

50 KHz to 12.4 GHz SMA Broadband Bias Tee, Male Input,
Rated to 750 mA and 25 Volts, DC SMA Connector

Bias Tees Technical Data Sheet

PE1631

Features

- General Purpose Broadband Bias Tee
- 50 KHz to 12.4 GHz Frequency Range
- Insertion Loss: 1 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.3:1 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

Description

The PE1631 is a Broadband Bias Tee that operates from 50 KHz to 12.4 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 1.3:1 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.

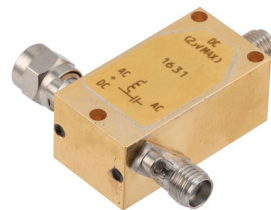
Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	50KHz		12.4	GHz
Impedance		50		Ohms
VSWR		1.3:1	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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 KHz to 12.4 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 mA and 25 Volts, DC SMA Connector PE1631](#)



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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

0.05 lbs [22.68 g]

Environmental Specifications

Temperature

Operating Range

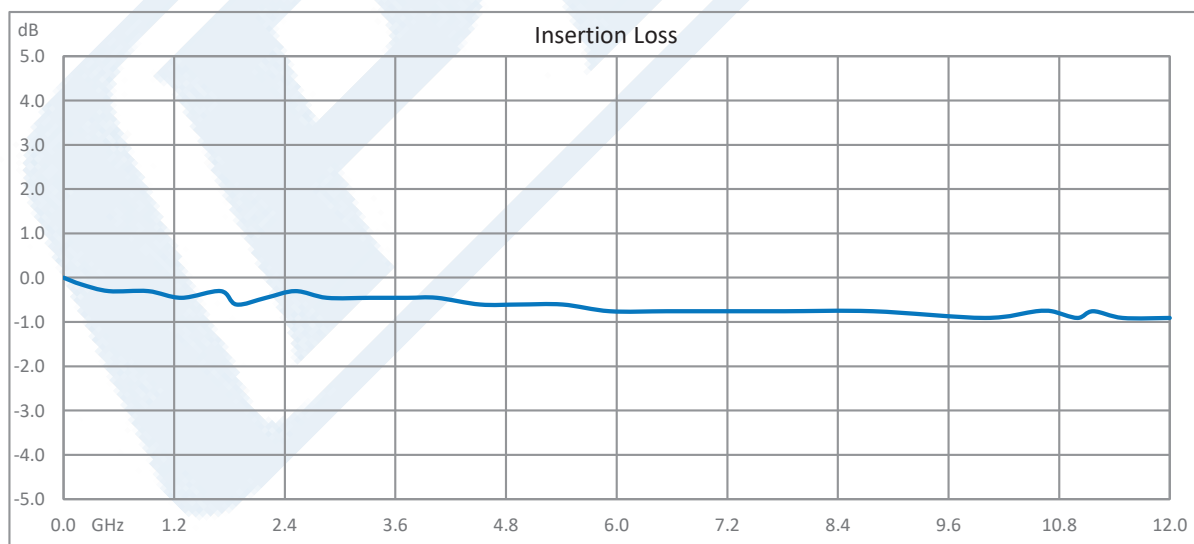
-15 to +30 deg C

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

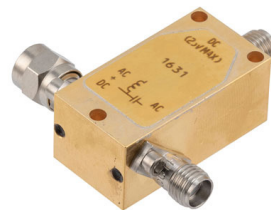
Plotted and Other Data

Notes:

Typical Performance Data



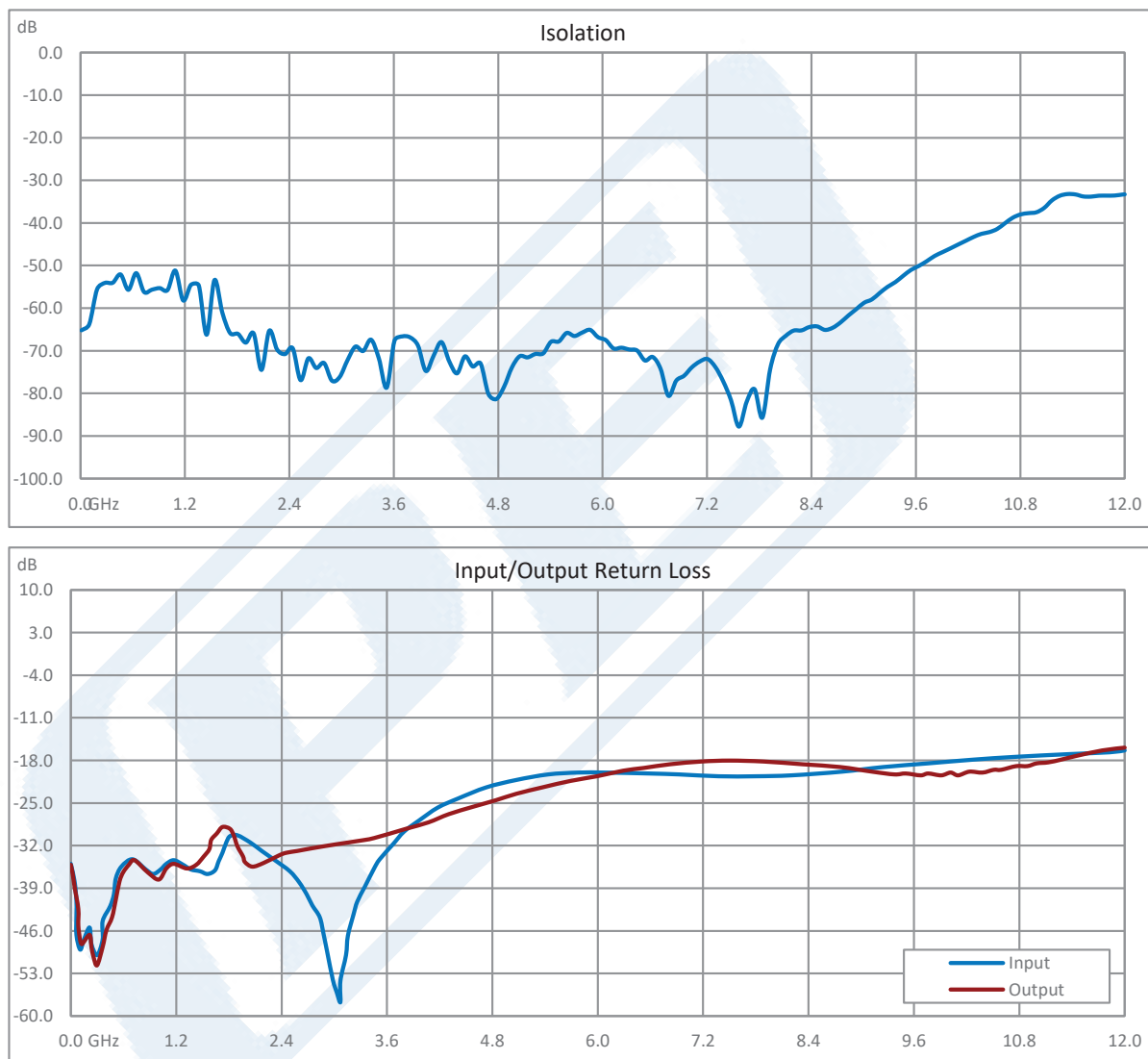
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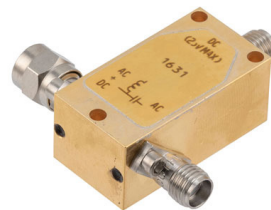
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50 KHz to 12.4 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 mA and 25 Volts, DC SMA Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 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: [50 KHz to 12.4 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 mA and 25 Volts, DC SMA Connector PE1631](https://www.pasternack.com/0.05-mhz-12.4-ghz-bias-tee-750-ma-25-volts-dc-pe1631-p.aspx)

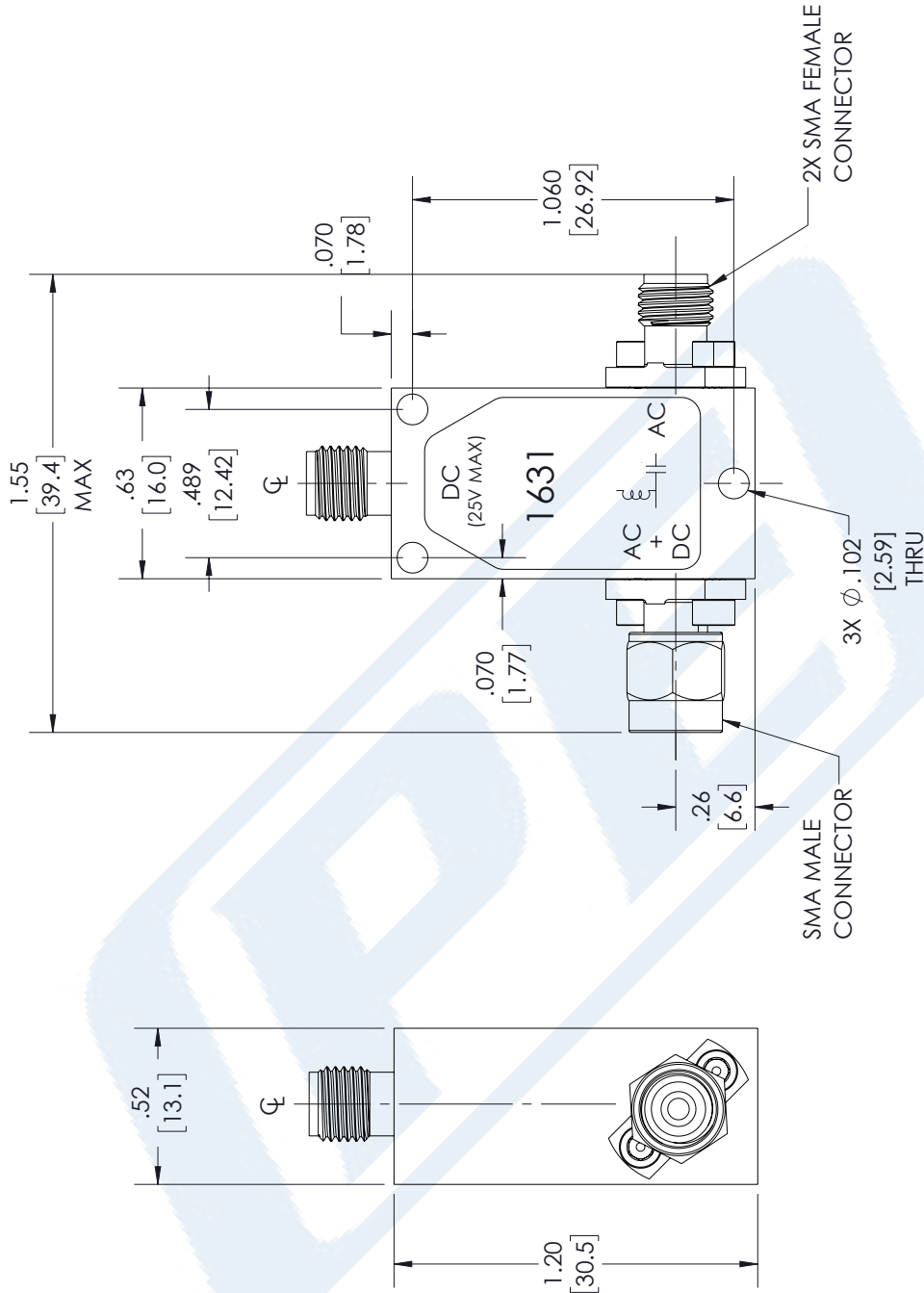
URL: <https://www.pasternack.com/0.05-mhz-12.4-ghz-bias-tee-750-ma-25-volts-dc-pe1631-p.aspx>

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.

PE1631 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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SHEET 1 OF 1

SCALE N/A

REV A

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E-mail: sales@pasternack.com

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

TOLERANCES:

FRACTIONS	DECIMALS
.XX = ± .02	.XX = ± .02
.XXX = ± .005	.XXX = ± .005

ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	± .125 [3.175]
12 [305] < L ≤ 60 [1524]	± .125 [3.175] / -0
60 [1524] < L ≤ 120 [3048]	± .125 [3.175] / -0
120 [3048] < L ≤ 300 [7620]	± .125 [3.175] / -0
300 [7620] < L	± .5% L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A 53919

DRAWN BY BPUCHASKI

ITEM NO. PE1631

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