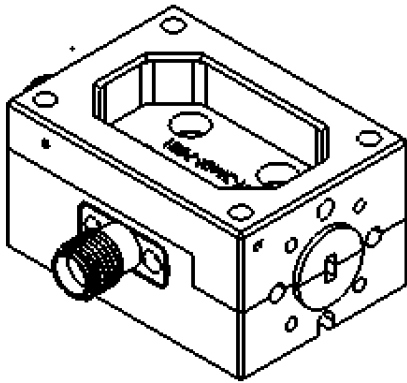


2021-12-11

76-81GHz Balance Mixer WR-12



Description:

AT-3MIX-7681 is an up and down balance mixer covering E band based on GaAs MMIC technology.

RF Port frequency range is from 76-81GHz with WR-12 waveguide. LO range is 25-27GHz as three times multiplier inside. AT-AM2-1844-18XC can be used as LO driver. IF port frequency from DC to 6GHz with SMA Female connector.

More information, please visit www.atmicrowave.com

Feature

- ✓ RF: 76-81GHz
- ✓ LO Range:25-27GHz
- ✓ Low Conversion Loss
- ✓ High RF/LO Isolation

Application

- ✓ Automotive Test
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency		76-81GHz	
LO Frequency		25-27GHz	
IF Range		DC-6GHz	
Conversion Loss		-10dB	-13
LO Driver	+15	+17dBm	+20
3LO-RF Isolation		-35dB	
Vdd		+5V	+8V
Idd		100mA	
Spec Temp		25C	





AT-3MIX-7681

76-81GHz E Band Balance Mixer

Mechanical Information

Item	Description
RF Port	WR-12
LO Port	2.92mm Female
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	30g
Size:	35x25x19mm

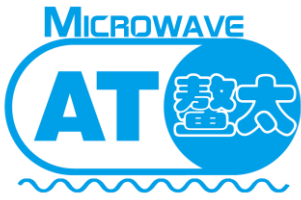
Absolute Maximum Ratings Table

Parameter	Value
IF Power	+7dBm
RF Power	+3dBm
LO Power	+21dBm
Vdd	+9V
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.

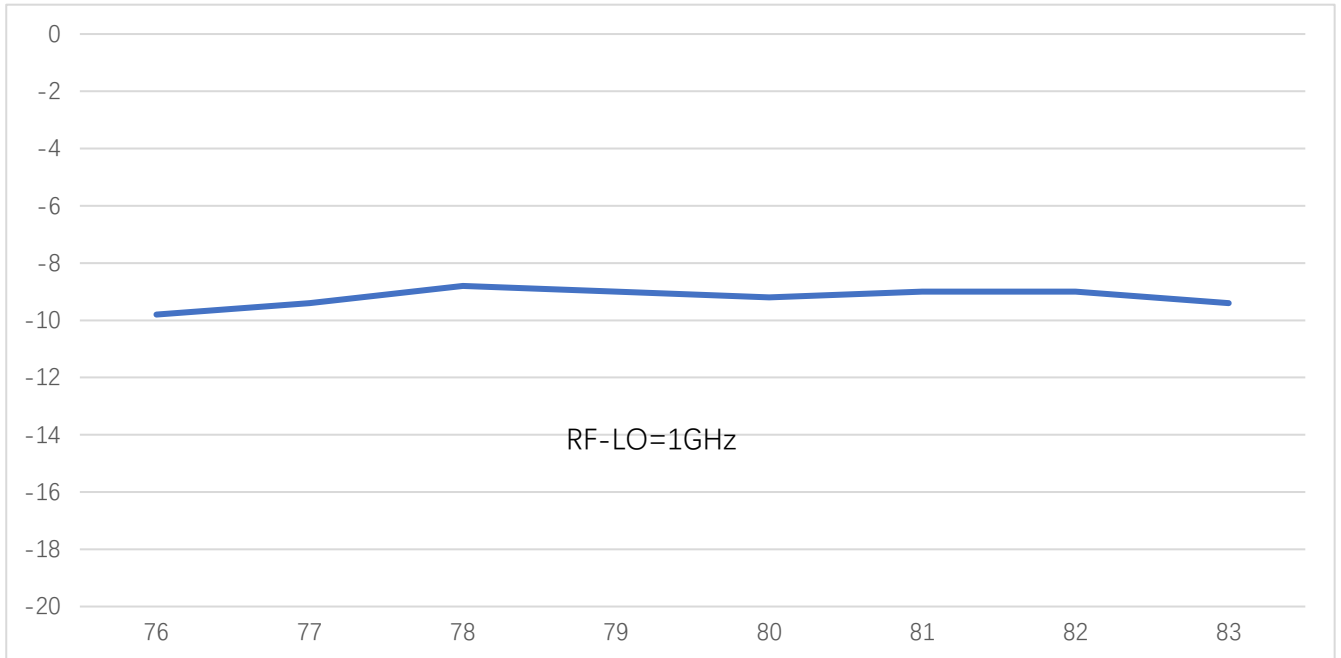




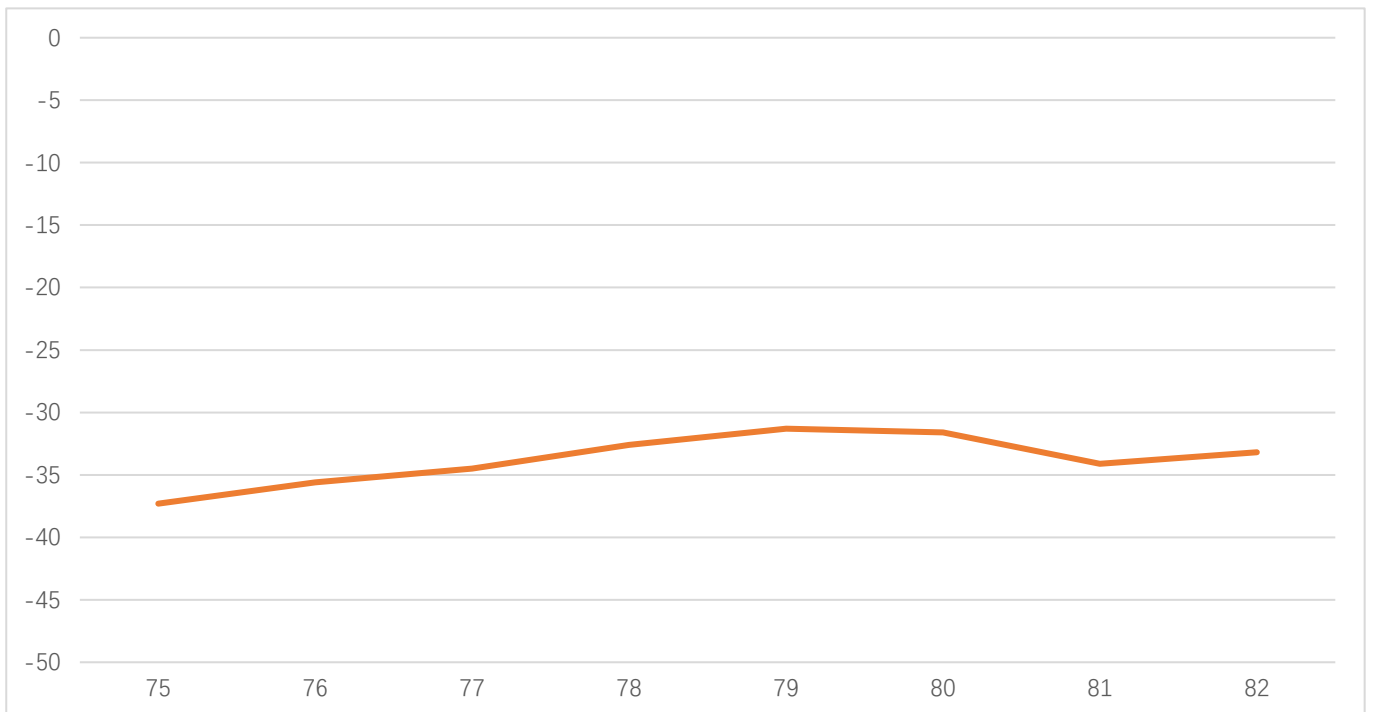
AT-3MIX-7681

76-81GHz E Band Balance Mixer

Test Data:

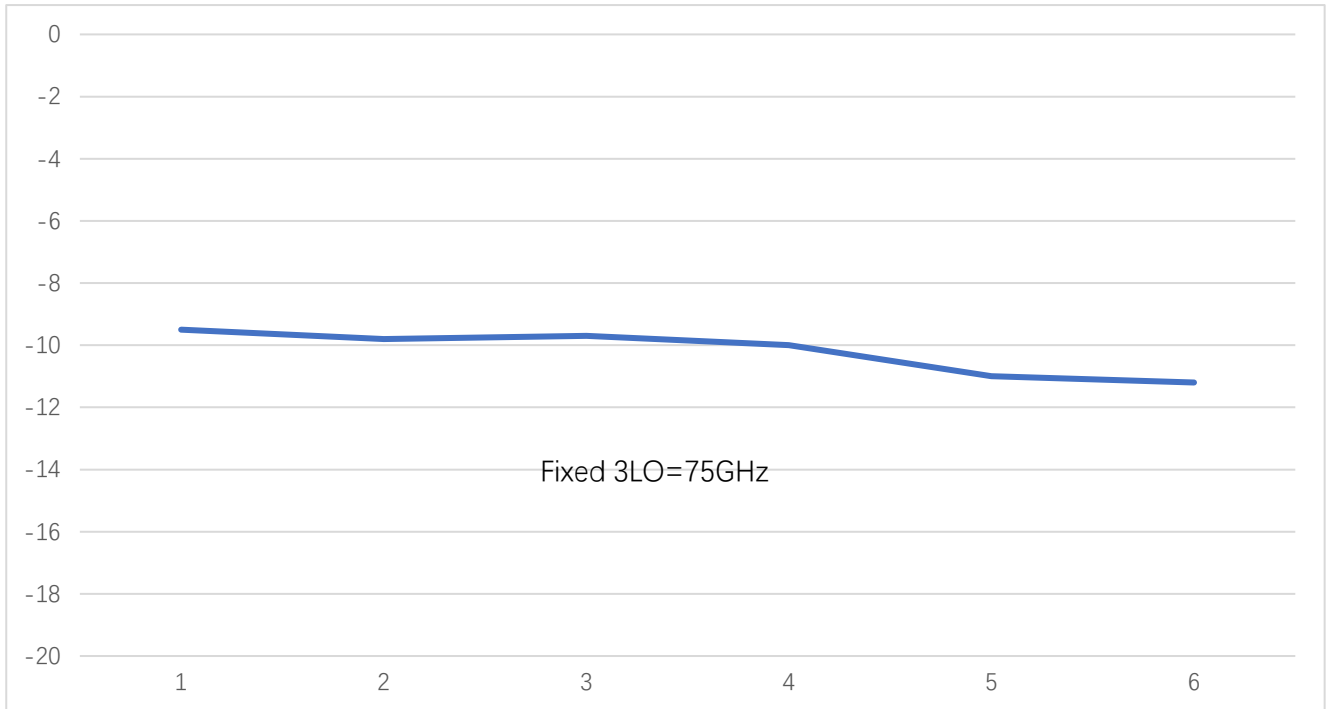


Conversion Loss vs Frequency



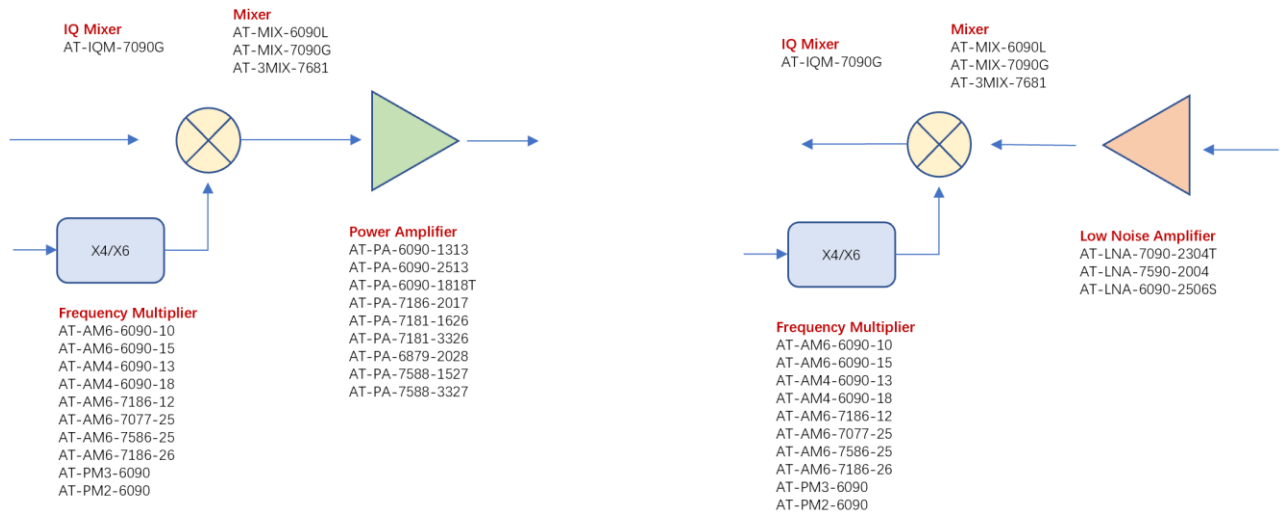
3LO to RF Isolation





IF Response, LO=25GHz, 3LO=75GHz

E Band 60-90GHz



Dimension

