

## SB3000 DATA SHEET

# 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 1.9 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	Тур	Мах	Units
Frequency Range	0.01		3	GHz
Impedance		50		Ohms
VSWR			1.6:1	
Insertion Loss		1.9		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 Width Height	1.25 in [31.75 mm] 1.25 in [31.75 mm] 0.75 in [19.05 mm]
Weight	0.1164 lbs [52.8 g]
Package Type	Connectorized
Connectors	
<b>RF</b> Connector	

Description	Connector		
Туре	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 1.9 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

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





#### **RF/DC Connector**

SMA Female
Beryllium Copper, Gold
Passivated Stainless Steel

## **DC Port**

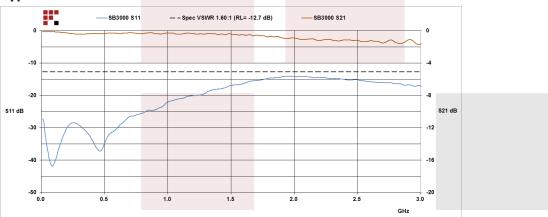
Description		Connector	
Туре		Solder Pin	
Environmental Specifi Temperature	cations		
Operating Range	-20 to	+65 deg C	

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

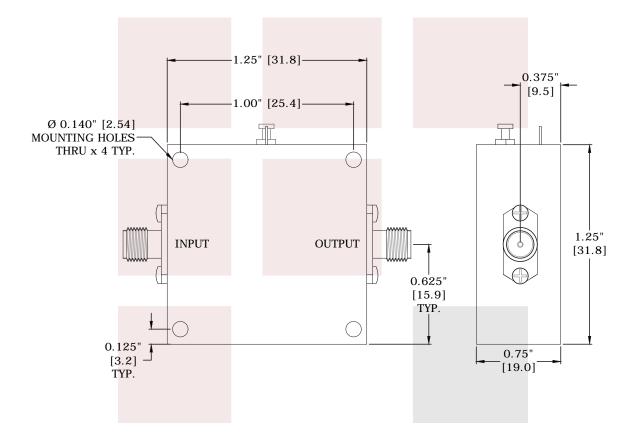
URL: https://www.fairviewmicrowave.com/sma-bias-tee-10-mhz-3-ghz-3000-ma-50-volts-dc-sb3000-p.aspx

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FAIRVIEW MICROWAVE INC.	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].					
SMA Bias Tee From 10 MHz to 3 GHz Rated To 3000 mA And 50 Volts DC	DWG NO SB3000			CAGE CODE 3FKR5		
	CAD FILE 012216	SHEET	SCALE	N/A	SIZE A	5568

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