

## 50 KHz to 18 GHz SMA Broadband Bias Tee, Rated to 750 mA and 25 Volts, DC Pin

The FMBT1632 is a Broadband Bias Tee that operates from 50 KHz to 18 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 1 dB insertion loss, 50 dB RF to Bias Port Isolation, and 1.4:1 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   | Typ   | Max   | Units |
|----------------------|-------|-------|-------|-------|
| Frequency Range      | 50KHz |       | 18    | GHz   |
| Impedance            |       | 50    |       | Ohms  |
| VSWR                 |       | 1.4:1 | 1.8:1 |       |
| Insertion Loss       |       | 1     | 1.5   | 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 g]   |

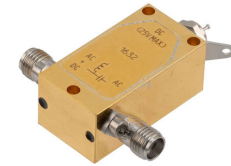
### Environmental Specifications

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

### Features:

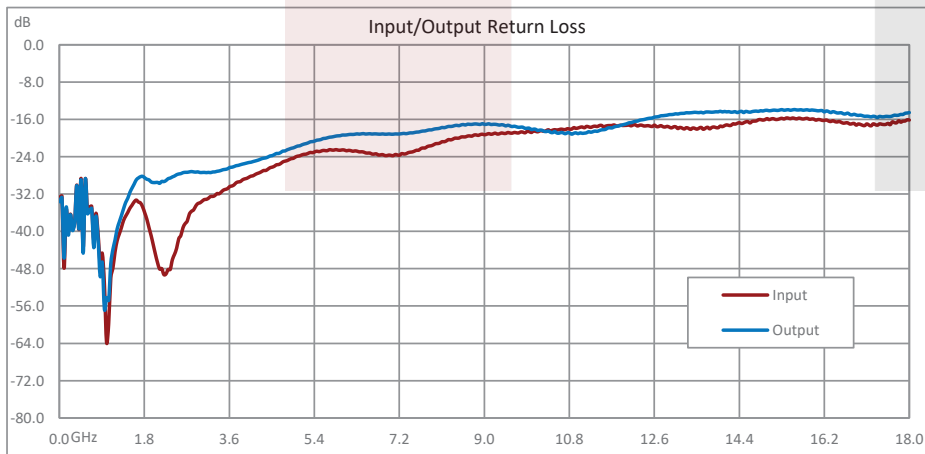
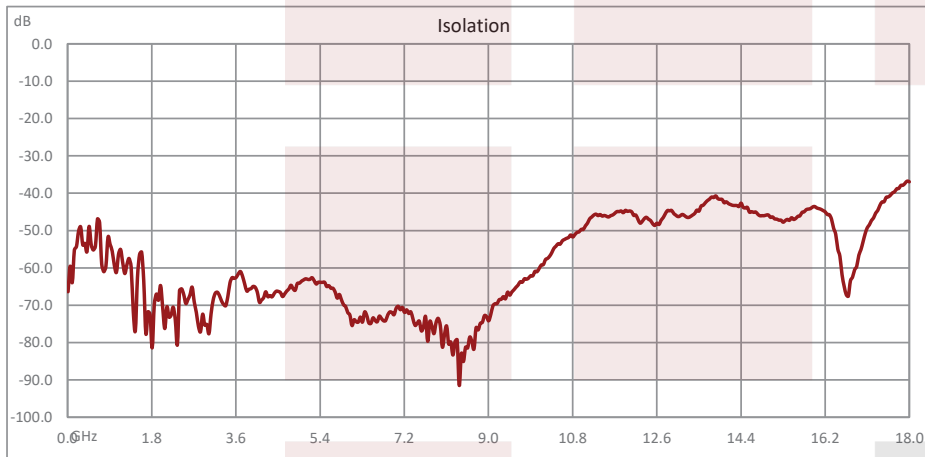
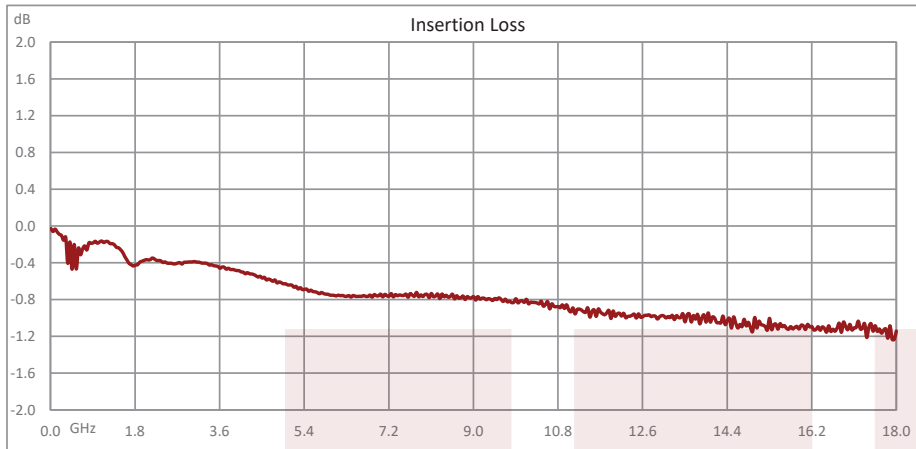
- General Purpose Broadband Bias Tee
- 50 KHz to 18 GHz Frequency Range
- Insertion Loss: 1 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.4:1 typ
- 50 Ohms Input and Output Matched
- SMA Female RF Input Connector
- SMA Female RF Output Connector
- DC Connector: Solder Post Pin
- Operational Temperature: +15°C 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 18 GHz SMA Broadband Bias Tee, Rated to 750 mA 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.

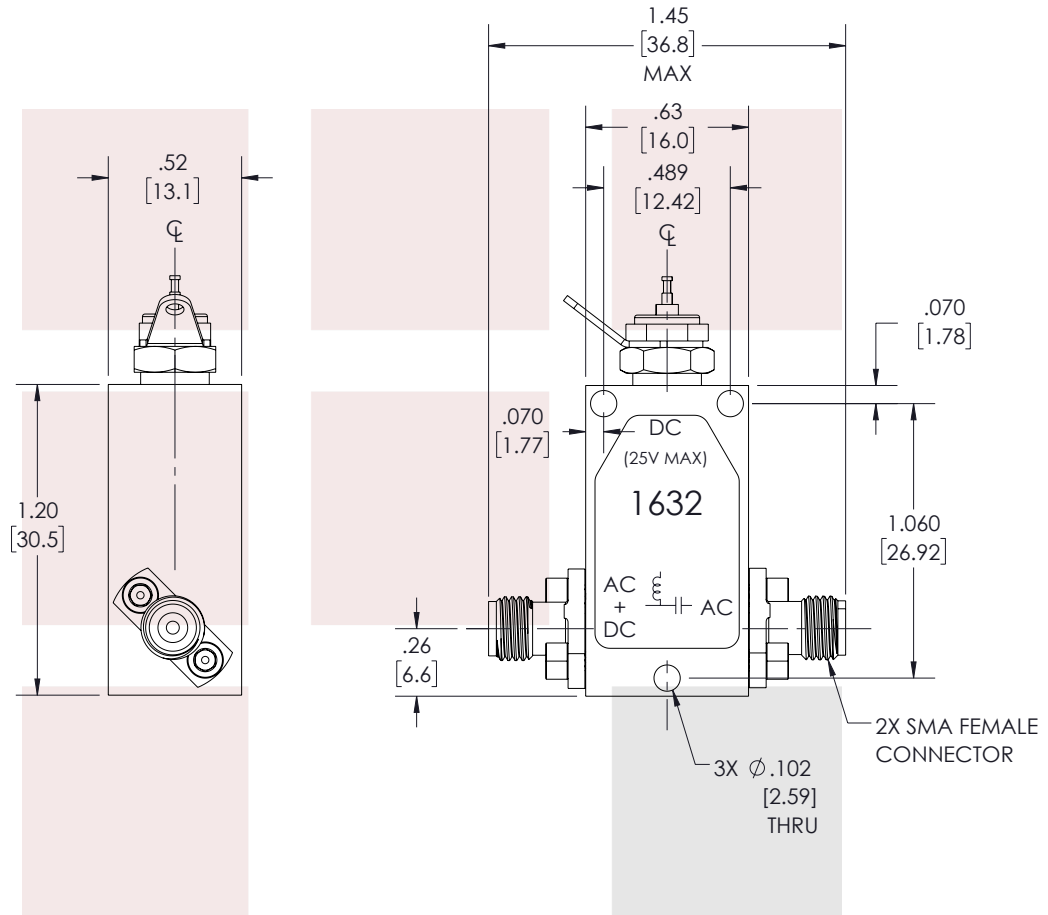
For additional information on this product, please click the following link: [50 KHz to 18 GHz SMA Broadband Bias Tee, Rated to 750 mA and 25 Volts, DC Pin FMBT1632](#)

URL: <https://www.fairviewmicrowave.com/bias-tee-0.05-mhz-18-ghz-750-ma-25-volts-dc-fmbt1632-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.



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



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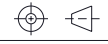
TITLE  
50 KHz to 18 GHz SMA Broadband Bias Tee, Rated to 750 mA and 25 Volts, DC Pin

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

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

|                    |             |   |
|--------------------|-------------|---|
| .X = ±.2 [5.08]    | FRACTIONS   | L ≤ 12 [305] = +1 [25] / -0                 |
| .XX = ±.02 [.51]   | ± 1/32      | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0     |
| .XXX = ±.005 [.13] | ANGLES ± 1° | 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<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>BPUCHASKI | ITEM NO.<br>FMBT1632 | REV<br>A |
|-----------|--------------------|-----------------------|----------------------|----------|

T-Rev.D