

## 10 MHz to 6 GHz N Broadband Bias Tee, Male Output, Rated to 2.5 Amps and 100 Volts, DC BNC Connector

The FMBT1628 is a Broadband Bias Tee that operates from 10 MHz to 6 GHz. This general purpose Bias Tee is used in applications that require a source of DC voltage and current to be injected into an RF circuit without affecting the RF signal through the main transmission path. The module is designed for a 50 ohm input/output impedance and displays impressive typical performance that includes 0.8 dB insertion loss, 40 dB Isolation, and 1.3:1 VSWR. The Bias Tee is rated for 2.5 Amps and +100 Volts max DC voltage. Maximum RF input power handling is 5W. The compact package uses an N Type Female connector at the RF input and an N Type Male connector at the RF output. A Female BNC connector is used for the DC port. Operational Temperature is -55°C to +105°C.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.01		6	GHz
Impedance		50		Ohms
VSWR		1.3:1	1.5:1	
Insertion Loss		0.8	1.25	dB
RF to Bias Isolation		40		dB
DC Voltage			100	Vdc
DC Current			2.5	A
Input Power (CW)			5	Watts
Bias Path Resistance		0.04	0.05	Ohm
3dB Bandwidth	0.005		15	GHz

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

### Mechanical Specifications

Size	
Length	1.29 in [32.77 mm]
Width	0.85 in [21.59 mm]
Height	1 in [25.4 mm]
Weight	0.11 lbs [49.9 g]

### Environmental Specifications

Temperature	
Operating Range	-55 to +105 deg C
Storage Range	-60 to +90 deg C

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

### Plotted and Other Data

Notes:



### Configuration:

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

### Features:

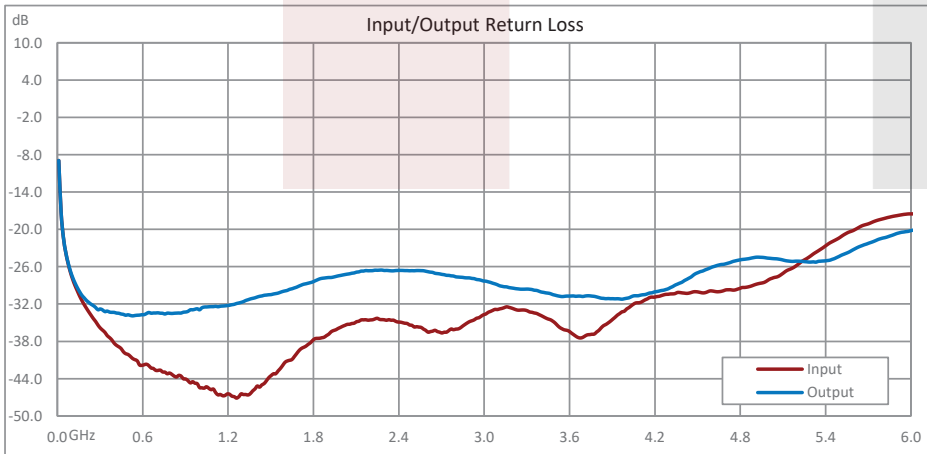
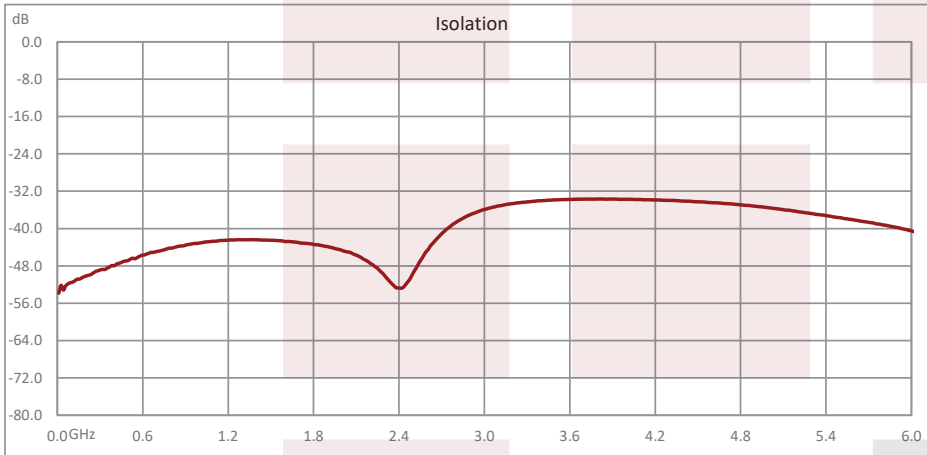
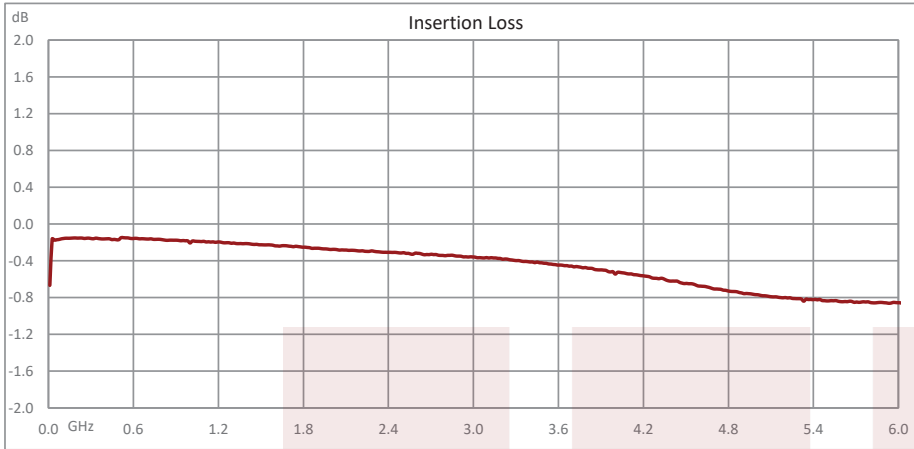
- General Purpose Broadband Bias Tee
- 10 MHz to 6 GHz Frequency Range
- Insertion Loss: 0.8 dB Typ
- Isolation: 40 dB typ
- VSWR: 1.3:1 typ
- RF Input Power Handling 5W max
- 50 Ohms Input and Output Matched
- N Type Female RF Input Connector
- N Type Male RF Output Connector
- DC Bias Connector: Female BNC
- Operational Temperature: -55°C to +105°C
- Rating: 2.5A max DC Current and +100V max DC Voltage

### Applications:

- Biasing for Antenna Amplifiers, Laser Diodes, Photo Diodes, Optical Modulators
- Test & Measurement
- SATCOM
- Wireless Communications Systems
- Power over Ethernet
- Base Stations and Radios

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**Typical Performance Data**

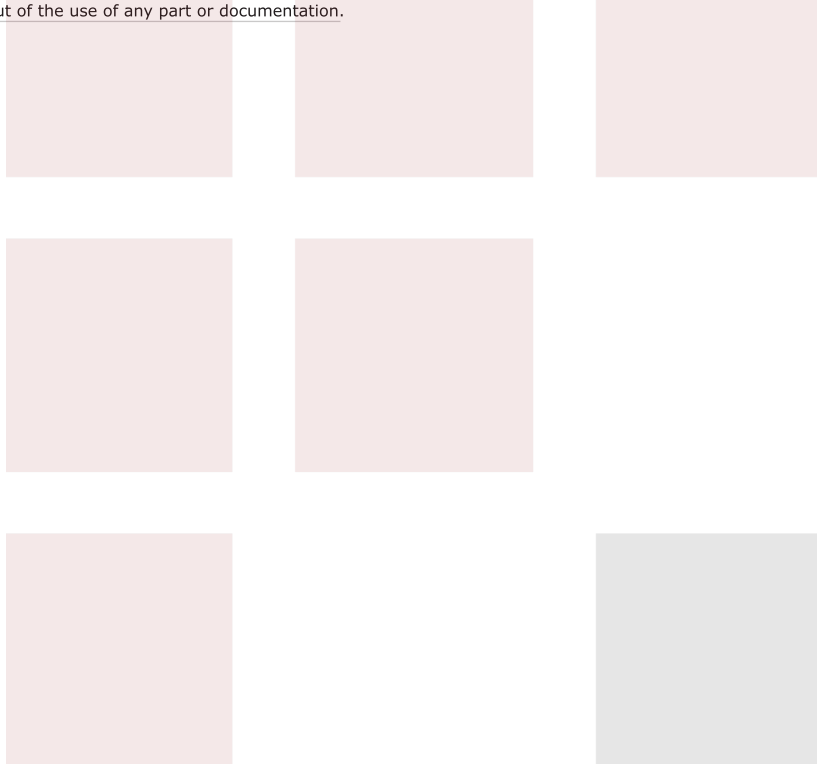


10 MHz to 6 GHz N Broadband Bias Tee, Male Output, Rated to 2.5 Amps and 100 Volts, DC BNC Connector from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

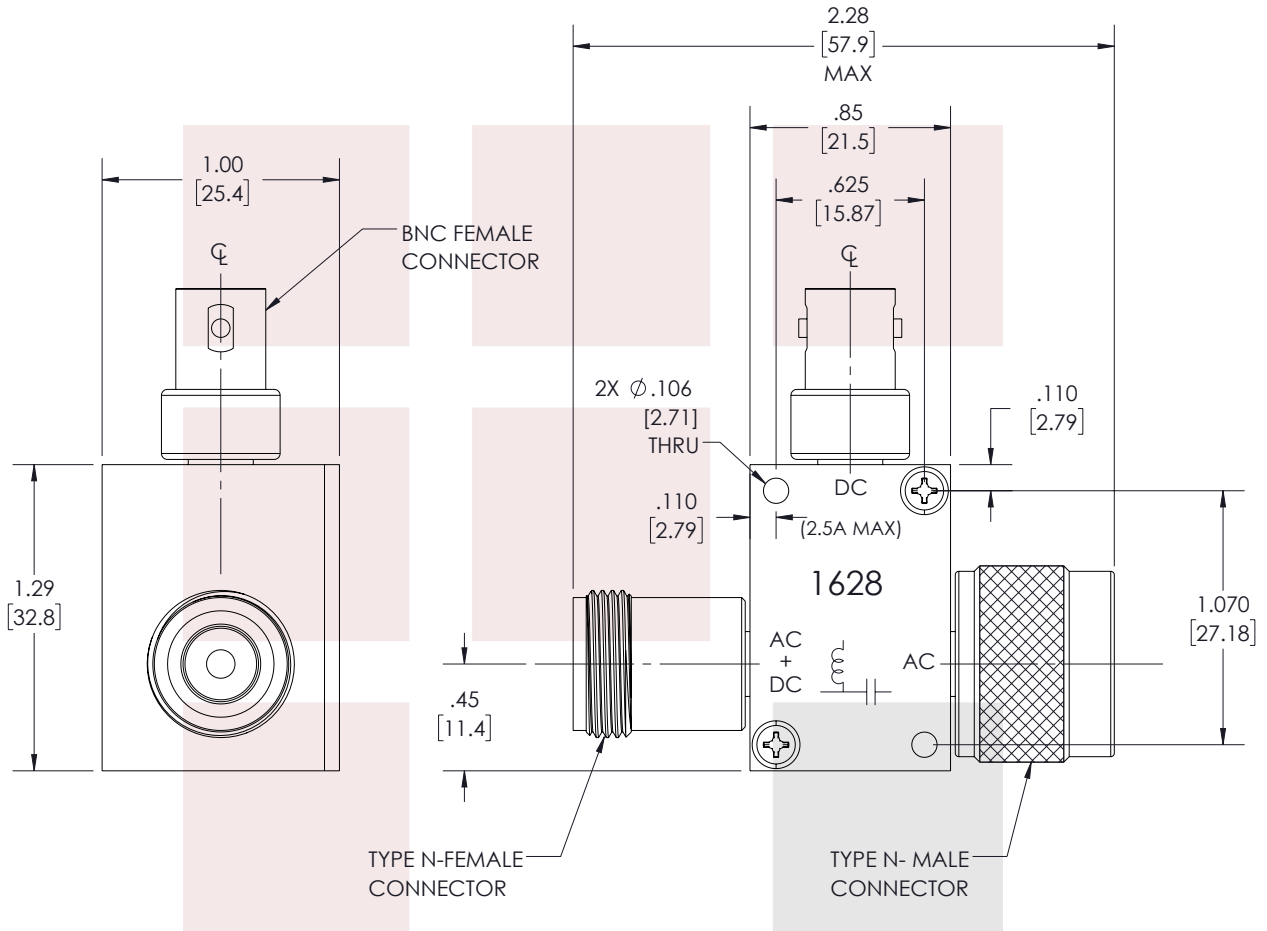
For additional information on this product, please click the following link: [10 MHz to 6 GHz N Broadband Bias Tee, Male Output, Rated to 2.5 Amps and 100 Volts, DC BNC Connector FMBT1628](#)

URL: <https://www.fairviewmicrowave.com/n-bias-tee-10-mhz-6-ghz-2500-ma-100-volts-dc-fmbt1628-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06/03/2022	TGALLA



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TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY BPUCHASKI	ITEM NO. FMBT1628	REV A
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