

D Band (140-164GHz) IQ Down-Converter

Bench-top Test Equipment WR-06

2022-1-14



Product Overview

AT-BTIQDC-140164R is D Band down-converter with RF-IF gain 15dB. There is X12 Frequency multiplier inside.

The down-converter can be used for NF test and general receiver application. The RF Port is with standard WR-06. LO input port and IF Output port are SMA Female. AT Microwave provides full band down-converter from U band to D Band.

More information, please visit www.atmicrowave.com

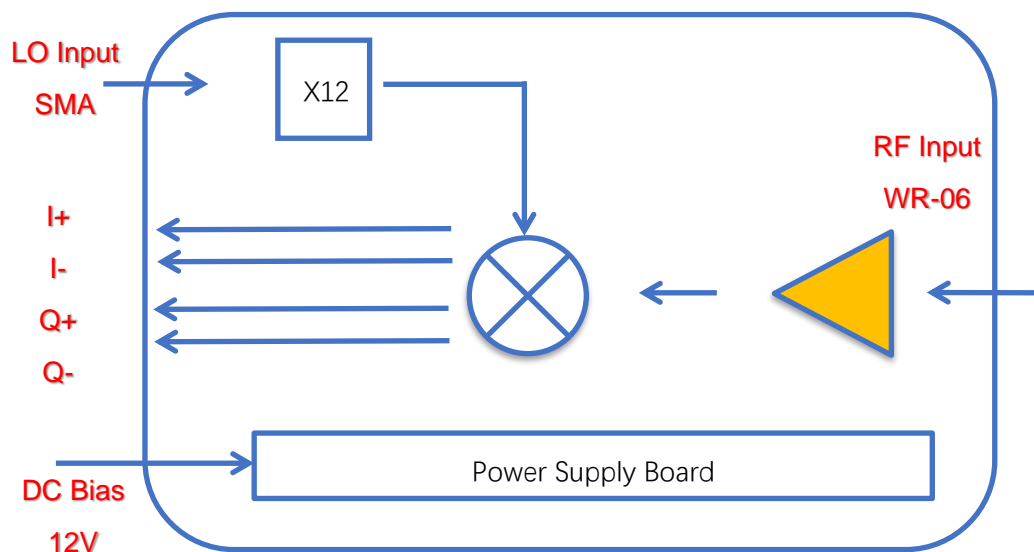
Advantages

- ✓ Frequency: 140-164GHz
- ✓ Gain: 15dB
- ✓ IF: DC-6GHz
- ✓ LO Input: 10.4-13.33GHz, +5dBm
- ✓ Bench-Top Labs Test

Application

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

Diagram Block:





AT-BTIQDC-140164R

Bench-Top D Band Down-Converter

Key Features

Test condition: RF Input Power=-30dBm, IF=100MHz, 25C

Parameter	Min	Typical	Max
RF Frequency	140GHz		164GHz
LO Frequency	10.4GHz		13.33GHz
LO Frequency Times		X12	
LO Driver	+10dBm	+13dBm	+15dBm
IF Frequency		DC-6GHz	
RF-IF Gain	10dB	15dB	
Noise Figure		8dB	10dB
RF Port Input P1dB		-30dBm	
RF Input Return Loss		-10dB	
IF Output Return Loss		-10dB	
Power Supply (With AC/DC Adapter)	+90V	+220V	+240V
Spec Temp		25C	

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.





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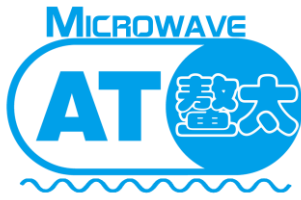
Mechanical Information:

Parameter	Value
RF Port	WR-06
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	+8dBm
LO Port Power	+15dBm
Operating Temperature	0 to 50 C
Storage Temperature	-65 to +150C





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Dimension: (mm)

