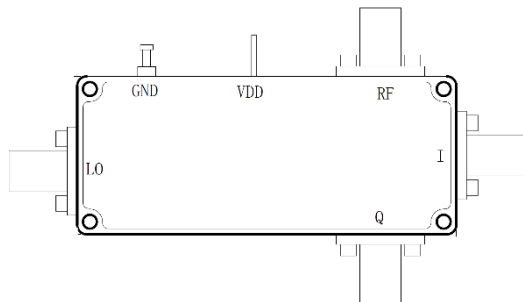


20-50GHz IQ Mixer, 2.4mm

2022-5-1

LO with X4 AMC (Amplified Multiplier Chain)

High gain for Up-converter application



Description:

AT-IQTX-2050HP is an up IQ mixer covering 20-50GHz with AMC(Amplified Multiplier Chain) inside.

RF Port frequency range is from 20-50GHz with 2.4mm connector. LO range is 5-12.5GHz 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

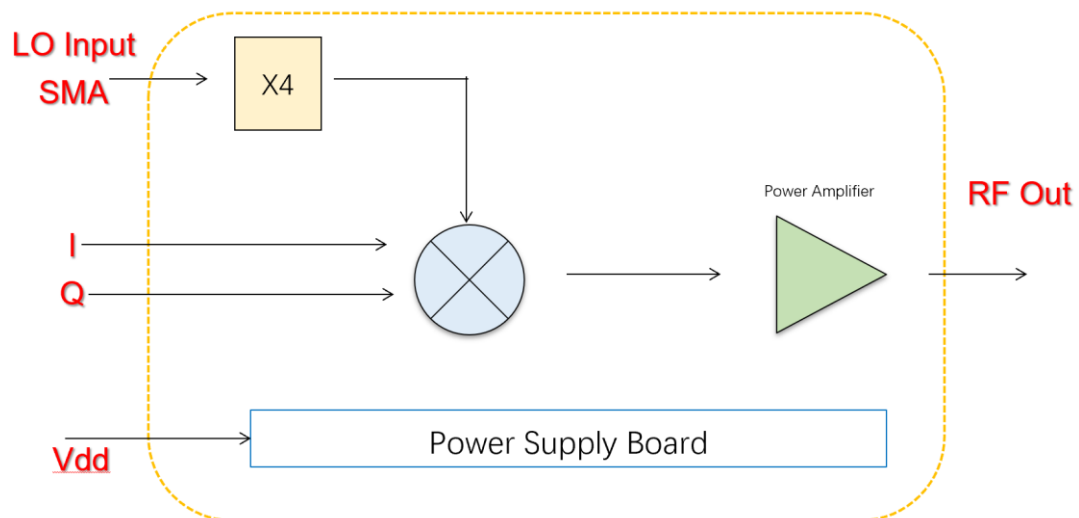
Feature

- ✓ RF Range: 20-50GHz
- ✓ LO Range: 5-12.5GHz
- ✓ High Gain: 10dB
- ✓ High RF/LO Isolation

Application

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

Diagram Block





AT-IQTX-2050HP

20-50GHz IQ Mixer Integrated with x4 AMC

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency		20-50GHz	
IF Range		DC-20GHz	
Conversion Gain	8dB	10dB	
LO Input Frequency		5-12.5GHz	
LO Driver	+12	+13dBm	+15
LO Multiplier Factor		X4	
RF P1dB		+20dBm	
RF Output Psat		+22dBm	
Sideband Suppression		-20dBc	
4LO-RF Leakage		0dBm	
Vdd		+5V	+8V
Idd		0.65A	
Spec Temp		25C	

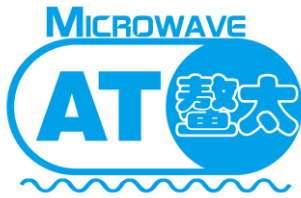
Note:

Unless otherwise noted all measurements performed with low side LO, IF =1GHz and external IF 90° hybrid.

Mechanical Information

Item	Description
RF Port	2.4mm
LO Port	SMA Female
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	120g
Size:	See outline





AT-IQTX-2050HP

20-50GHz IQ Mixer Integrated with x4 AMC

Absolute Maximum Ratings Table

Parameter	Value
IF Power	+15dBm
LO Power	+20dBm
Vdd	+9V
Operating Temperature	-40 to +85C
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.

Dimension

To be added.

