Fairview Microwave
an INFINITE brand

FMBT1627
DATA SHEET

10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin

The FMBT1627 is a Broadband Bias Tee that operates from 10 MHz to 6 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 0.5 dB insertion loss, 50 dB Isolation, and 1.2:1 VSWR. The Bias Tee is rated for 2.5 Amps and +100 Volts max DC voltage. Maximum RF input power hanlding is 5W. The compact package uses an SMA Female 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 -55°C to +105°C.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.01		6	GHz
Impedance		50		Ohms
VSWR		1.2:1	1.5:1	
Insertion Loss		0.5	1.25	dB
RF to Bias Isolation		50		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	0.55 in [13.97 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: SMA Female
- DC/RF Port Connector:SMA Female
- DC Port Connector: DC Pin

Features:

- General Purpose Broadband Bias Tee
- 10 MHz to 6 GHz Frequency Range
- Insertion Loss: 0.5 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.2:1 typ
- RF Input Power Handling 5W max
- 50 Ohms Input and Output Matched
- SMA Female RF Input Connector
- SMA Female RF Output Connector
- DC Connector: Solder Post Pin
- 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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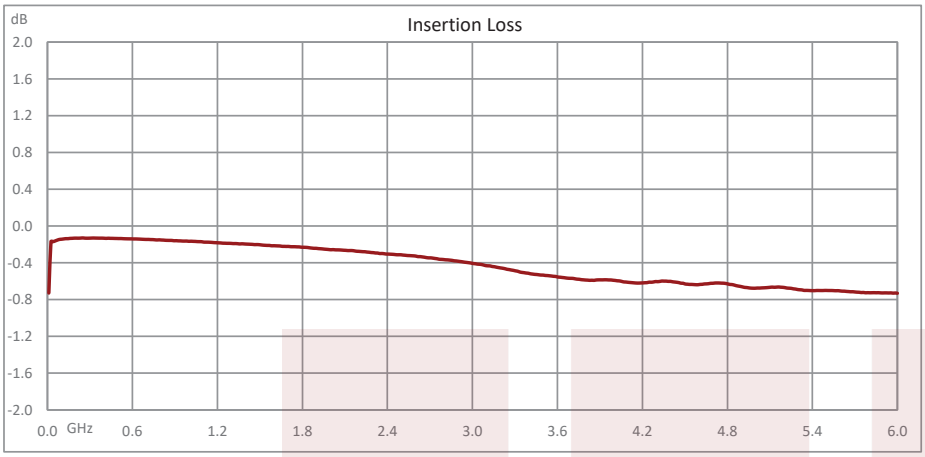
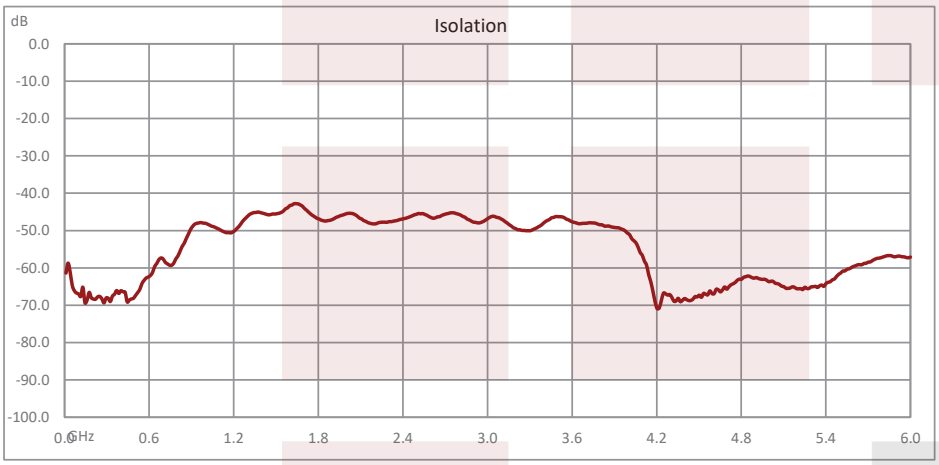
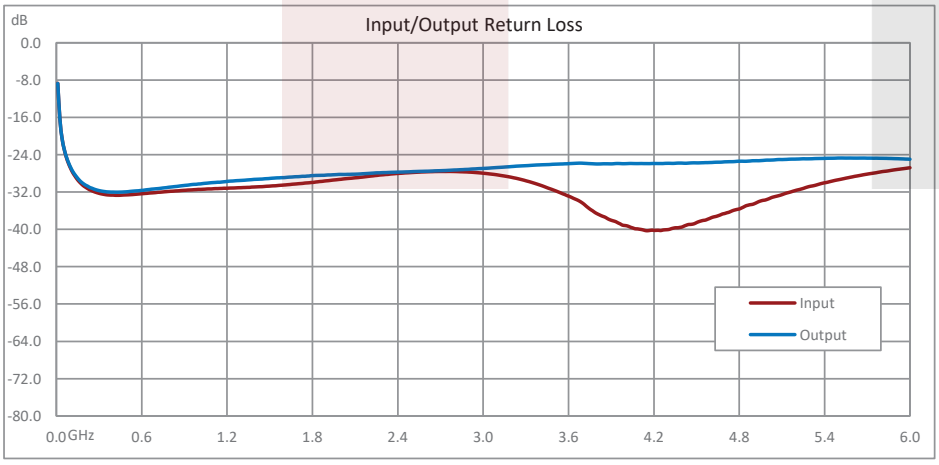
Typical Performance Data





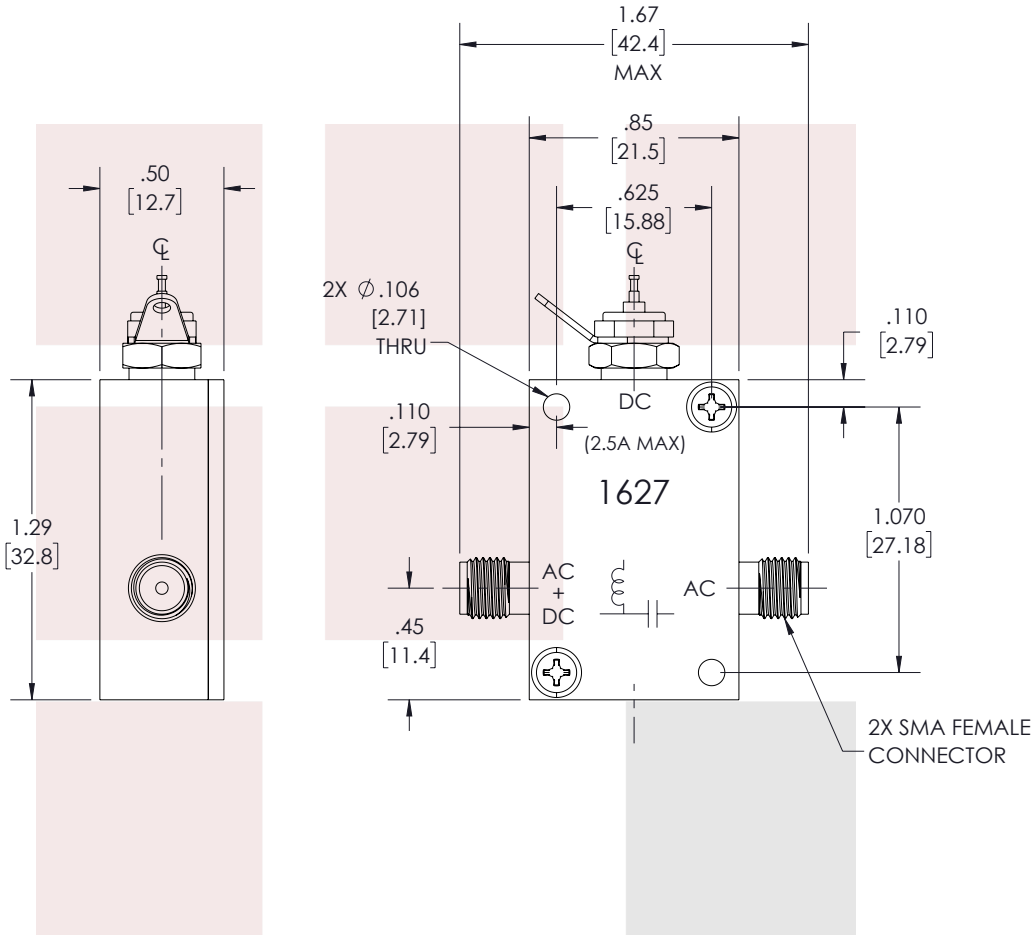


10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin FMBT1627

URL: https://www.fairviewmicrowave.com/sma-bias-tee-10-mhz-6-ghz-2500-ma-100-volts-dc-fmbt1627-p.aspx

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:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
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

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	BPUCHASKI	FMBT1627	A

T-Rev.D