



10 MHz to 12 GHz SMA Broadband Bias Tee, Male Input, Rated to 2.5 Amps and 100 Volts, DC BNC Connector

Bias Tees Technical Data Sheet

PE1629

Features

- General Purpose Broadband Bias Tee
- 10 MHz to 12 GHz Frequency Range
- Insertion Loss: 0.8 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.3:1 typ
- RF Input Power Handling 5W max
- 50 Ohms Input and Output Matched
- SMA Male RF Input Connector
- SMA Female RF Output Connector
- DC Bias Connector: Female BNC
- 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 PE1629 is a Broadband Bias Tee that operates from 10 MHz to 12 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 0.8 dB insertion loss, 50 dB Isolation, and 1.3:1 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 Male connector at the RF input and an SMA Female connector at the RF output. A Female BNC connector is used for the DC port. Operational Temperature is -55°C to +105°C.

Configuration

RF Port Connector	SMA Male
DC/RF Port Connector	SMA Female
DC Port Connector	BNC Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		12	GHz
Impedance		50		Ohms
VSWR		1.3:1	1.5:1	
Insertion Loss		0.8	3	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 12 GHz SMA Broadband Bias Tee, Male Input, Rated to 2.5 Amps and 100 Volts, DC BNC Connector PE1629](#)



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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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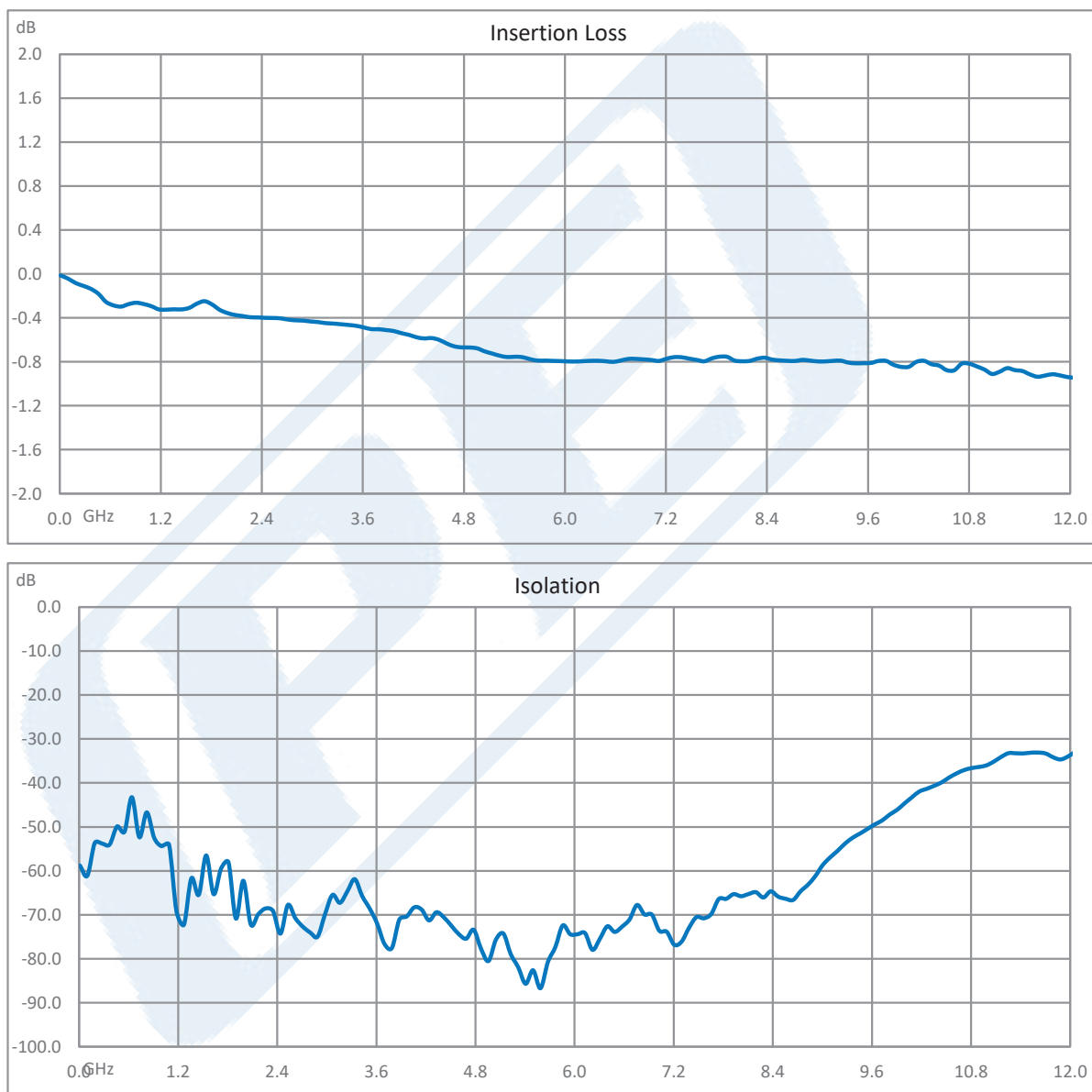


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Typical Performance Data



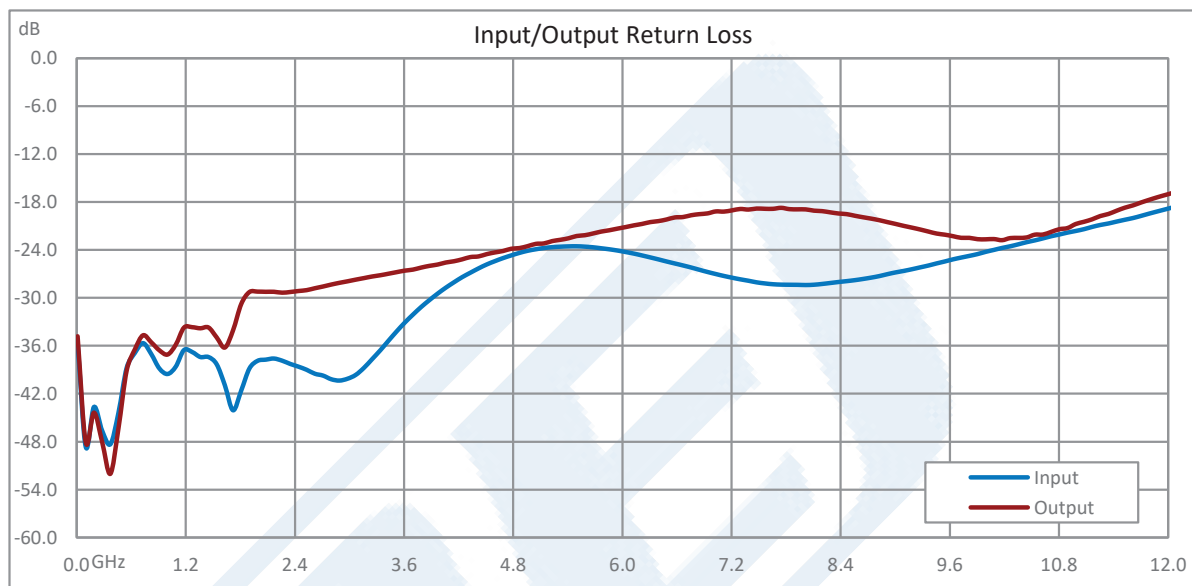
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10 MHz to 12 GHz SMA Broadband Bias Tee, Male Input, Rated to 2.5 Amps and 100 Volts, DC BNC Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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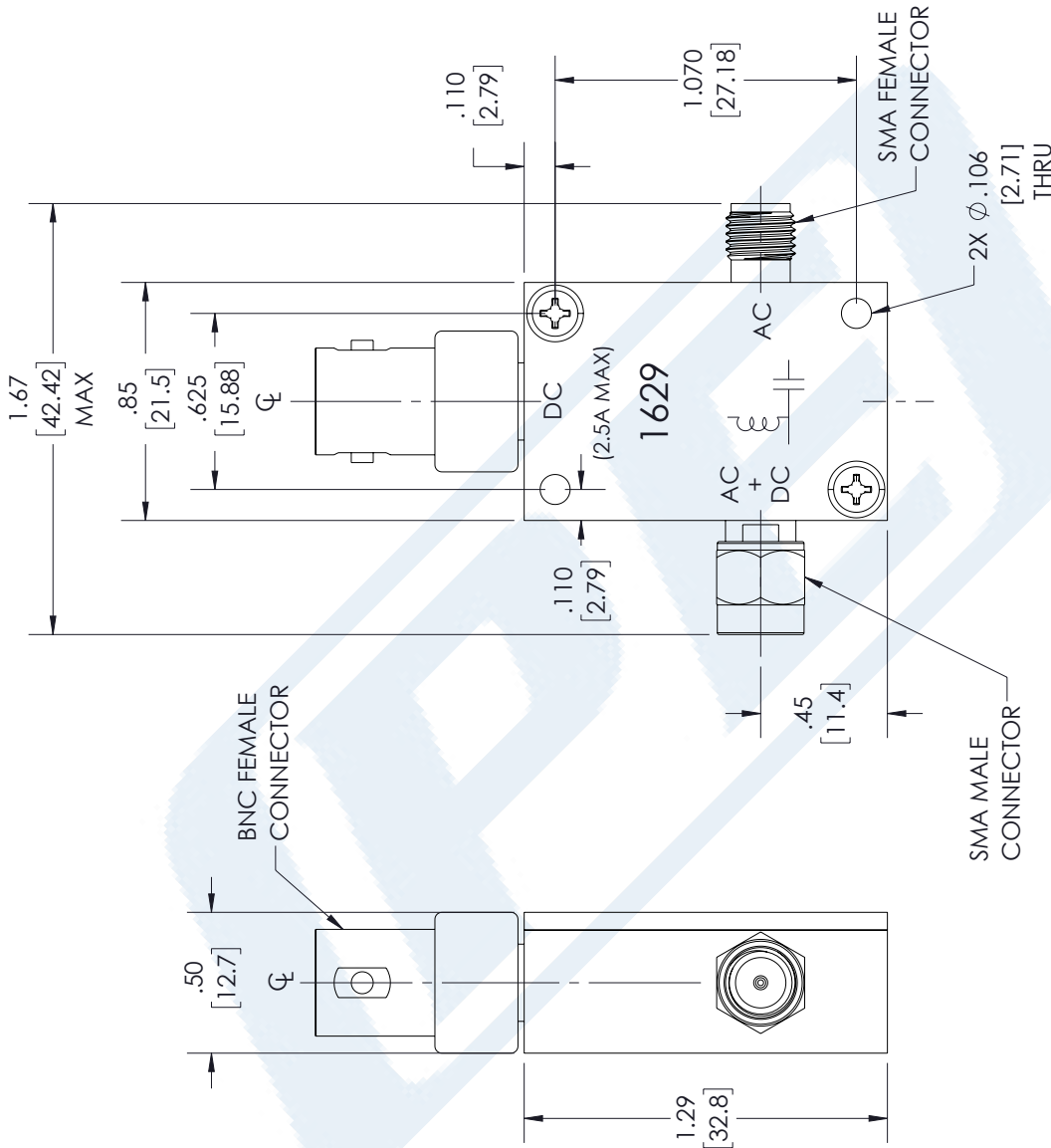
URL: <https://www.pasternack.com/sma-bias-tee-10-mhz-12-ghz-2500-ma-100-volts-dc-pe1629-p.aspx>

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PE1629 CAD Drawing

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



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]	± .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

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

PE PASTERNAK
an INFINITE brand

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SHEET 1 OF 1
SCALE N/A

REV A

ITEM NO. PE1629

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