

### E Band (60-90GHz) Down-Converter NF Test and General Receiver, WR-12

2022-9-1



#### Product Overview

AT-BTDC-6090 is full E Band down-converter with X6 frequency multiplier inside. The down converter gain is 20dB with IF amplifiers.

The down-converter can be used for NF test and general receiver application. The RF Port is with standard WR-12. LO input port and IF Output port are SMA Female. AT Microwave provides full band down-convertors from U band to D Band.

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

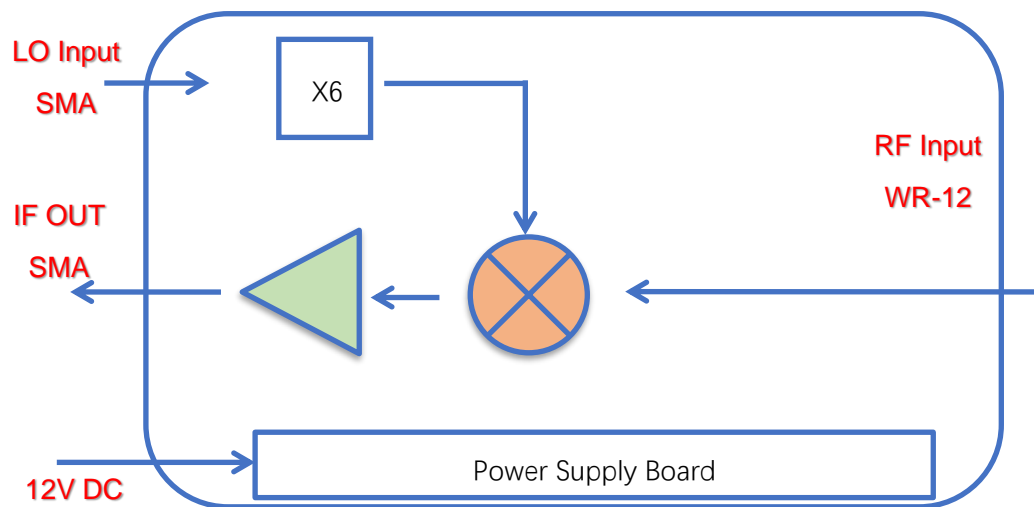
#### Advantages

- ✓ Frequency: 60-90GHz
- ✓ Gain:20dB
- ✓ IF: 50kHz-12GHz
- ✓ LO Input: 10-15GHz, +3dBm
- ✓ Bench-Top Labs Test

#### Application

- ✓ Noise Figure Test
- ✓ 5G Communication
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ RCS Test

#### Diagram Block:





# AT-BTDC-6090

Bench-Top E Band Down-Converter

## Key Features (Test condition IF=100MHz)

Parameter	Min	Typical	Max
RF Frequency	60GHz		90GHz
LO Frequency	10GHz		15GHz
LO Multiplier Factor		X6	
LO Driver	+0	+3dBm	+5dBm
IF Frequency		50kHz-12GHz	
RF-IF Gain (IF=100MHz)		20dB	
RF Input P1dB		0dBm	
Noise Figure		15dB	23dB
RF Input Return Loss		-8dB	
IF Output Return Loss		-10dB	
Power Supply (With AC/DC Adapter)	+90V	+220V	+240V
Spec Temp		25C	

## Mechanical Information:

Parameter	Value
RF Port	WR-12
LO/IF Port	SMA Female
DC Bias	+12V Supply, AC to DC Power Converter included
DC Bias Switch	ON-OFF switch with light indicator
Dimension	See outline

## Absolute Maximum Ratings Table

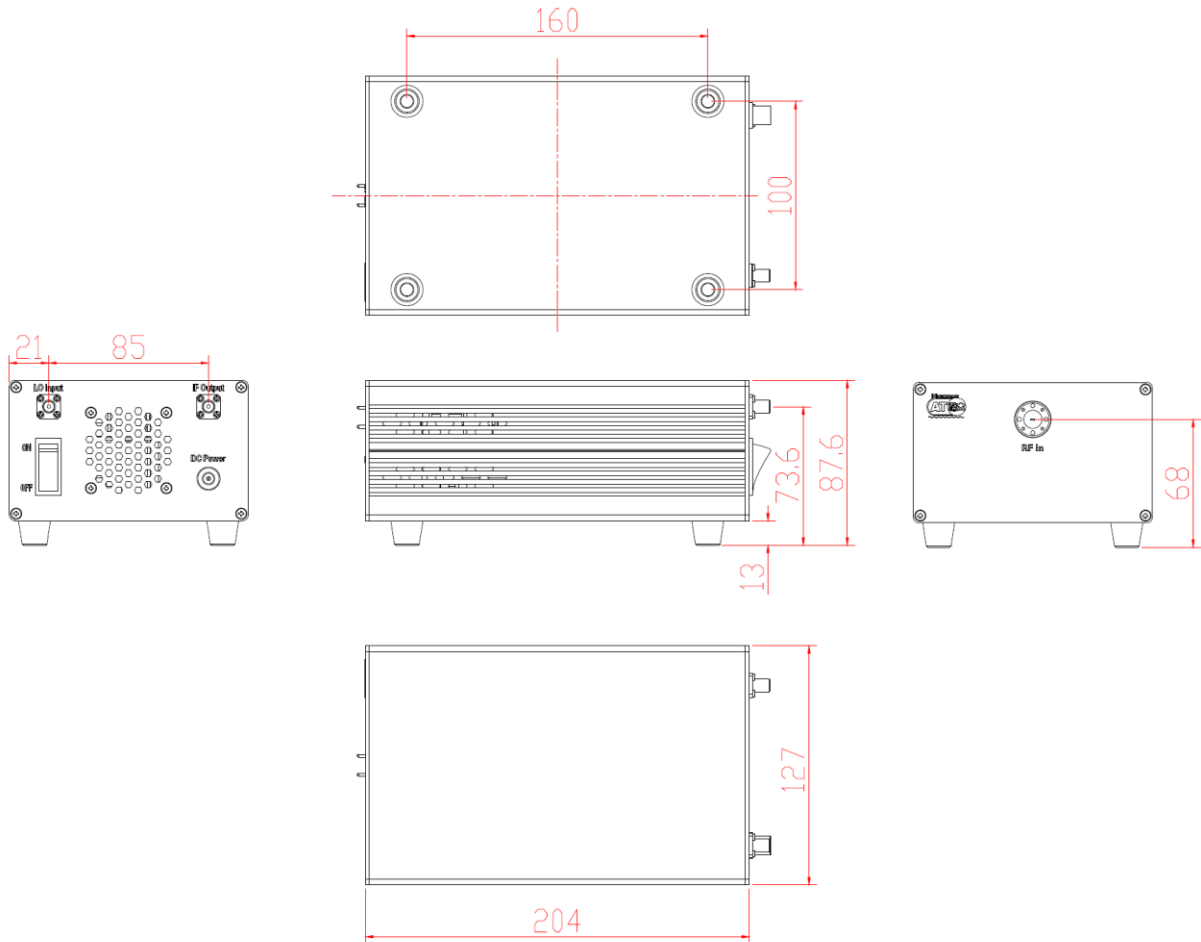
Parameter	Value
AC Supply	+260V
RF Input Power	+7dBm
LO Port Power	+15dBm
Operating Temperature	0 to 50 C
Storage Temperature	-65 to +150C



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### Dimension: (mm)



### 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.

