



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

Bias Tees Technical Data Sheet

PE1627

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

Description

The PE1627 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 0.5 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 handling 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.

Configuration

RF Port Connector
DC/RF Port Connector
DC Port Connector

SMA Female
SMA Female
DC Pin

Electrical Specifications

Description	Minimum	Typical	Maximum	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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin PE1627](#)



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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	0.05 lbs [22.68 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:

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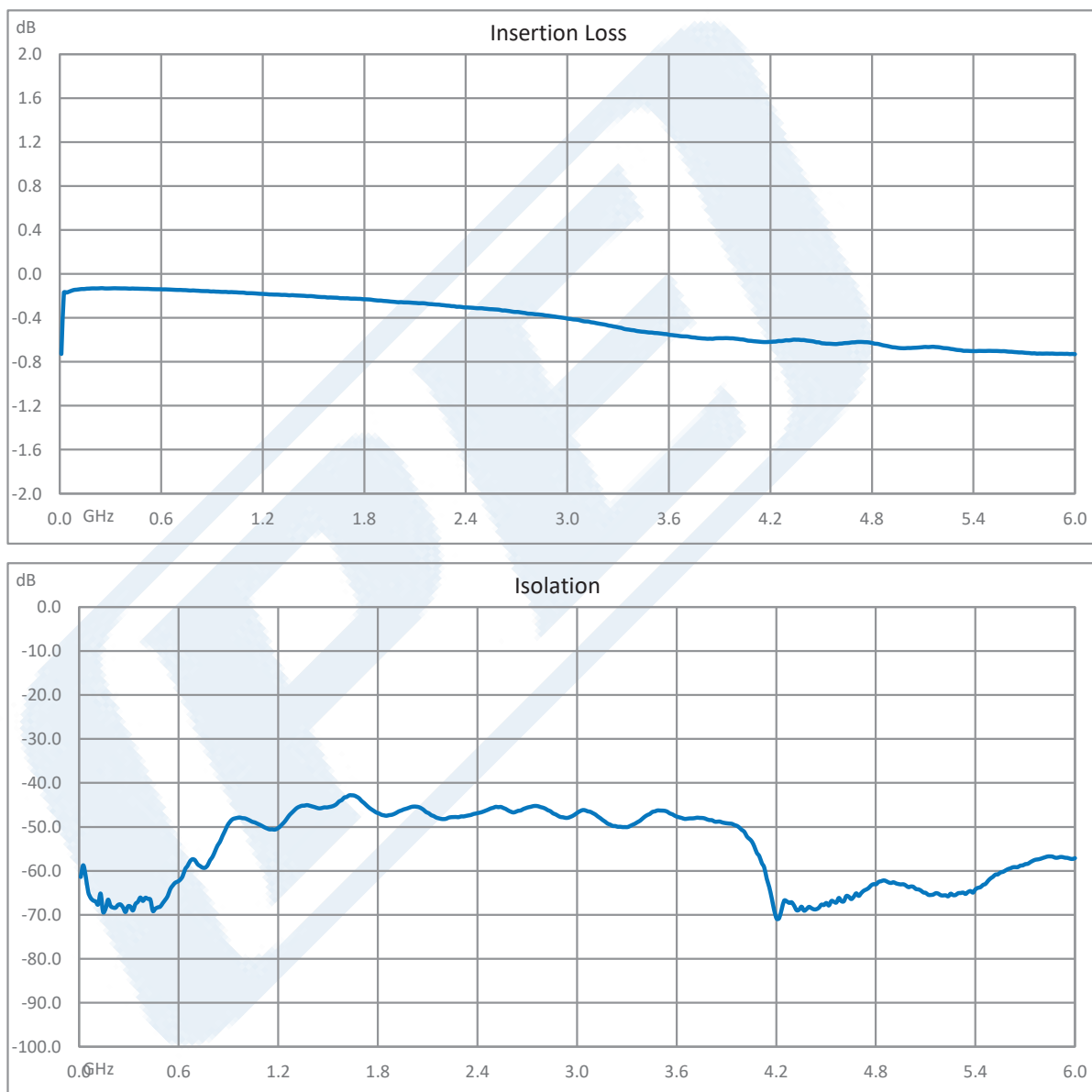


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Typical Performance Data



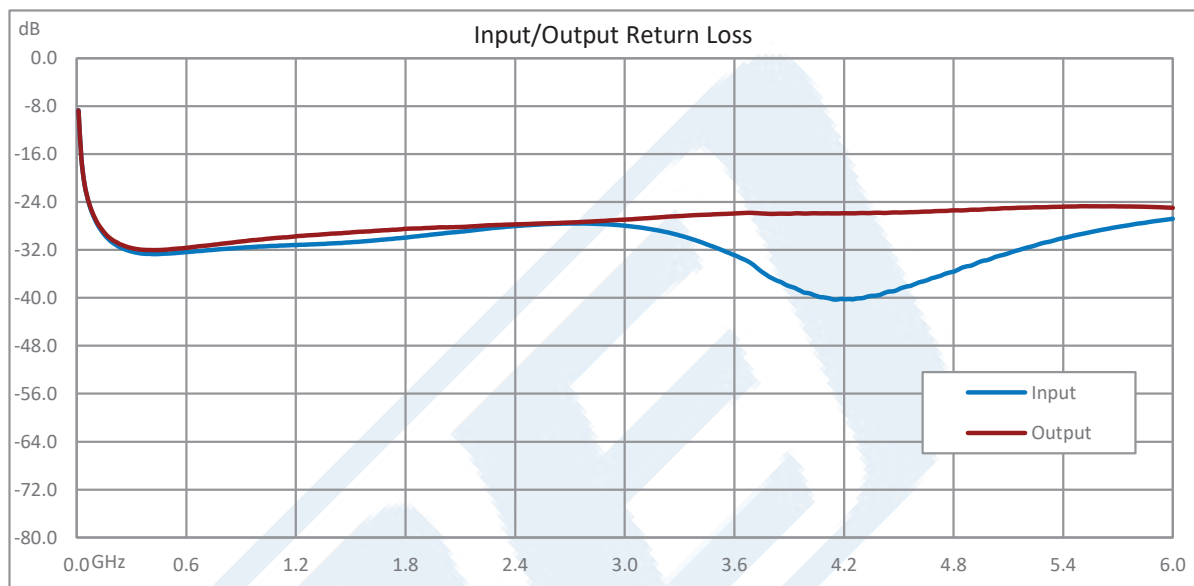
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10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [10 MHz to 6 GHz SMA Broadband Bias Tee, Rated to 2.5 Amps and 100 Volts, DC Pin PE1627](https://www.pasternack.com/sma-bias-tee-10-mhz-6-ghz-2500-ma-100-volts-dc-pe1627-p.aspx)

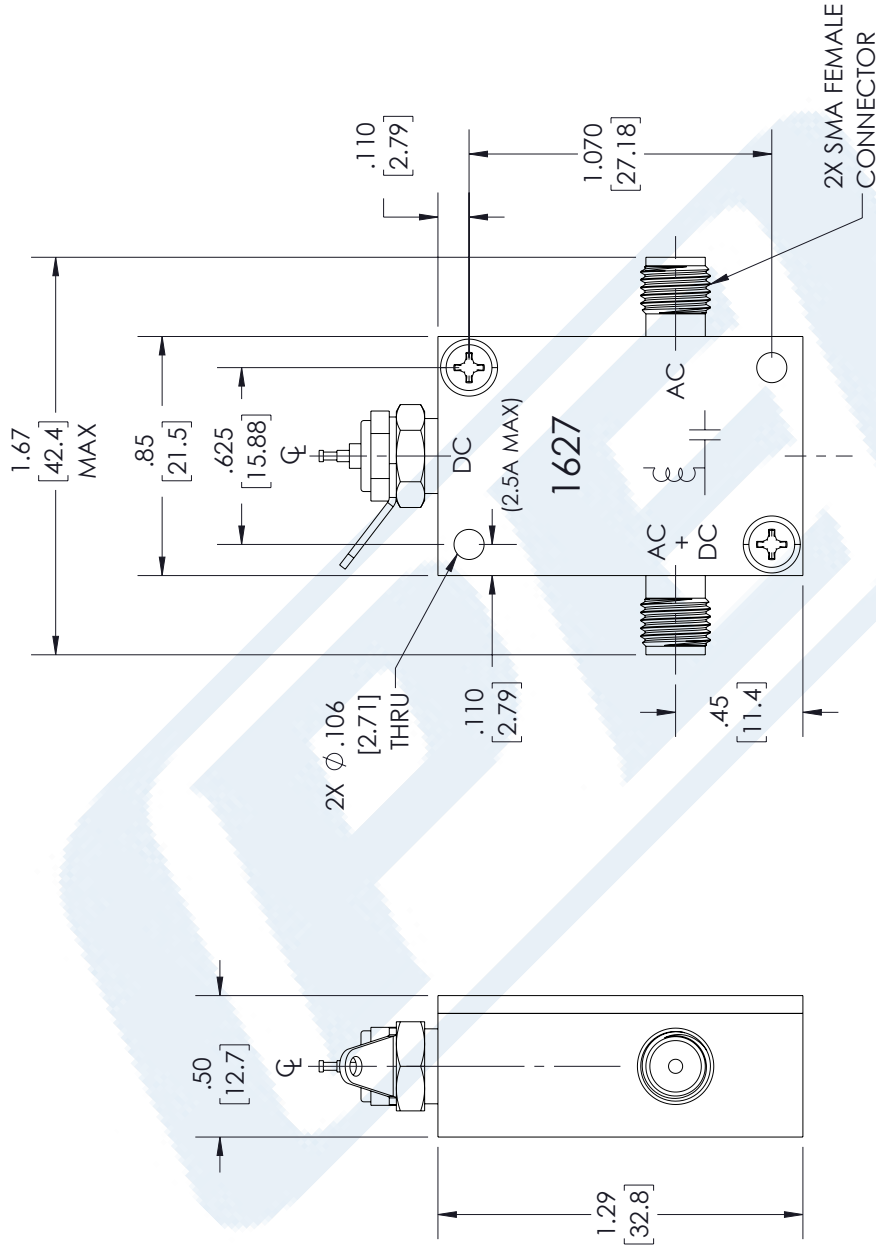
URL: <https://www.pasternack.com/sma-bias-tee-10-mhz-6-ghz-2500-ma-100-volts-dc-pe1627-p.aspx>

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PE1627 CAD Drawing

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



THIRD-ANGLE PROJECTION

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SCALE N/A

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

TOLERANCES:

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

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	± .125 [3.18]
12 [305] < L ≤ 60 [1524]	± .25 [6.35]
60 [1524] < L ≤ 120 [3048]	± .5 [12.7]
120 [3048] < L ≤ 300 [7620]	± 1.0 [25.4]
300 [7620] < L	± 5% [127]

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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