

AT-4IQM-2050HL

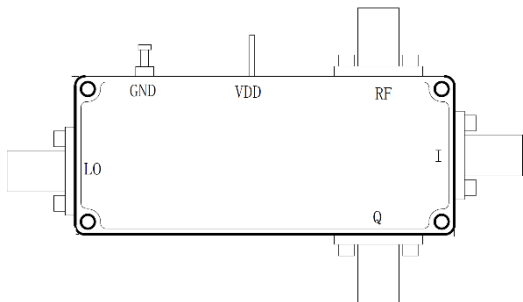
20-50GHz IQ Mixer Integrated with x4 AMC

20-50GHz IQ Mixer, 2.4mm

2022-4-20

LO with X4 AMC (Amplified Multiplier Chain)

Super High Linear for Up-converter



Description:

AT-4IQM-2050HL 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

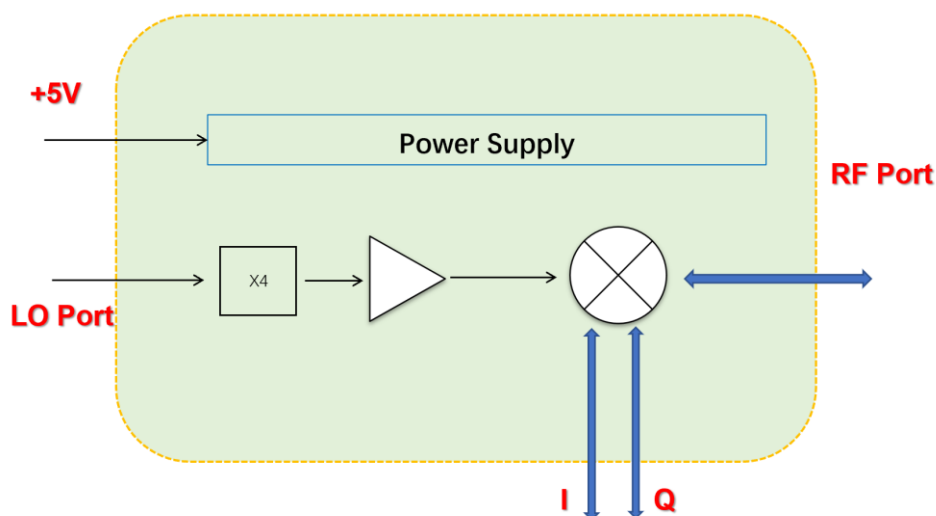
Feature

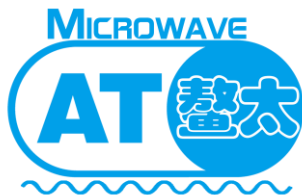
- ✓ RF Range: 20-50GHz
- ✓ LO Range: 5-12.5GHz
- ✓ Low Conversion Loss
- ✓ High RF/LO Isolation

Application

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

Diagram Block





AT-4IQM-2050HL

20-50GHz IQ Mixer Integrated with x4 AMC

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency		20-50GHz	
IF Range		DC-20GHz	
Conversion Loss		-10dB	-15dB
LO Input Frequency		5-12.5GHz	
LO Driver	+12	+13dBm	+15
LO Multiplier Factor		X4	
Vdd		+5V	+8V
Idd		0.5A	
IF Input P1dB-Up-converter		+17dBm	
Sideband Suppression Up-converter		-20dBc	
4LO-RF Leakage		-20dBm	
Imaging Rejection Down-converter		25dBc	
Spec Temp		25C	

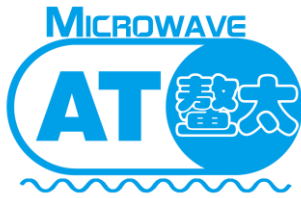
Note:

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 Female
LO Port	SMA Female
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	120g
Size:	See outline





AT-4IQM-2050HL

20-50GHz IQ Mixer Integrated with x4 AMC

Absolute Maximum Ratings Table

Parameter	Value
IF Power	+20dBm
RF Power	+20dBm
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

