

# 200-220GHz Sub-Harmonics Mixer



### Description:

AT-SHM-200220 is 200-220GHz up and down sub-harmonics mixer. The RF frequency range is 200-220GHz with WR-04 waveguide. The RF Range can be used from 190-230GHz with a little higher insertion loss.

LO Port is 100-110GHz with WR-08, and AT-AM8-90140C is recommended as broadband LO for this mixer. AT-AM8-86106-10 can also be used as LO driver.

IF range is DC-20GHz with SMA Female connector.

For more information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Feature

- ✓ RF: 200-220GHz
- ✓ LO: 100-110GHz
- ✓ IF: DC-20GHz
- ✓ Low LO power requirement

### Application

- ✓ High Speed Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

## Electronical Specifications:

Test condition: IF=1GHz, 25C

Parameter	Min	Typical	Max
RF Frequency Range		200-220GHz	
Typical RF Input Power		-20dBm	+5dBm
LO Frequency Range		100-110GHz	
LO Driver	+5dBm	+7dBm	+10dBm
IF Range		DC-20GHz	
Conversion Loss		-12dB	-15dB
Bias		NO	
Spec Temp		25C	





# AT-SHM-200220

200-220GHz Band Sub-harmonics Mixer

## Mechanical Information

Item	Description
RF Port	WR-04
LO Port	WR-08
IF Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	30g
Size:	20x20x20mm

## Absolute Maximum Ratings Table

Parameter	Value
IF Power	+7dBm
RF/LO Power	+13dBm
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.



### Test Data



### Dimension (unit mm)

