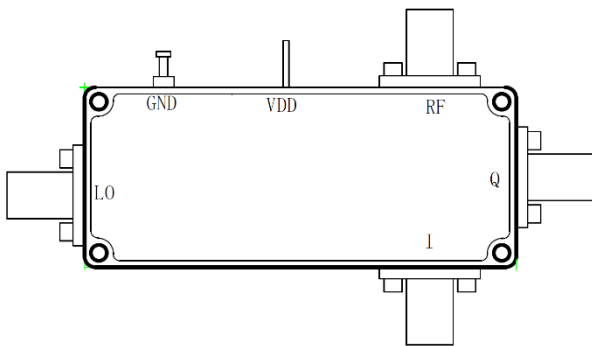


37-65GHz IQ Mixer, 1.85mm

2022-8-1

LO with X4 AMC (Amplified Multiplier Chain)

High Gain for Up-converter



(Reference only, no actual outline)

Description:

AT-IQTX-3765HV is an up IQ Mixer covering 37-65GHz based on GaAs MMIC technology.

RF Port frequency range is from 37-65GHz with 1.85mm connector. LO range is 9.25-16.75GHz as X4 multiplier inside on LO chain. IF port frequency from DC to 20GHz with SMA Female connector.

More information, please visit www.atmicrowave.com

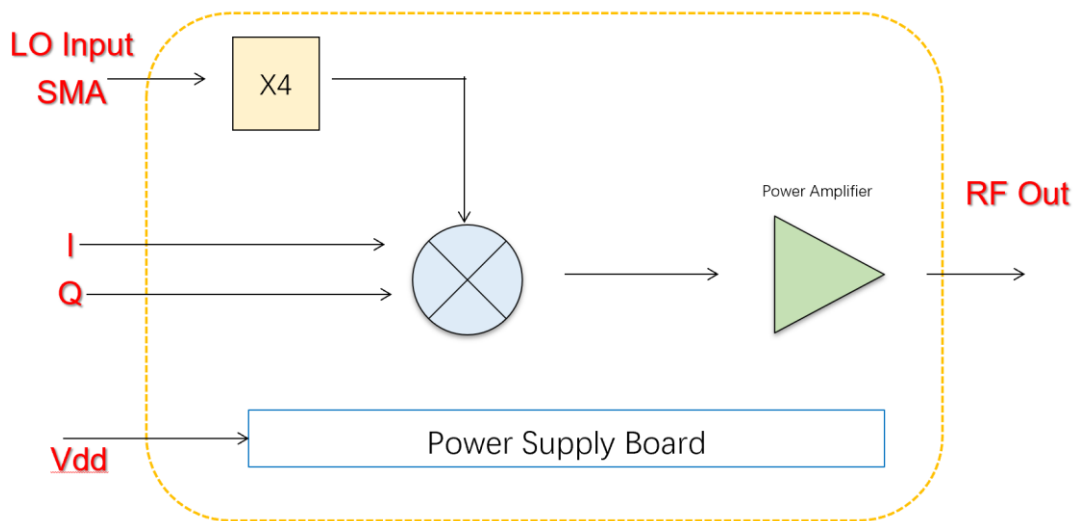
Feature

- ✓ RF Range: 37-65GHz
- ✓ LO Range: 9.25-16.75GHz
- ✓ Low Conversion Loss
- ✓ High RF/LO Isolation

Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Diagram Block





AT-IQTX-3765HV

37-65GHz IQ Mixer Integrated with x4

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency		37-65GHz	
IF Range		DC-20GHz	
IF-RF Gain (IF=100MHz)	8dB	40-60GHz: 10dB	
LO Input Frequency		9.25-16.75GHz	
LO Driver	+10	+13dBm	+15
LO Multiplier Factor		X4	
RF P1dB		+16dBm	
RF Output Psat		+18dBm	
Sideband Suppression		-20dBc	
4XLO-RF Leakage		0dBm	
Vdd		+5V	+8V
Idd		0.75A	
Spec Temp		25C	

Note:

All measurements performed with low side LO, IF =1GHz and external IF 90° hybrid, if not specified.

Mechanical Information

Item	Description
RF Port	1.85mm Female
LO Port	SMA Female
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	TBD
Size:	See outline





AT-IQTX-3765HV

37-65GHz IQ Mixer Integrated with x4

Absolute Maximum Ratings Table

Parameter	Value
IF Power	+15dBm
LO Power	+23dBm
Vdd	+9V
Operating Temperature	-20 to +70C
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.

Dimension

To be added.

