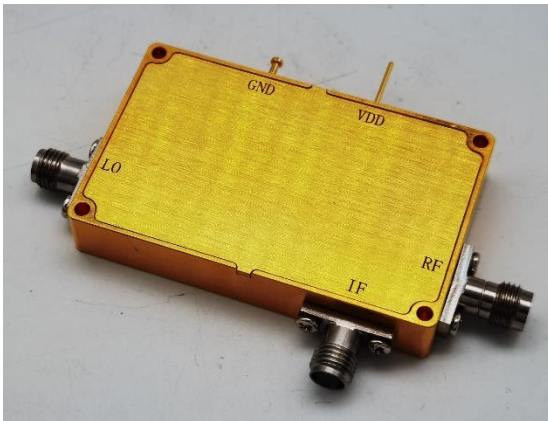


20-50GHz Balance Mixer, 2.4mm

2022-3-3

Integrated X4 Multiplier LO Port, High Linear



Description:

AT-4MIX-2050HV is an up and down balance mixer covering 20-50GHz based on GaAs MMIC technology.

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

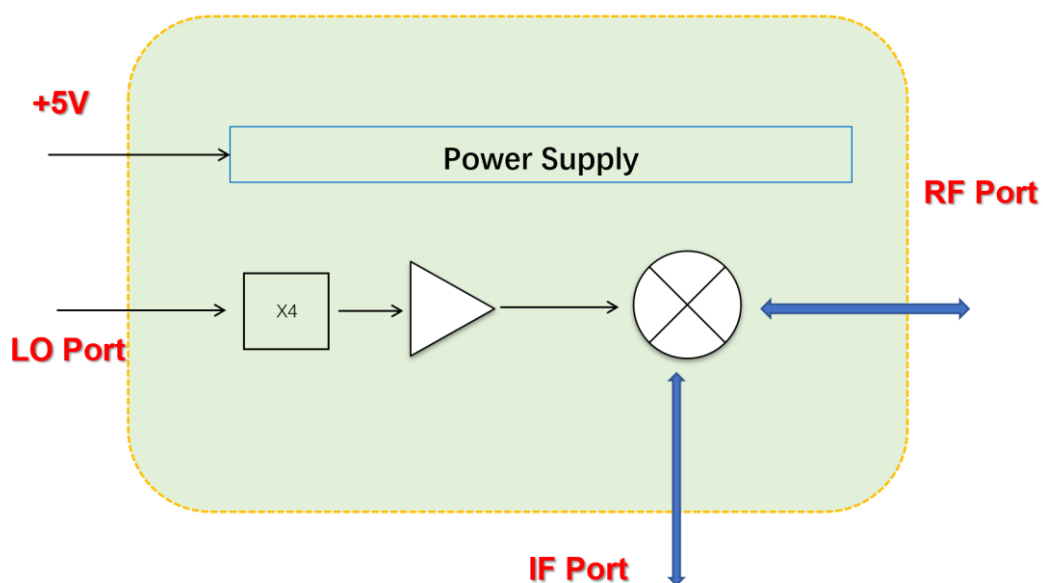
Feature

- ✓ 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-4MIX-2050HL

20-50GHz Balance Mixer Integrated with x4

Electronical Specifications: (IF=100MHz if not specified)

Parameter	Min	Typical	Max
RF Frequency		20-50GHz	
IF Range		DC-20GHz	
Conversion Loss		-10dB	-15dB
LO Input Frequency		5-12.5GHz	
LO Driver	+10	+13dBm	+15
LO Multiplier Factor		X4	
IF Input P1dB		+12dBm	
4XLO to RF Leakage		-15dBm	
Vdd		+5V	+8V
Idd		0.45A	
Spec Temp		25C	

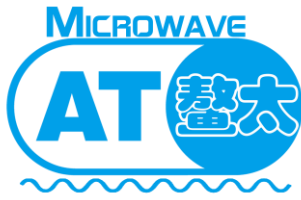
Mechanical Information

Item	Description
RF Port	2.4mm Female
LO Port	SMA Female
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	100g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
IF Power	+15dBm
RF Power	+20dBm
LO Power	+23dBm
Vdd	+9V
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C





AT-4MIX-2050HL

20-50GHz Balance Mixer Integrated with x4

Test Data (25C)

Please note that test curves will vary slightly from unit to unit.

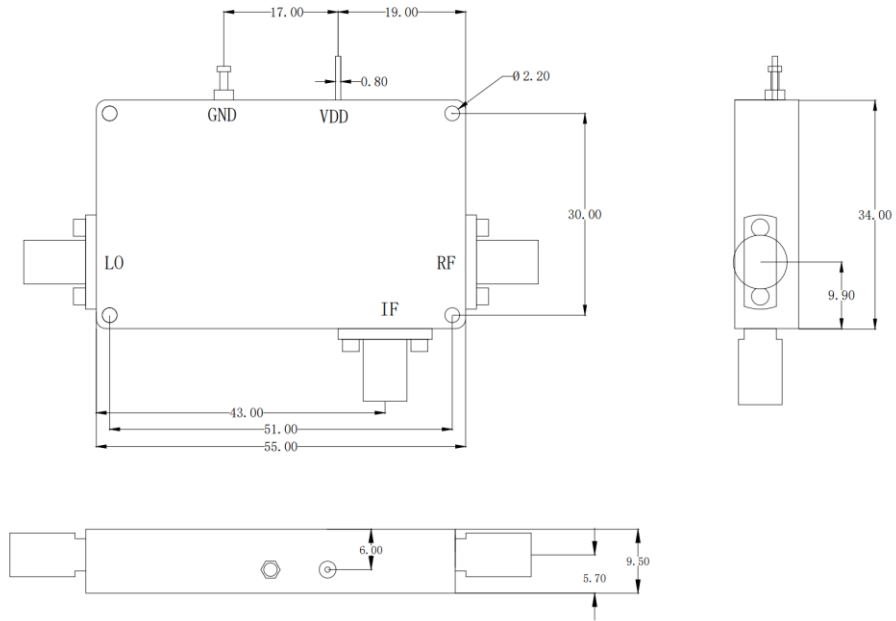
To be added

Notes:

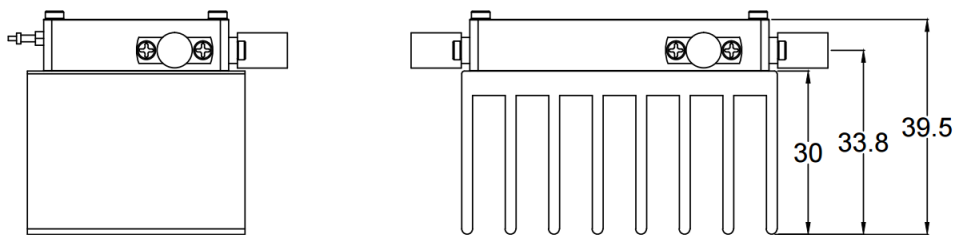
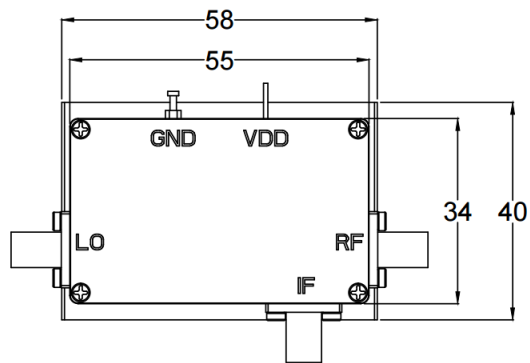
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Dimension (mm)



Outline without heatsink



Outline with small heatsink in default,
which can be removed according to customer's actual application.

