

N Bias Tee from 10 MHz to 3 GHz Rated to 1000 mA and 72 Volts DC

Fairview Microwave's SB3021 is a type N bias tee (also known as bias T) that operates from 10 MHz to 3 GHz with a bias rating of 1,000 mA and 72 VDC. This bias tee is configured with type N inputs on all of the ports. SB3021 type N bias T offers good electrical performance featuring 1 dB max insertion loss and 1.2:1 max VSWR.

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			1.2:1	
Insertion Loss			1	dB
DC Voltage			72	Vdc
DC Current			1	A
Input Power (CW)			5	Watts

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

Mechanical Specifications

Size	
Length	2.9 in [73.66 mm]
Width	0.78 in [19.81 mm]
Height	1.97 in [50.04 mm]
Weight	0.2497 lbs [113.26 g]
Package Type	Connectorized
Housing Material and Plating	Aluminum

Connectors

RF Connector

Description	Connector
Type	N Male
Inner Conductor Material and Plating	Brass, Gold
Body Material and Plating	Brass, Nickel



Configuration:

- RF Port Connector: N Male
- DC/RF Port Connector: N Female
- DC Port Connector: N Female

Features:

- 10 MHz to 3 GHz Frequency Range
- Low VSWR < 1.2:1
- Insertion Loss < 1 dB
- 1,000 mA / 72 VDC Bias

Applications:

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

Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

RF/DC Connector

Description	Connector
Type	N Female
Inner Conductor Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel

DC Port

Description	Connector
Type	N Female
Inner Conductor Material and Plating	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel

Environmental Specifications
Temperature

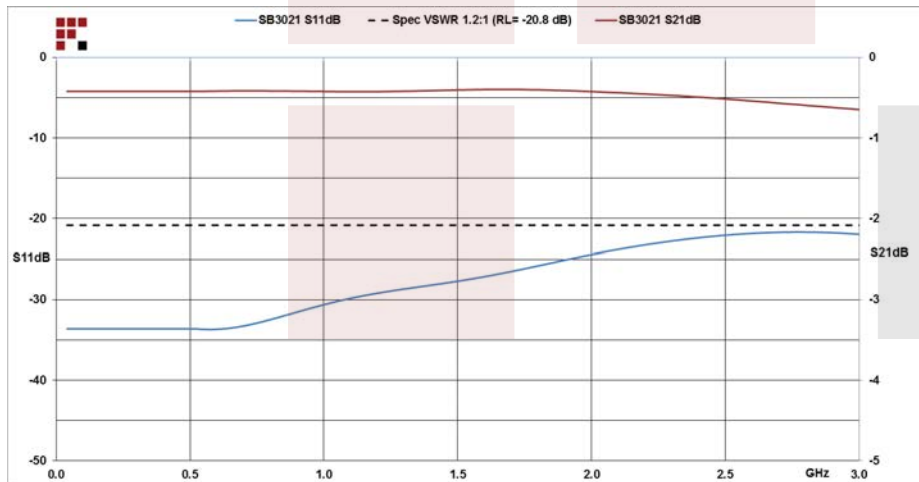
Operating Range -40 to +65 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data



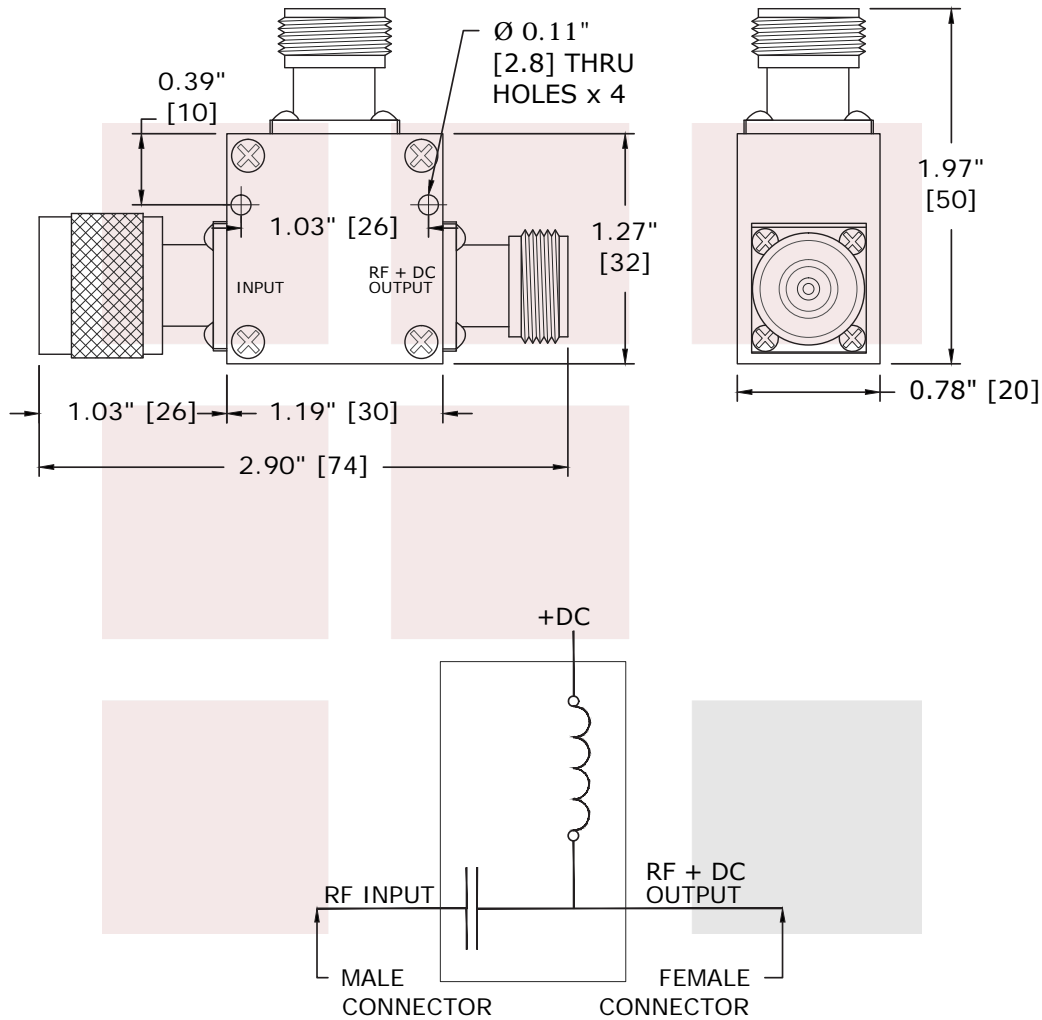
N Bias Tee from 10 MHz to 3 GHz Rated to 1000 mA and 72 Volts DC from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Bias Tee from 10 MHz to 3 GHz Rated to 1000 mA and 72 Volts DC SB3021](#)

URL: <https://www.fairviewmicrowave.com/n-bias-tee-10-3-ghz-1000-ma-72-volts-dc-sb3021-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.





FAIRVIEW MICROWAVE INC.
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

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
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DWG NO SB3021 CAGE CODE 3FKR5

CAD FILE	011415	SHEET	SCALE	N/A	SIZE	A	5568
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