

## 2.92mm Bias Tee From 0.03 MHz to 40 GHz Rated To 500 mA And 25 Volts DC

Fairview Microwave's SB4000A is a 2.92mm bias tee (also known as bias T) that operates from 30 kHz to 40 GHz with a bias rating of 500 mA and 25 VDC. This bias tee is configured with 2.92mm inputs on the RF ports and solder pin on the bias port. SB4000A 2.92mm bias T offers good electrical performance featuring 4.75 dB max insertion loss and 40 dB min isolation.

Bias tees are typically used to inject a DC signal into an RF path such as when biasing an amplifier or any other active device, supplying power to the connected output without disrupting the RF signal. They can also be used as DC returns to provide a ground return path for the input device or DC blocks to prevent direct current signals from flowing through the output device. Fairview Microwave's bias tees are available in various connector configurations over different frequency bands to fit your needs, all of which ship the same day.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	30KHz		40	GHz
Impedance		50		Ohms
VSWR			1.8:1	
Insertion Loss			3	dB
RF to Bias Isolation	40			dB
DC Voltage			25	Vdc
DC Current			500	mA
Input Power (CW)			1	Watts

Electrical Specification Notes:  
Values at +25°C, sea level.

### Mechanical Specifications

<b>Size</b>	
Length	1.2 in [30.48 mm]
Width	0.63 in [16 mm]
Height	0.5 in [12.7 mm]
Weight	0.063 lbs [28.58 g]
Package Type	Connectorized

### Connectors

#### RF Connector

Description	Connector
Type	2.92mm Female
Inner Conductor Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel



### Configuration:

- RF Port Connector: 2.92mm Female
- DC/RF Port Connector: 2.92mm Female
- DC Port Connector: Solder Pin

### Features:

- 30 kHz to 40 GHz Frequency Range
- Isolation 40 dB Min
- Insertion Loss < 4.75 dB
- 500 mA / 25 VDC Bias

### Applications:

- Amplifier Biasing
- DC Return / Block
- Transmitting Power With a Single Coax
- Test and Measurement
- Communication Systems
- Wireless Systems

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**RF/DC Connector**

Description	Connector
Type	2.92mm Female
Inner Conductor Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel

**DC Port**

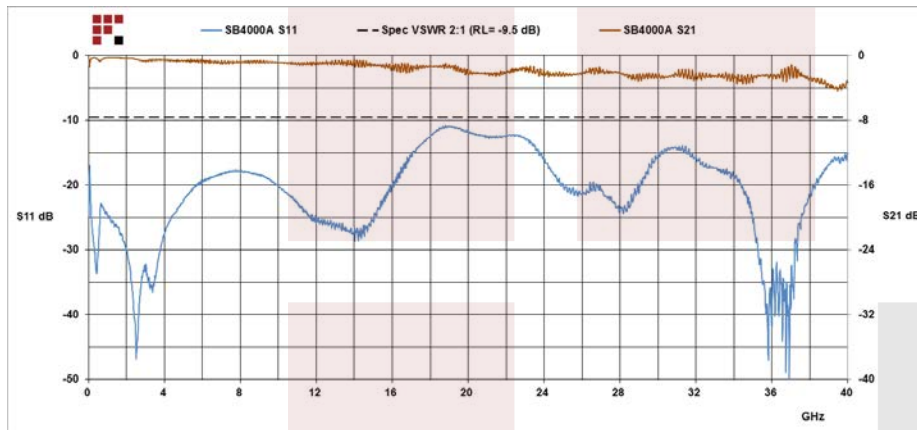
Description	Connector
Type	Solder Pin

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**

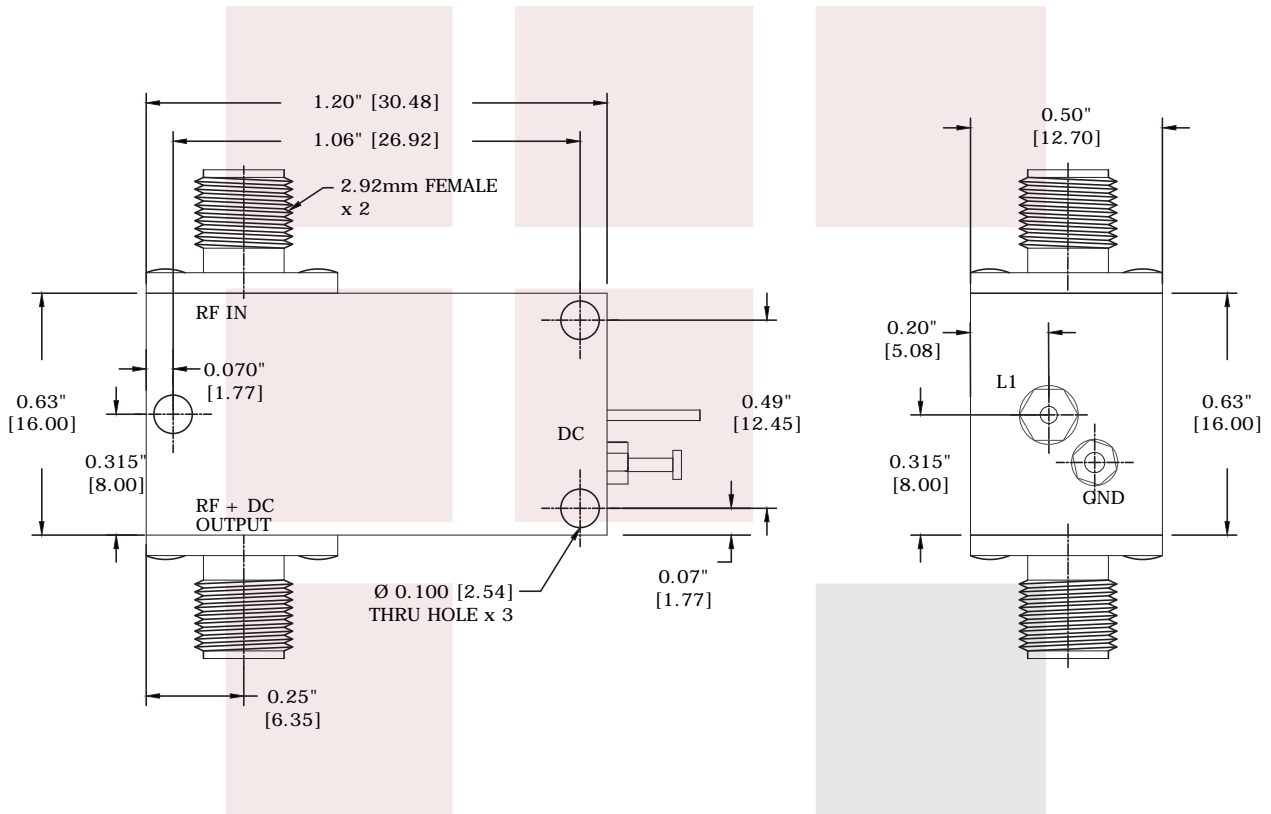


2.92mm Bias Tee From 0.03 MHz to 40 GHz Rated To 500 mA And 25 Volts DC from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm Bias Tee From 0.03 MHz to 40 GHz Rated To 500 mA And 25 Volts DC SB4000A](#)

URL: <https://www.fairviewmicrowave.com/2.92mm-bias-tee-0.03-mhz-40-ghz-500-ma-25-volts-dc-sb4000a-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE  
 2.92mm Bias Tee From 0.03 MHz to 40 GHz Rated To  
 500 mA And 25 Volts DC

DWG NO

SB4000A

CAGE CODE

3FKR5

CAD FILE

011415

SHEET

SCALE

N/A

SIZE

A 5568