

# 9kHz-50GHz DC Block

## Super Low End Frequency



### Product Overview

AT-DCLF-24M24F is a broadband DC Block from 9kHz to 50GHz. The insertion loss is -1.5 dB with -15dB return loss performance

The RF1 and RF2 connector are 2.4mm Female and Male respectively, other connector is available according to request. Input and Output ports can be changed to use.

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

### Advantages

- ✓ Frequency: 9kHz-50GHz
- ✓ Insertion Loss: -1.5dB
- ✓ Max Voltage: 10V
- ✓ Power Handling: +30dBm

### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ Optical Application

### Key Features

Parameter	Min	Typical	Max
Frequency(note)	4kHz	9kHz-50GHz	
Insertion Loss		-1.5dB	-2.5dB
Return Loss		-15dB	
Capacitance Value		1uF	
Group Delay		100ps	
Max Voltage			+10V
Power Handling			+27dBm
Spec Temp		25C	

Note: Only test from 9kHz due to the test limitation at present.





# AT-DCLF-24M24F

9kHz-50GHz DC Block

## Mechanical Information

Item	Description
RF1 Port	2.4mm Female
RF2 Port	2.4mm Male
Case Material	Copper
Finish	Gold Plated
Weight	20g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Voltage	+10V
RF RF1 Power	+27 dBm
Operating Temperature	-45 to +85C
Storage Temperature	-55 to +125C

## Ordering

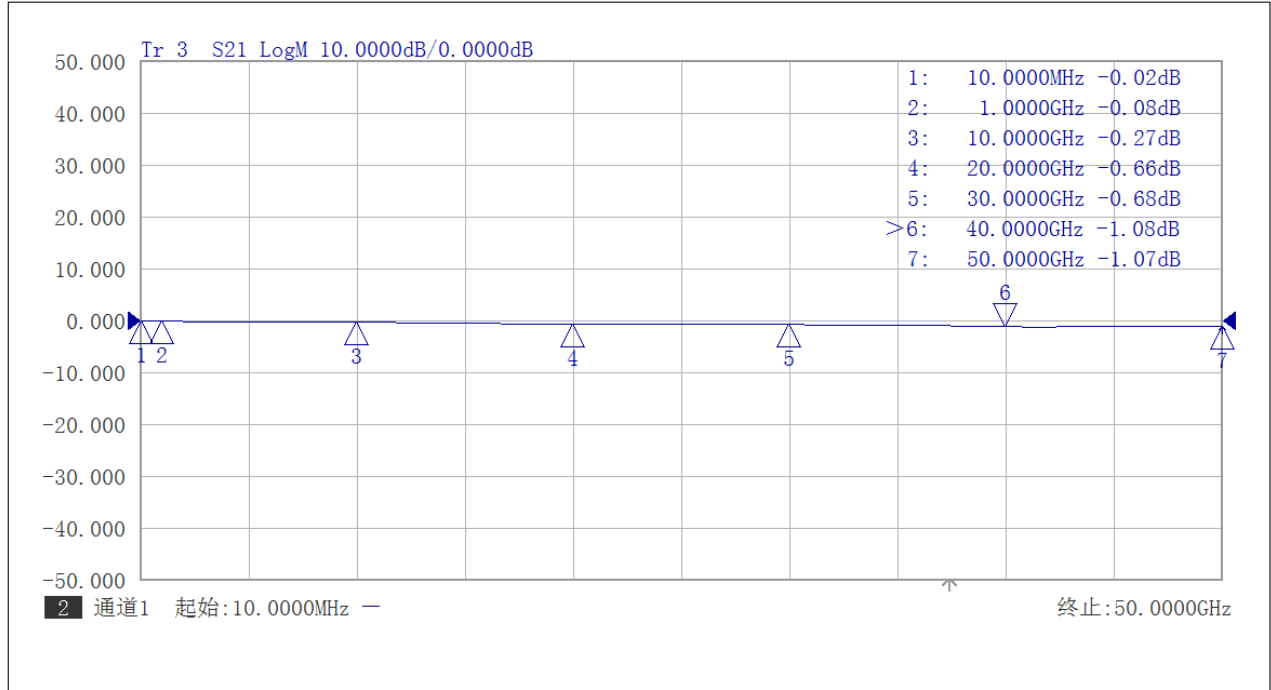
Part Number	Description
AT-DCLF-24M24F	In Default. RF1 2.4mm Female, RF2 2.4mm Male
AT-DCLF-24F24F	RF1 2.4mm Female, RF2 2.4mm Female
AT-DCLF-24M24M	RF1 2.4mm Male, RF2 2.4mm Male

## Notes:

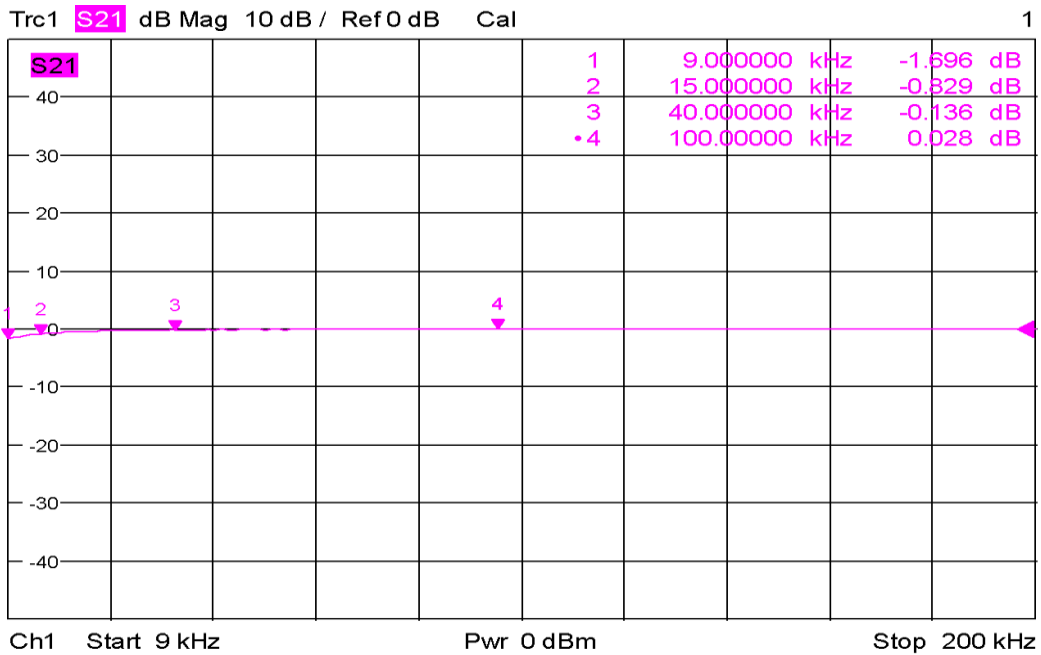
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data:



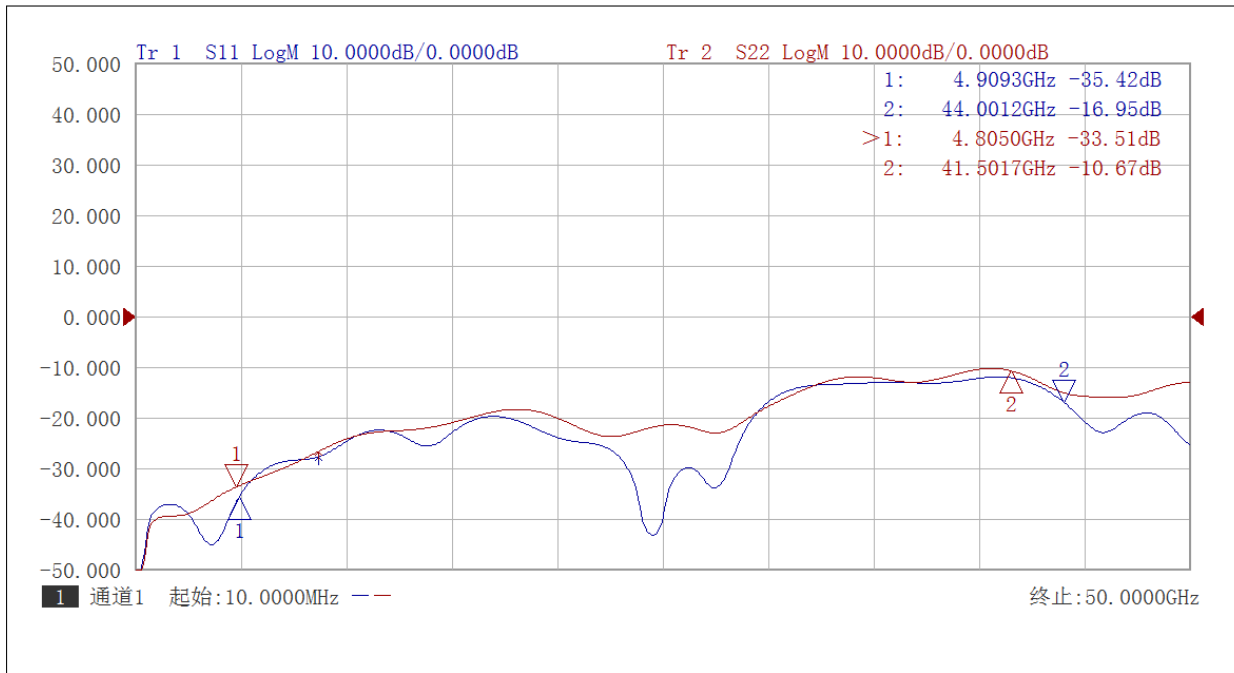
Insertion loss vs Frequency 10MHz-50GHz



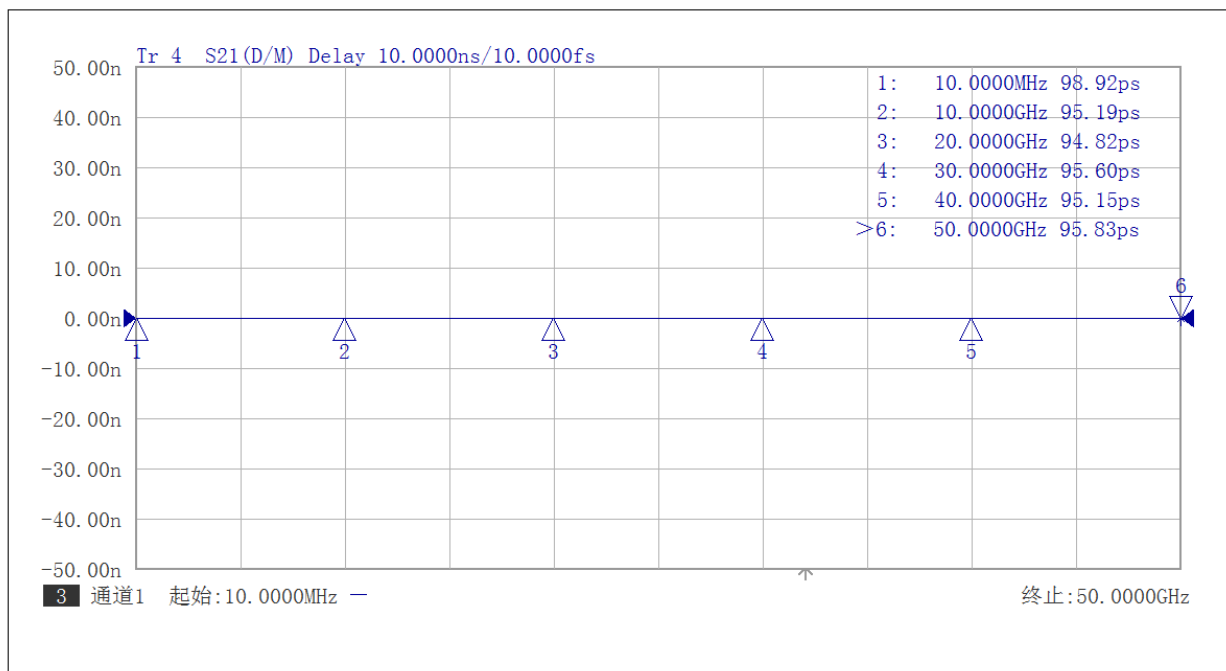
Date: 18.AUG.2021 11:05:45

Low End Frequency Insertion Loss





Input and Output Return Loss vs Frequency 10MHz-50GHz

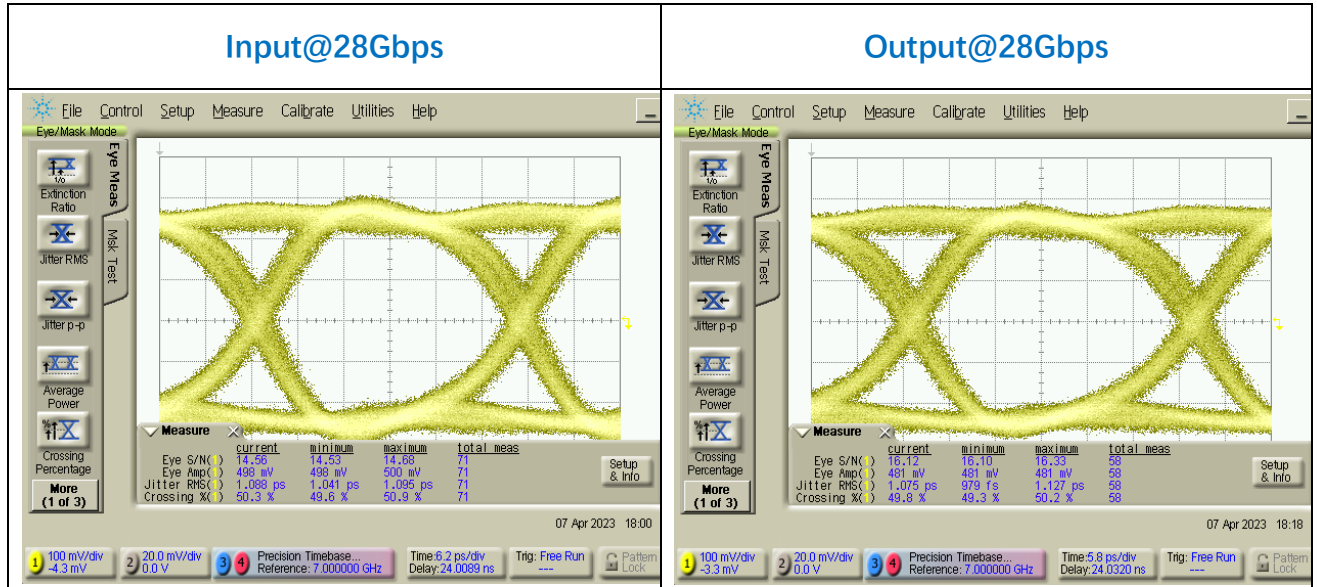


Group Delay vs Frequency

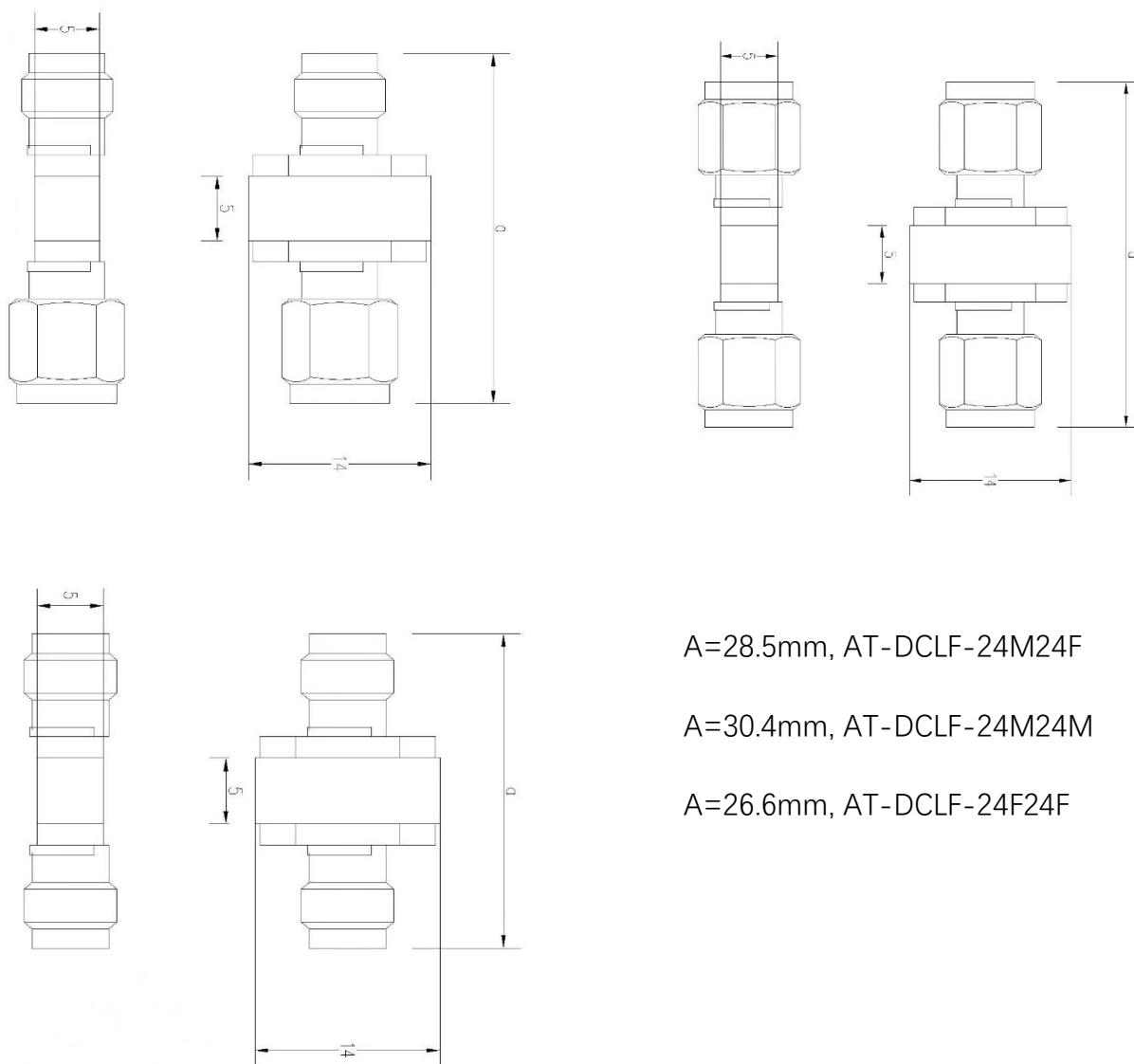


## Eye Diagram Test

Please note that eye diagram test is not a guarantee test before shipment



**Dimension:** (unit in mm)



A=28.5mm, AT-DCLF-24M24F

A=30.4mm, AT-DCLF-24M24M

A=26.6mm, AT-DCLF-24F24F

