



10 MHz to 3 GHz, Type F 75 Ohm Bias Tee, Rated
2.5 Amps and 100 Volts, DC BNC Connector

Bias Tees Technical Data Sheet

PE1650

Features

- 75 Ohm Broadband Bias Tee
- 10 MHz to 3 GHz Frequency Range
- Insertion Loss: 0.8 dB Typ
- Isolation: 40 dB typ
- VSWR: 1.5:1 typ
- 75 Ohms Input and Output Matched
- Type F Female RF Input Connector
- Type F Female RF Output Connector
- DC Connector: Female BNC
- Operational Temperature: -55°C to +105°C
- Rating: 2.5 Amps 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 PE1650 is a 75 Ohm Broadband Bias Tee that operates from 10 MHz to 3 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 75 ohm input/output impedance and displays impressive typical performance that includes 0.8 dB insertion loss, 40 dB RF to Bias Port Isolation, and 1.5:1 VSWR. The Bias Tee is rated for 2.5 Amps and +100 Volts max DC voltage. The compact package uses a Type F Female connector at the RF input and a Type F 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 F Female
DC/RF Port Connector F Female
DC Port Connector BNC Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		3	GHz
Impedance		75		Ohms
VSWR		1.5:1	1.8:1	
Insertion Loss		0.8	3	dB
RF to Bias Isolation		40		dB
DC Voltage			100	Vdc
DC Current			2.5	A
Bias Path Resistance		0.04	0.05	Ohm
3dB Bandwidth	0.005		6	GHz

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 3 GHz, Type F 75 Ohm Bias Tee, Rated 2.5 Amps and 100 Volts, DC BNC Connector PE1650](#)



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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

1 in [25.4 mm]

Weight

0.05 lbs [22.68 g]

Environmental Specifications

Temperature

Operating Range

-55 to +105 deg C

Storage Range

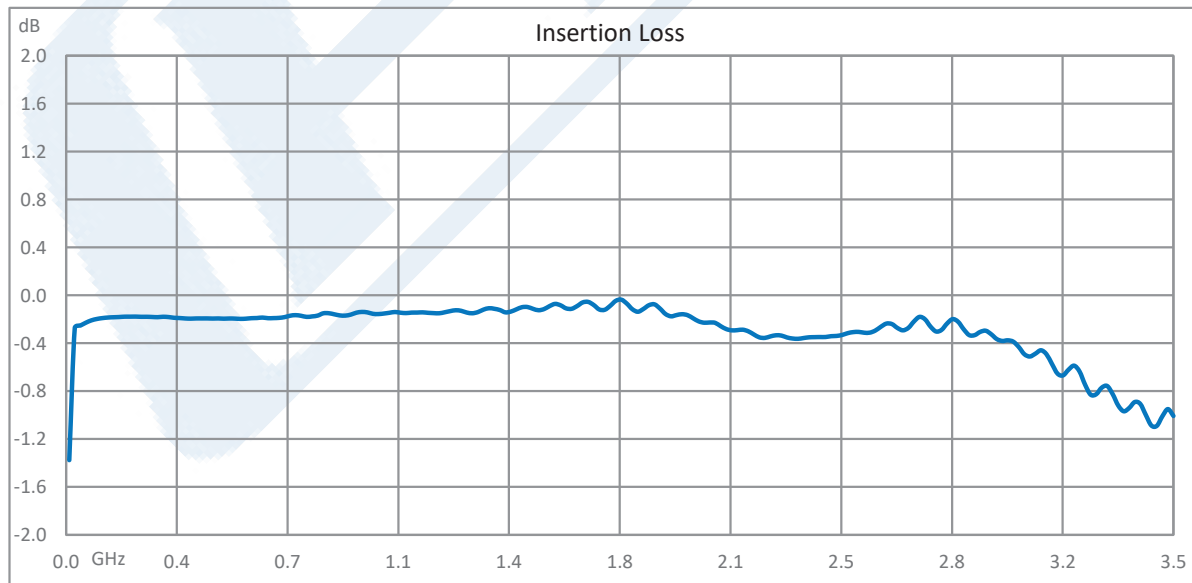
-60 to +90 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



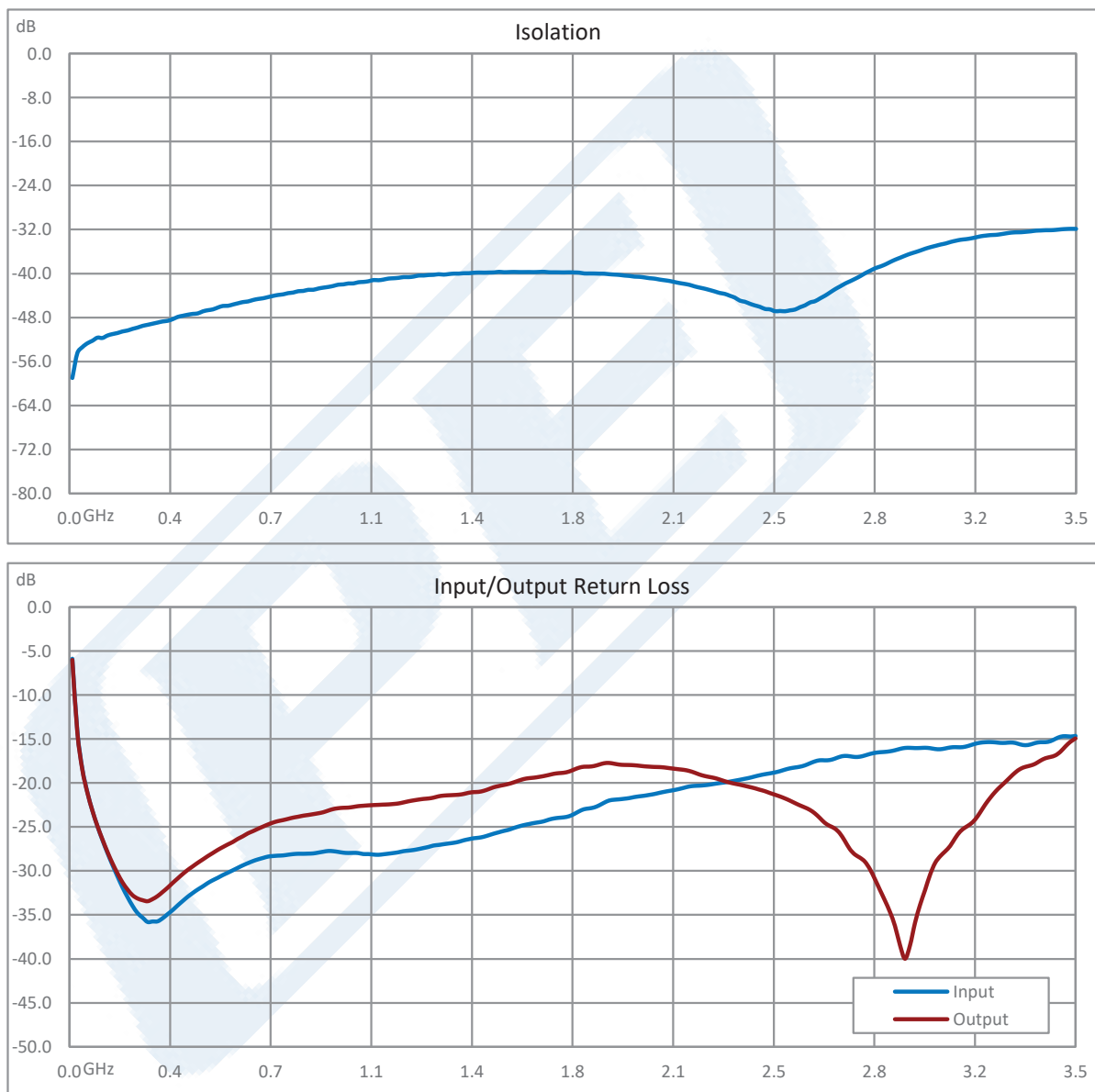
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10 MHz to 3 GHz, Type F 75 Ohm Bias Tee, Rated 2.5 Amps and 100 Volts, DC BNC Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

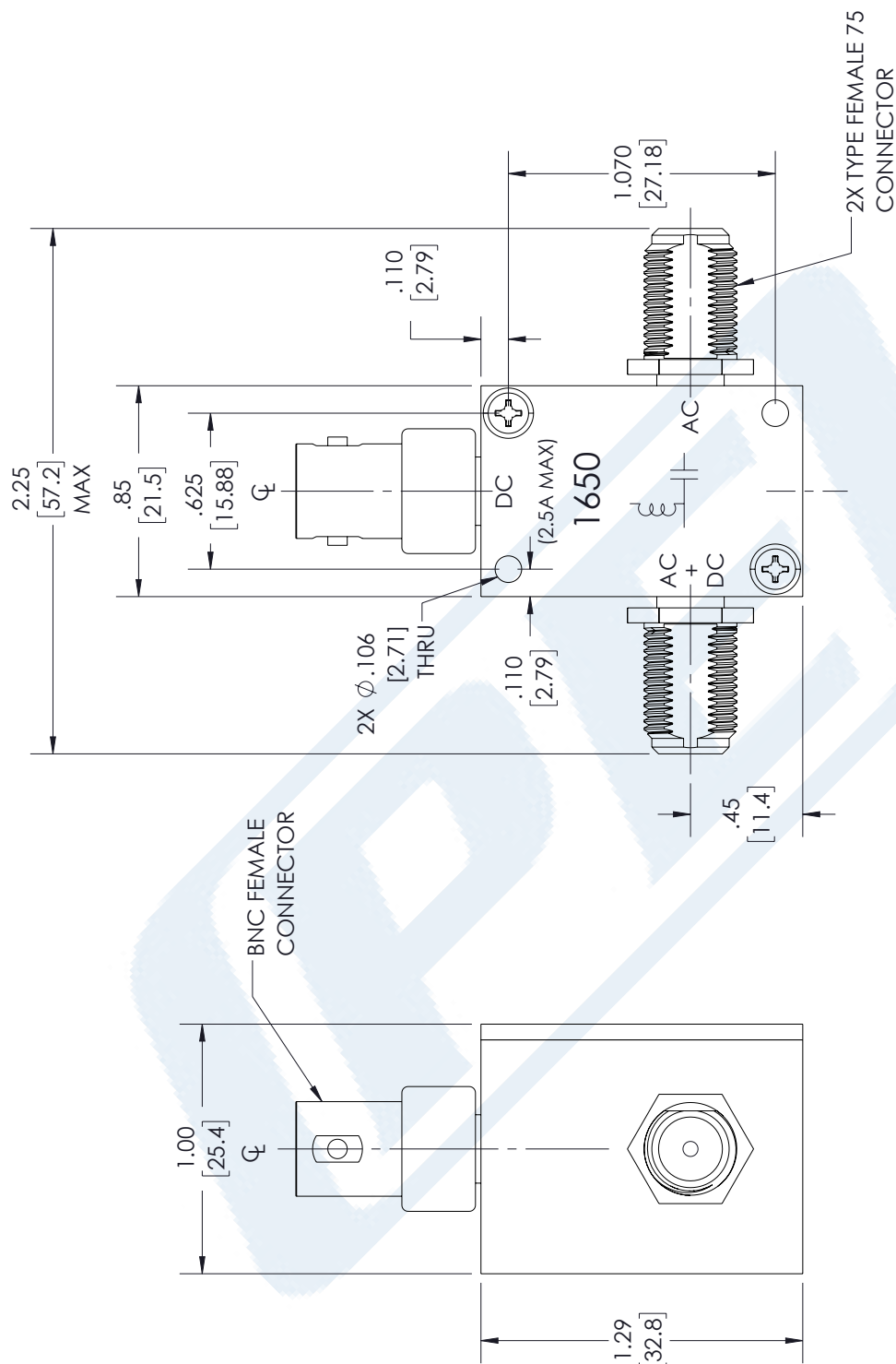
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [10 MHz to 3 GHz, Type F 75 Ohm Bias Tee, Rated 2.5 Amps and 100 Volts, DC BNC Connector PE1650](https://www.pasternack.com/f-bias-tee-10-mhz-3-ghz-2500-ma-100-volts-dc-pe1650-p.aspx)

URL: <https://www.pasternack.com/f-bias-tee-10-mhz-3-ghz-2500-ma-100-volts-dc-pe1650-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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

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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

	CONCENTRATION	TEMPERATURE	CRYSTALLINITY	MOLECULAR WEIGHT	CRYSTALLINITY	MOLECULAR WEIGHT
X	± 2	[508]			FRACTIONS	
XX	± 0.2	[.51]			$\pm 1/32$	
XXX	± 0.05	[.13]			ANGLES $\pm 1^\circ$	
CABLE LENGTH (L) TOLERANCES:						
$L \leq 12 \quad [305] = +1 \quad [25] / -0$ $12 \quad [305] < L \leq 60 \quad [1524] = +2 \quad [51] / -0$ $60 \quad [1524] < L \leq 120 \quad [3048] = +4 \quad [102] / -0$ $120 \quad [3048] < L \leq 300 \quad [7620] = +6 \quad [152] / -0$ $300 \quad [7620] < L = +5\% / -0$						

THIRD-ANGLE PROJECTION

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SCALE	N/A
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