

## SMA Bias Tee From 10 MHz to 3 GHz Rated To 3000 mA And 50 Volts DC

Fairview Microwave's SB3000 is an SMA bias tee (also known as bias T) that operates from 10 MHz to 3 GHz with a bias rating of 3,000 mA and 50 VDC. This bias tee is configured with SMA inputs on the RF ports and solder pin on the bias port. SB3000 SMA bias T offers good electrical performance featuring 1.8 dB typical insertion loss and 25 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	0.01		3	GHz
Impedance		50		Ohms
VSWR			1.5:1	
Insertion Loss			1.8	dB
RF to Bias Isolation	25			dB
DC Voltage			50	Vdc
DC Current			3,000	mA
Input Power (CW)			10	Watts

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

### Mechanical Specifications

<b>Size</b>	
Length	1.25 in [31.75 mm]
Width	1.25 in [31.75 mm]
Height	0.75 in [19.05 mm]
Weight	0.1095 lbs [49.67 g]
Package Type	Connectorized

### Connectors

#### RF Connector

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



### Configuration:

- RF Port Connector: SMA Female
- DC/RF Port Connector: SMA Female
- DC Port Connector: Solder Pin

### Features:

- 10 MHz to 3 GHz Frequency Range
- Isolation 25 dB Min
- Insertion Loss 1.8 dB Typ
- 3,000 mA / 50 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	SMA Female
Inner Conductor Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel

**DC Port**

Description	Connector
Type	Solder Pin

**Environmental Specifications**

**Temperature**

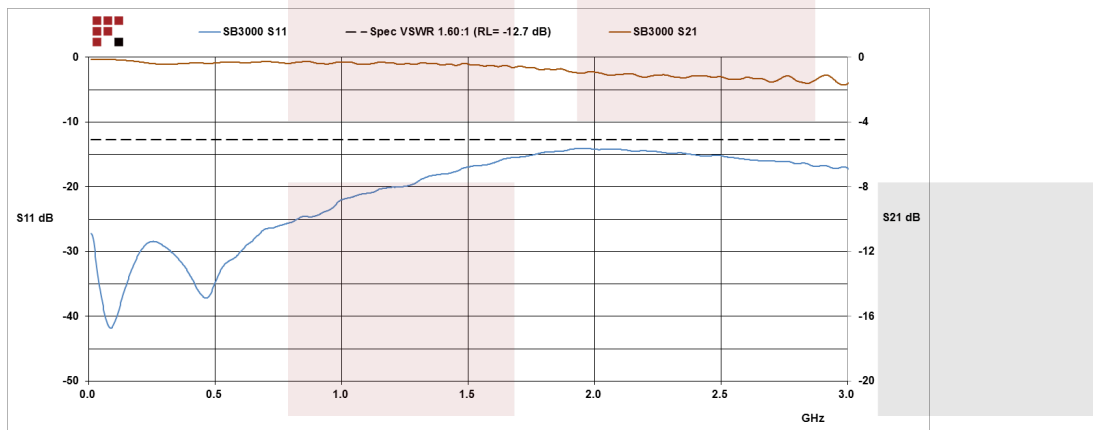
Operating Range -20 to +65 deg C

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**

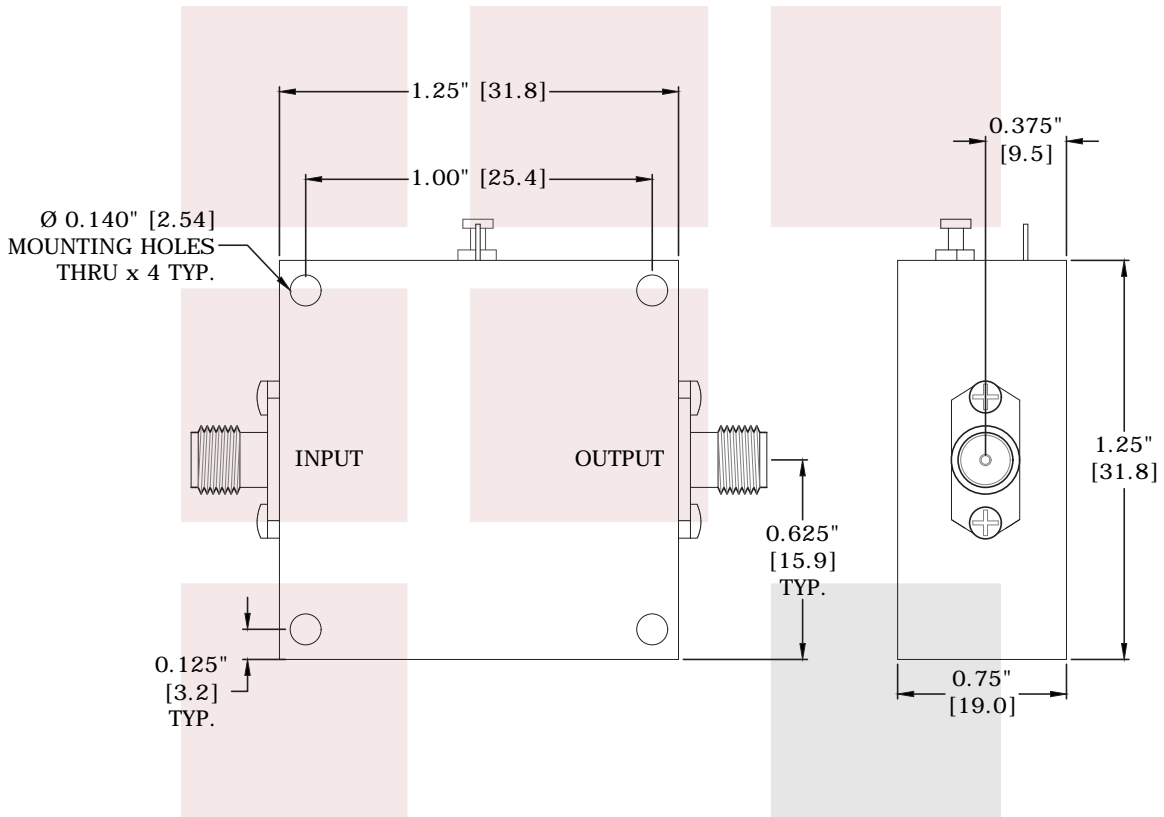


SMA Bias Tee From 10 MHz to 3 GHz Rated To 3000 mA And 50 Volts DC from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Bias Tee From 10 MHz to 3 GHz Rated To 3000 mA And 50 Volts DC SB3000](#)

URL: <https://www.fairviewmicrowave.com/sma-bias-tee-10-mhz-3-ghz-3000-ma-50-volts-dc-sb3000-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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TITLE SMA Bias Tee From 10 MHz to 3 GHz Rated To 3000 mA And 50 Volts DC		DWG NO <b>SB3000</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	012216	SHEET	SCALE	N/A	SIZE A 5568