

# FMBT1638 DATA SHEET

## 50 KHz to 26 GHz SMA Broadbanc Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin

The FMBT1638 is a Broadband Bias Tee that operates from 50 KHz to 26 GHz. This general purpose Bias Tee is used in applications that requrie 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 1.4 dB insertion loss, 50 dB RF to Bias Port Isolation, and 1.5:1 VSWR. The Bias Tee is rated for 0.75 Amps and +25 Volts max DC voltage. The compact package uses an SMA Male connector at the RF input and an SMA Female connector at the RF output. A Solder Post Pin is used for the DC Connector. Operational Temperature is +15°C to +30°C.

#### **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	50KHz		26	GHz
Impedance		50		Ohms
VSWR		1.5:1	1.8:1	
Insertion Loss		1.4	3	dB
RF to Bias Isolation		50		dB
DC Voltage			25	Vdc
DC Current			750	mA
Rise Time		9		ps

**Electrical Specification Notes:** 

Values at +25°C, sea level.

**Mechanical Specifications** 

Size

 Length
 1.2 in [30.48 mm]

 Width
 0.63 in [16 mm]

 Height
 0.515 in [13.08 mm]

 Weight
 0.11 lbs [49.9 q]

**Environmental Specifications** 

Temperature

Operating Range +15 to +30 deg C

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data** 

Notes:



### **Configuration:**

- RF Port Connector: SMA MaleDC/RF Port Connector: SMA
- DC Port Connector: DC Pin

#### **Features:**

Female

- General Purpose Broadband Bias Tee
- 50 KHz to 26 GHz Frequency Range
- Insertion Loss: 1.4 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.5:1 typ
- 50 Ohms Input and Output Matched
- SMA Male RF Input Connector
- SMA Female RF Output Connector
- DC Connector: Solder Post Pin
- Operational Temperature: +15°C to +30°C
- Rating: 0.75A max DC Current and +25V max DC Voltage

## **Applications:**

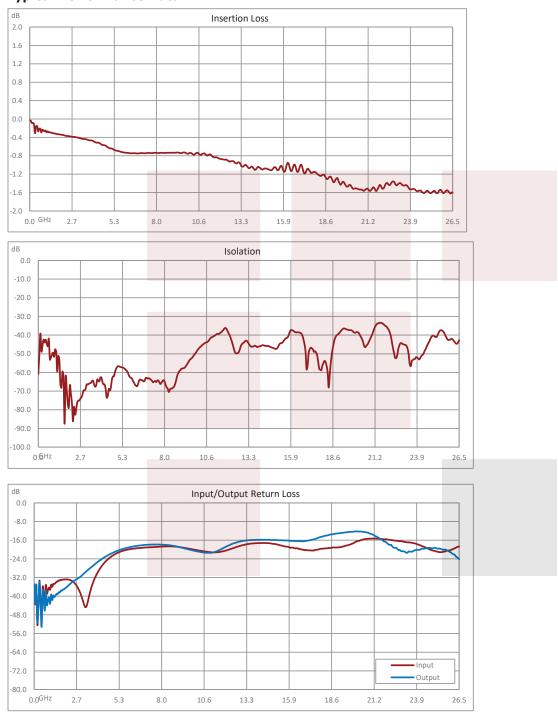
- Biasing for Antenna Amplifiers, Laser Diodes, Photo Diodes, Optical Modulators
- Test & Measurement
- SATCOM
- Wireless Communications Systems
- Power over Ethernet
- Base Stations and Radios

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#### **Typical Performance Data**







50 KHz to 26 GHz SMA Broadbanc Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin 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: 50 KHz to 26 GHz SMA Broadbanc Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin FMBT1638

The information contained in this document is accurate to the best of our knowledge and representative of the part

URL: https://www.fairviewmicrowave.com/bias-tee-0.05-mhz-26-ghz-750-ma-25-volts-dc-fmbt1638-p.aspx

described	herein. It may	be necessar	y to ma	ke modification	ons to the part a	and/or t	he documentation of the	part, in order
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