

50 KHz to 18 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC SMA Connector

The FMBT1635 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 1.5:1 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 Female SMA Connector is used for the DC Port. Operational Temperature is +15°C to +30°C.

Electrical Specifications

| Description | Min | Typ | Max | Units |
|----------------------|-------|-------|-------|-------|
| Frequency Range | 50KHz | | 18 | GHz |
| Impedance | | 50 | | Ohms |
| VSWR | | 1.5:1 | 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 Male
- DC/RF Port Connector: SMA Female
- DC Port Connector: SMA Female

Features:

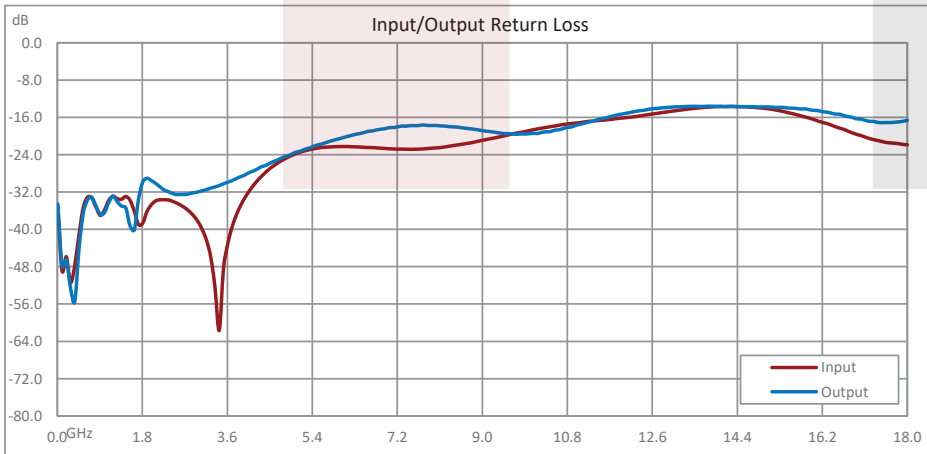
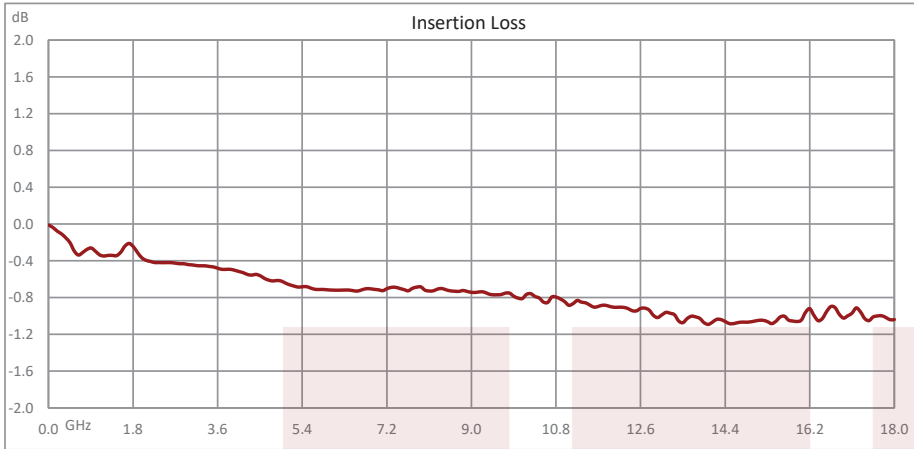
- General Purpose Broadband Bias Tee
- 50 KHz to 18 GHz Frequency Range
- Insertion Loss: 1 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.5:1 typ
- 50 Ohms Input and Output Matched
- SMA Male RF Input Connector
- SMA Female RF Output Connector
- DC Connector: SMA Female
- Operational Temperature: +15°C to +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



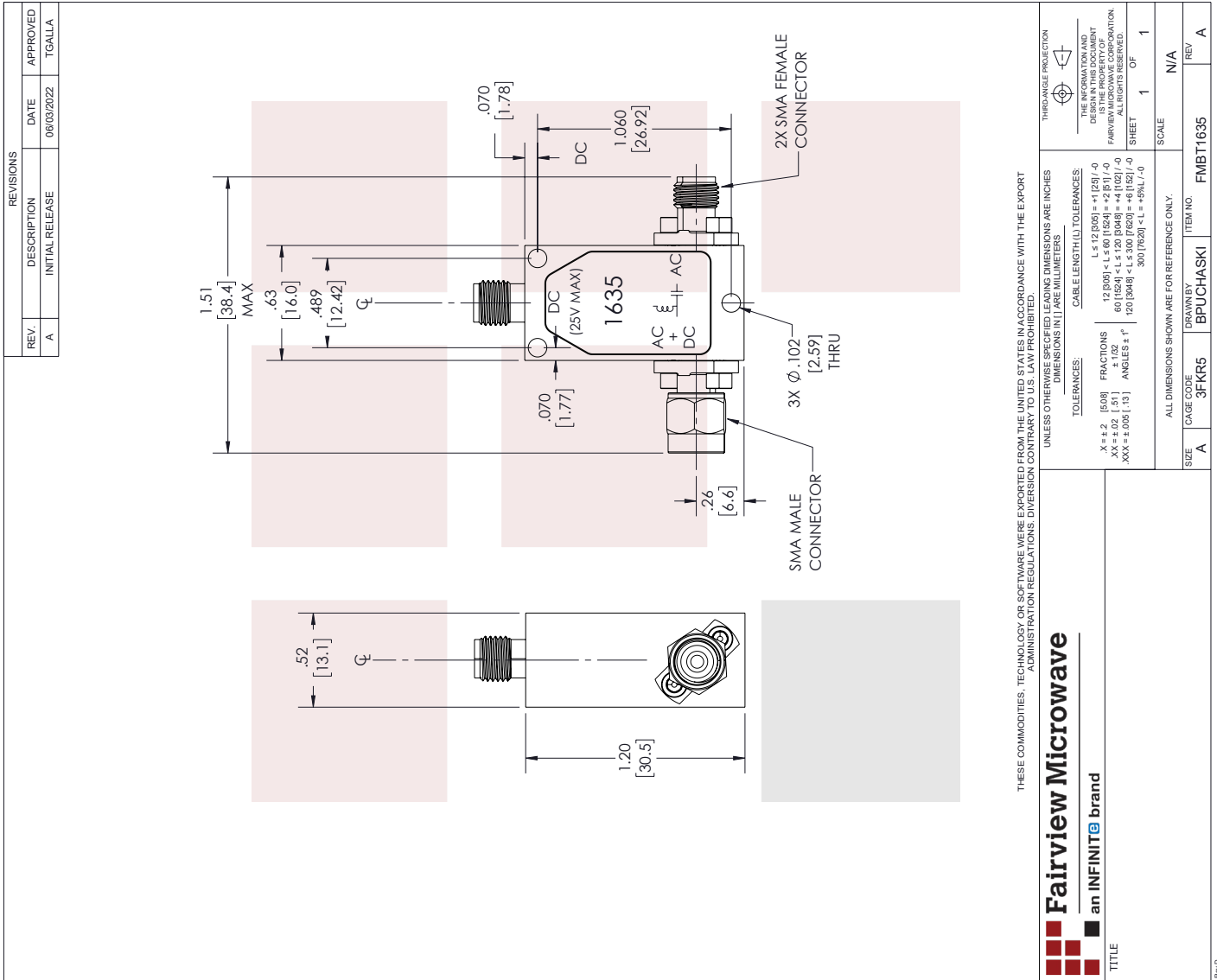
50 KHz to 18 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC SMA Connector from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [50 KHz to 18 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC SMA Connector FMBT1635](#)

URL: <https://www.fairviewmicrowave.com/bias-tee-0.05-mhz-18-ghz-750-ma-25-volts-dc-fmbt1635-p.aspx>

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