

W Band (75-110GHz) Down-Converter Low NF Receiver, WR-10

2022-7-11



Product Overview

AT-BTDC-75110R is low NF full W Band down-converter with X6 frequency multiplier insider. The down converter gain is 20dB with RF amplifiers.

The down-converter can be used for NF test and general receiver application. The RF Port is with standard WR-10. LO port is SMA Female, IF Output port are 2.92mm Female. AT Microwave provides full band down-converter from U band to D Band.

More information, please visit www.atmicrowave.com

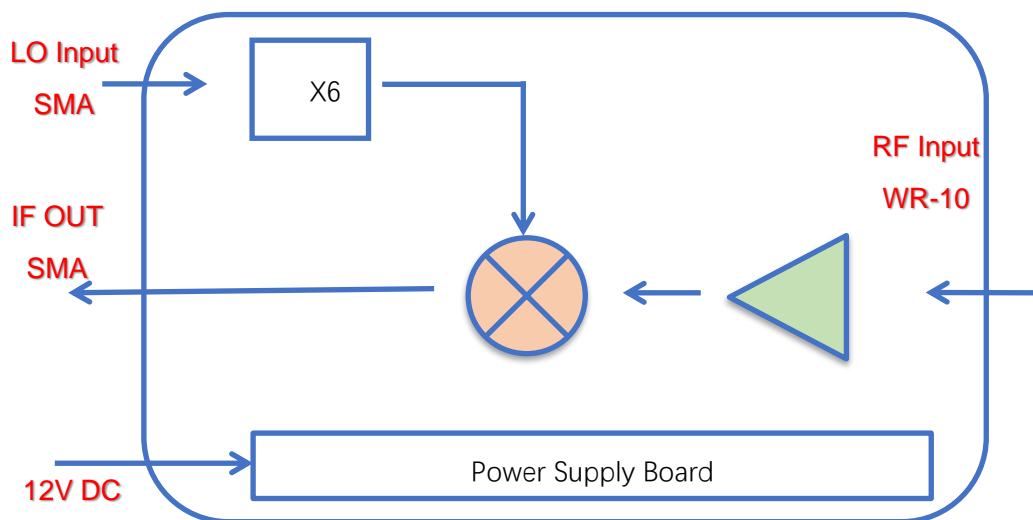
Advantages

- ✓ Frequency: 75-110GHz
- ✓ Gain: 20dB
- ✓ IF: DC-35GHz
- ✓ LO Input: 12.5-18.3GHz, +3dBm
- ✓ Bench-Top Labs Test

Application

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

Diagram Block:





AT-BTDC-75110R

Bench-Top W Band Down-Converter

Key Features (Test condition IF=100MHz)

| Parameter | Min | Typical | Max |
|-----------------------------------|---------|----------|----------|
| RF Frequency | 75GHz | | 110GHz |
| LO Frequency | 12.5GHz | | 18.33GHz |
| LO Multiplier Factor | | X6 | |
| LO Driver | +0 | +3dBm | +5dBm |
| IF Frequency | | DC-35GHz | |
| RF-IF Gain (IF=100MHz) | | 20dB | |
| RF Input P1dB | | -40dBm | |
| Noise Figure | | 5dB | 8dB |
| 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-10 |
| LO Port | SMA Female |
| IF Port | 2.92mm 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

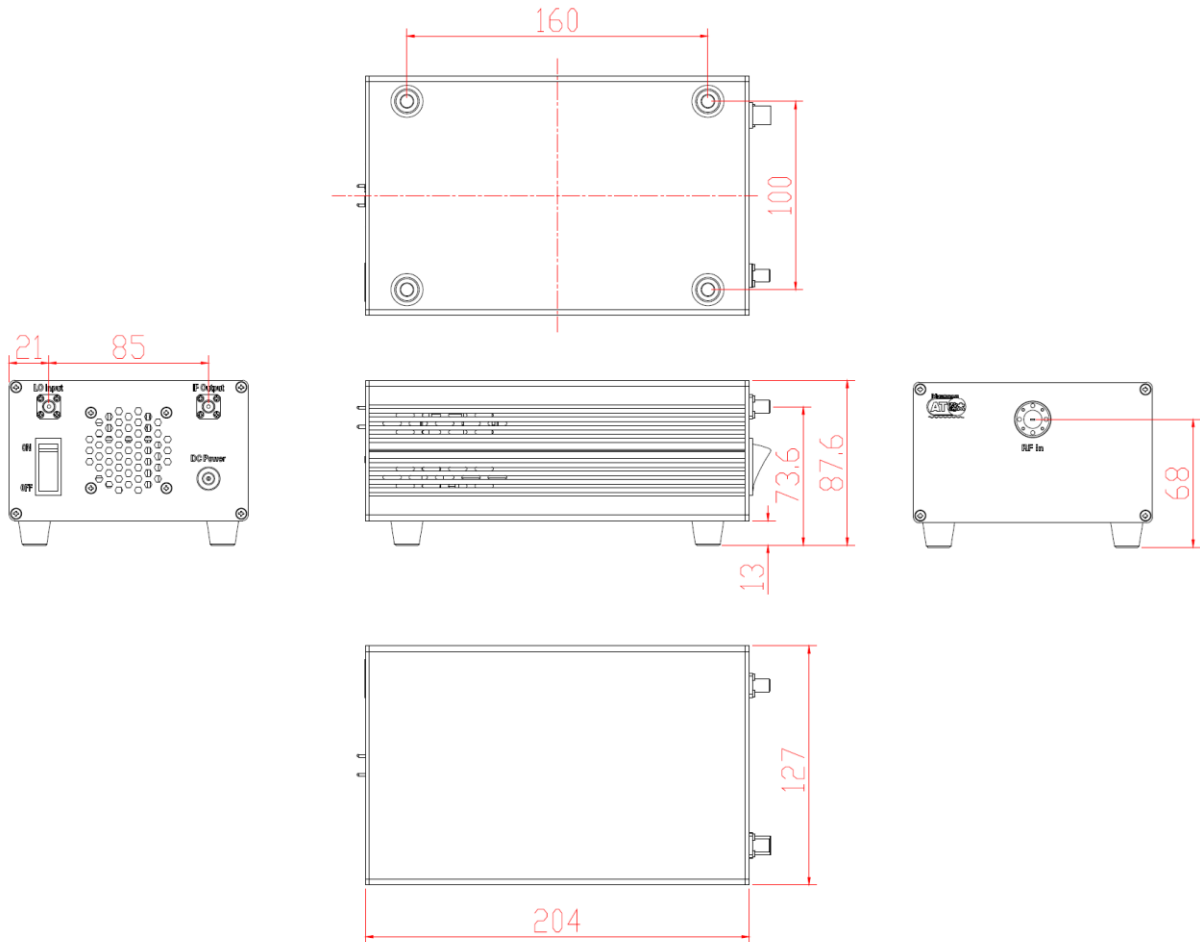
| Parameter | Value |
|-----------------------|--------------|
| AC Supply | +260V |
| RF Input Power | 0dBm |
| LO Port Power | +15dBm |
| Operating Temperature | 0 to 50 C |
| Storage Temperature | -65 to +150C |



Shanghai AT Microwave Limited
Tel:021-6229 1233 sales@atmicrowave.com
www.atmicrowave.com



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.

