

30kHz-50GHz Broadband Bias Tee, High Voltage, High Current, 25V/0.75A

2022-5-17



Product Overview

AT-BTL-0050HC is a broadband bias tee from 30kHz to 50GHz. The insertion loss is -2dB typical. The max Voltage is 25V and Max current is 750mA.

The bias tee can be used in optical communication, MMIC test and many other applications.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 30kHz-50GHz
- ✓ Insertion Loss: -2.5dB
- ✓ Max Voltage: 25V
- ✓ Power Handling: +33dBm

Application

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

Key Features

| Parameter | Min | Typical | Max |
|----------------|------|-------------|--------|
| Frequency | | 30kHz-50GHz | |
| Insertion Loss | | -2.5dB | -4dB |
| Return Loss | -8dB | -15dB | |
| Group Delay | | 100ps | |
| Max Voltage | | | +25V |
| Current | | | 750mA |
| Power Handling | | | +33dBm |
| Spec Temp | | 25C | |





AT-BTL-0050HC

30kHz-50GHz Bias Tee

Mechanical Information

| Item | Description |
|---------------|--------------|
| RF+DC Port | 2.4mm Female |
| RF Port | 2.4mm Male |
| DC Port | SMA Female |
| Case Material | Copper |
| Finish | Gold Plated |
| Weight | 38g |
| Size: | See outline |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Voltage | +25V |
| RF Power | +33 dBm |
| Operating Temperature | -40 to +70C |
| Storage Temperature | -65 to +150C |

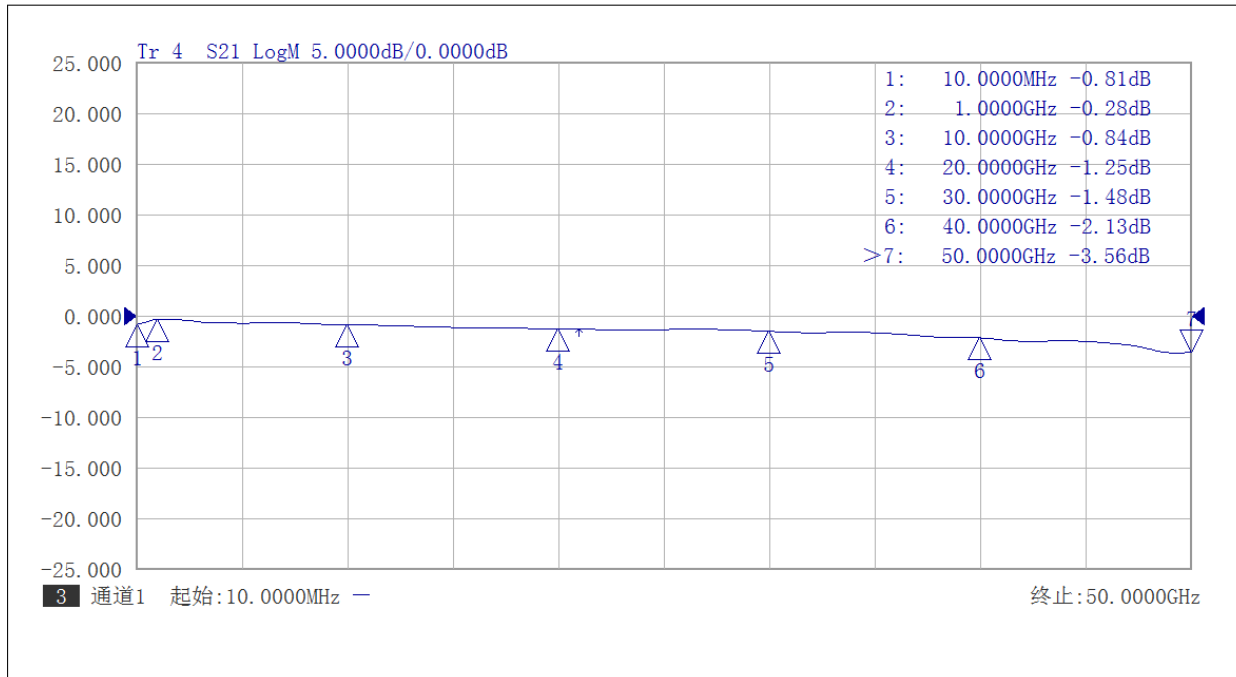
Notes:

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.

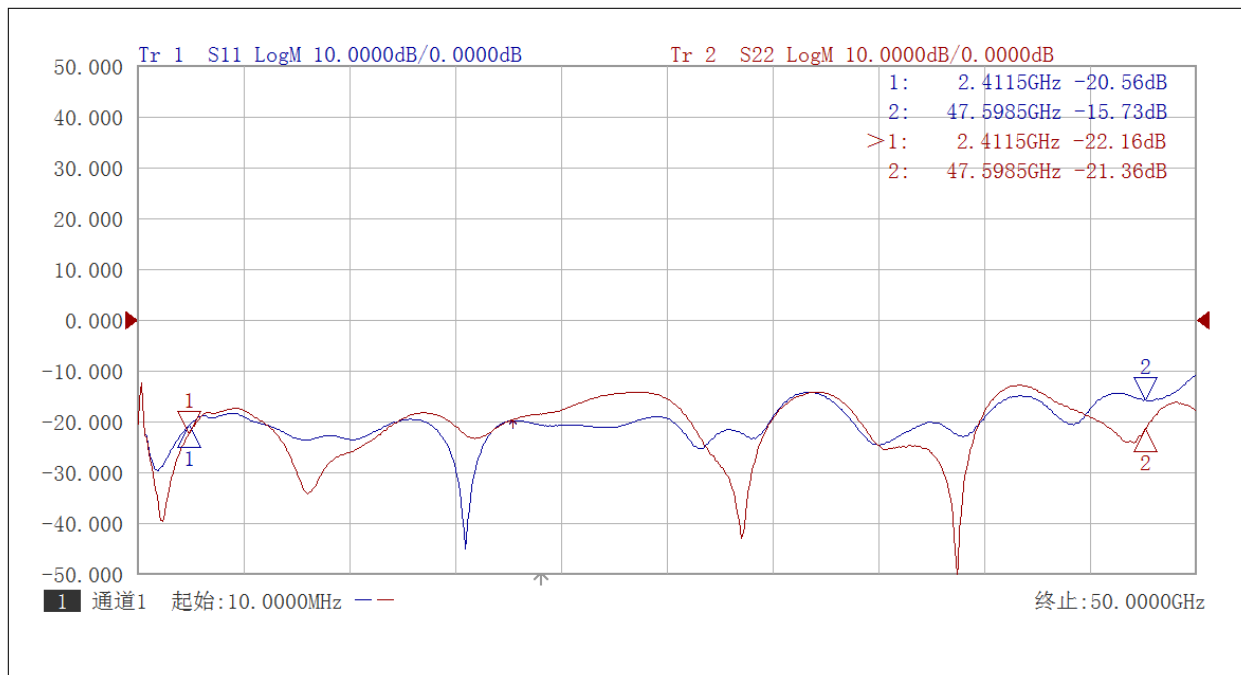


Test Data (25C)

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

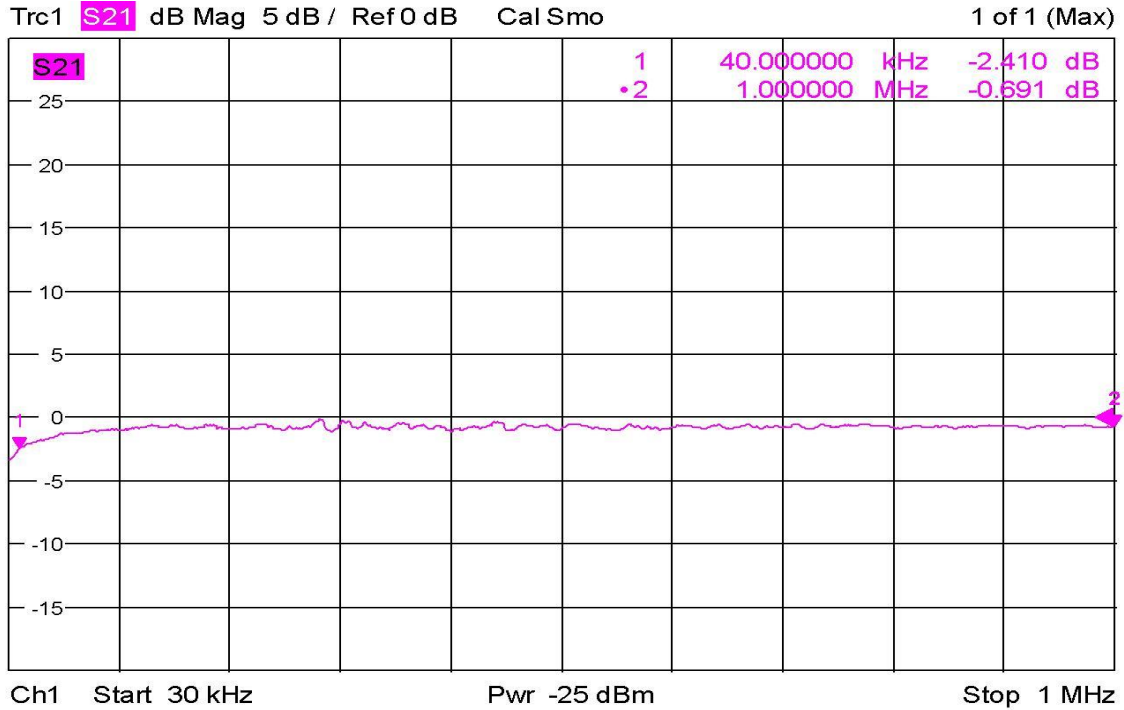


Insertion Loss vs Frequency



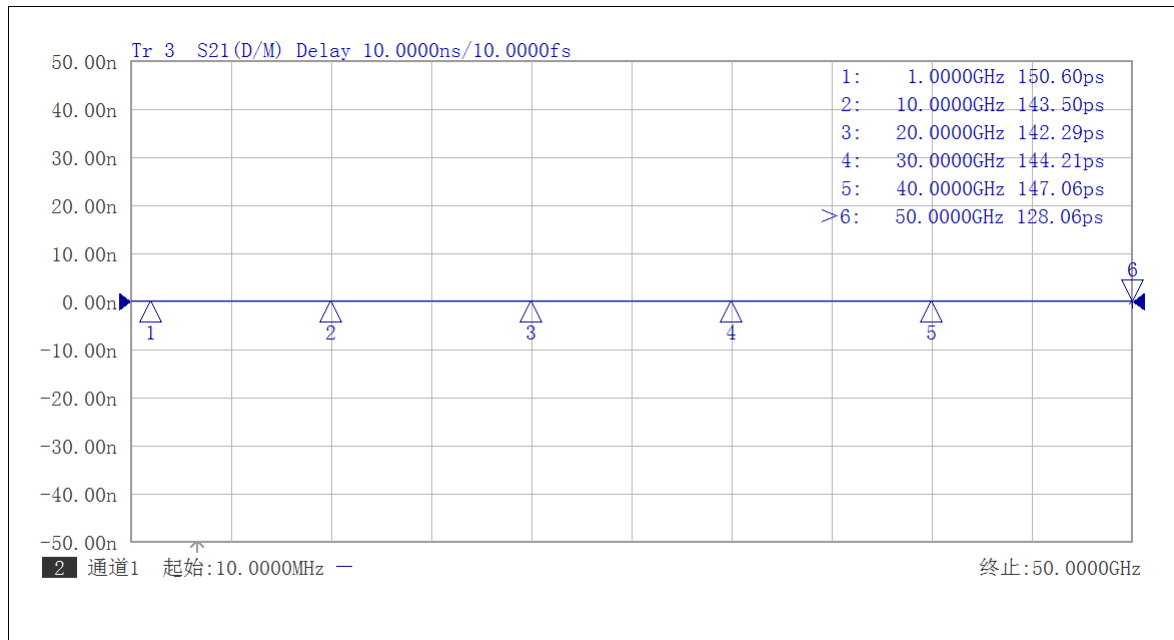
Return Loss vs Frequency





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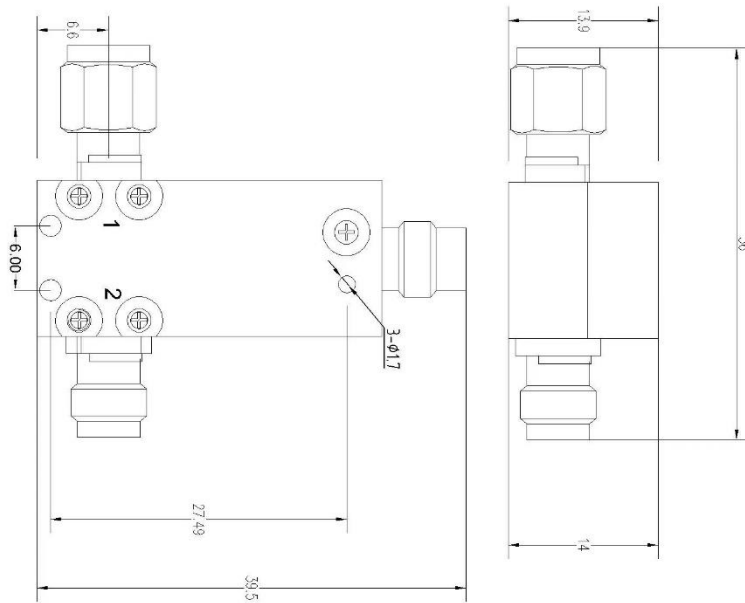
Low Frequency Insertion Loss



Group delay vs Frequency



Dimension: (unit in mm)



Pin Descriptions

| Port# | Description | Connector |
|-------|-------------|------------|
| 1 | DC+ RF Port | 2.4mm |
| 2 | RF Port | 2.4mm |
| 3 | DC Input | SMA Female |

Part Number Selection

| Port# | Description |
|-----------------|--------------------|
| AT-BTL-0050HC | 1=Male, 2=Female |
| AT-BTL-0050HC-2 | 1=Female, 2=Male |
| AT-BTL-0050HC-3 | 1=Female, 2=Female |
| AT-BTL-0050HC-4 | 1=Male, 2=Male |

PCN

| Date | Description |
|-----------|--------------------------------------|
| 2022-5-17 | Change DC+RF Port to Male in default |

