75-110GHz Balance Mixer WR-10 Integrated with AMC Chain

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Description:

AT-6MIX-75110T is an up and down balance mixer integrated with x6 active frequency multiplier chain covering W band based on GaAs MMIC technology.

IF input is balanced and can range from DC to 12GHz with SMA connector. LO is SMA with X6 Frequency multiplier inside.
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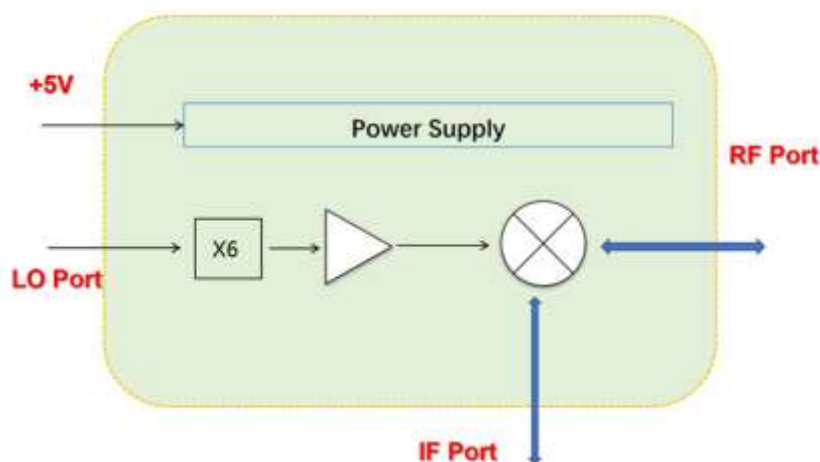For more information, please visit www.atmicrowave.com

Feature

- ✓ RF: 75-110GHz
- ✓ LO: 12.5-18.33, with x6
- ✓ IF: DC-12GHz
- ✓ Low Conversion Loss
- ✓ Low LO power requirement

Application

- ✓ W band Imaging
- ✓ Automotive Test
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Diagram Block

Electronical Specifications:

Parameter	Min	Typical	Max
RF Frequency		75-110GHz	
6XLO Frequency Range		75-110GHz	
LO Frequency Range		12.5-18.33GHz	
Multiplier Factor		X6	
LO Power	+0	+3dBm	+6
IF Range		DC-12GHz	
Conversion Loss (IF=100MHz)		-12dB	-17dB
6XLO to RF Leakage		-15dBm	
IF Port Input P1dB		+3dBm	
RF Port Input P1dB		+0dBm	
Power Supply		+5V	
Current		0.5A	
Spec Temp		25C	

Note, Tested by IF=100MHz

Mechanical Information

Item	Description
RF Port	WR-10 with UG-387/U-M anti-cocking Flange.
LO Port	SMA Female
IF Port	2.92 Female
Case Material	Copper
Finish	Gold Plated
Weight	230g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
IF Port	+7dBm
LO Port	+15dBm
RF Port	+15dBm
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 (25C)

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

Dimension (mm)

TO BE ADDED.