

12 KHz to 40 GHz, 2.92mm Broadband Bias Tee,
Rated 150 mA and 16 Volts, DC SMA Connector

Bias Tees Technical Data Sheet

PE1644

Features

- General Purpose Wideband Bias Tee
- 12 KHz to 40 GHz Frequency Range
- Insertion Loss: 1.5 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.7:1 typ
- 50 Ohms Input and Output Matched
- 2.92mm Female RF Input Connector
- 2.92mm Female RF Output Connector
- DC Connector: SMA Female
- Operational Temperature: +15°C to +30°C
- Rating: 150 mA max DC Current and +16V 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 PE1644 is a Wideband Bias Tee that operates from 12 KHz to 40 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 1.5 dB insertion loss, 50 dB RF to Bias Port Isolation, and 1.7:1 VSWR. The Bias Tee is rated for 150 mA and +16 Volts max DC voltage. The compact package uses a 2.92mm Female connector at the RF input and a 2.92mm Female connector at the RF output. An SMA Female Connector is used for the DC Port. Operational Temperature is +15°C to +30°C.

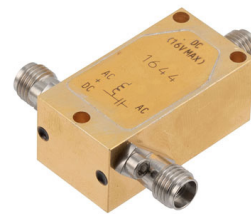
Configuration

RF Port Connector	2.92mm Female
DC/RF Port Connector	2.92mm Female
DC Port Connector	SMA Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	12KHz		40	GHz
Impedance		50		Ohms
VSWR		1.7:1	2.5:1	
Insertion Loss		1.5	3	dB
RF to Bias Isolation		50		dB
DC Voltage			16	Vdc
DC Current			150	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: [12 KHz to 40 GHz, 2.92mm Broadband Bias Tee, Rated 150 mA and 16 Volts, DC SMA Connector PE1644](#)



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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

0.5 in [12.7 mm]

Weight

0.05 lbs [22.68 g]

Environmental Specifications

Temperature

Operating Range

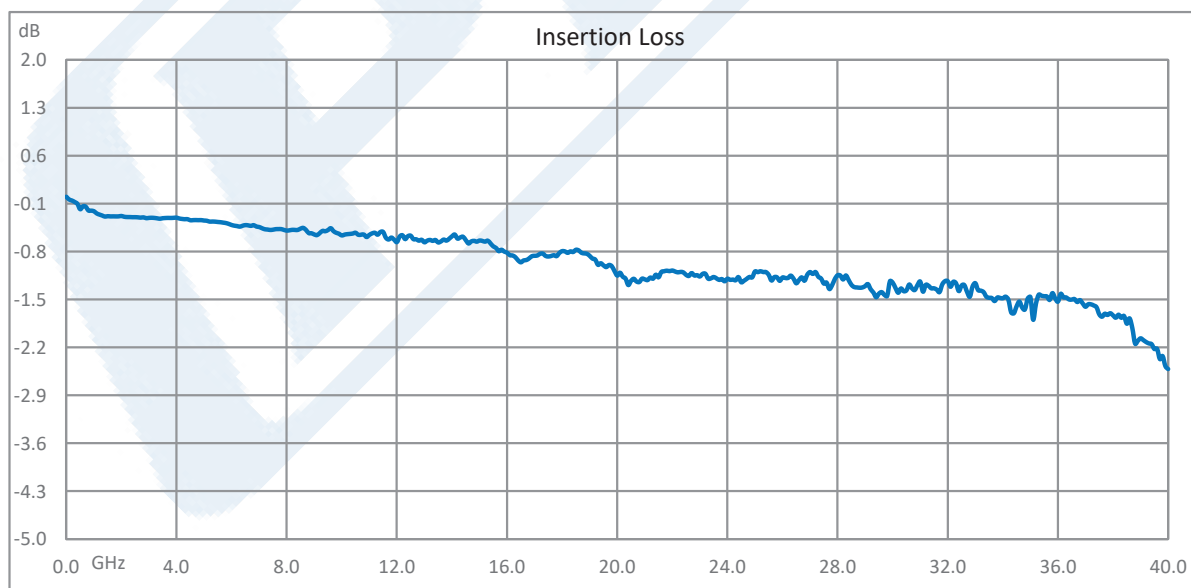
+15 to +30 deg C

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

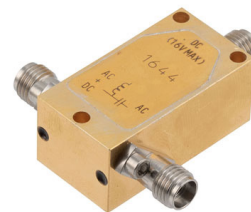
Plotted and Other Data

Notes:

Typical Performance Data



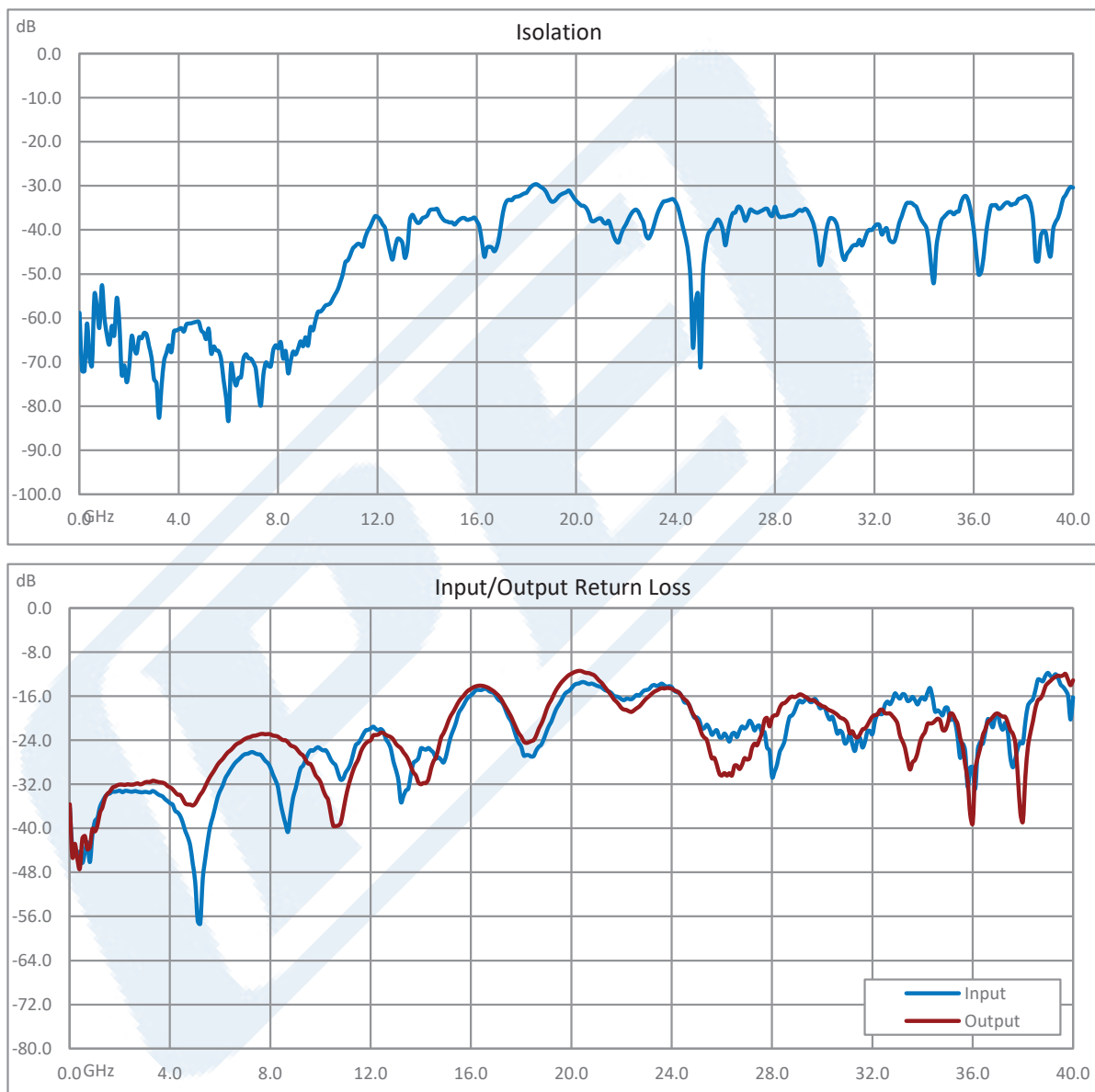
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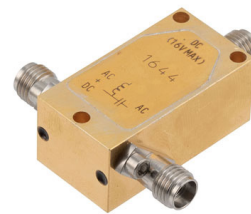
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12 KHz to 40 GHz, 2.92mm Broadband Bias Tee, Rated 150 mA and 16 Volts, DC SMA Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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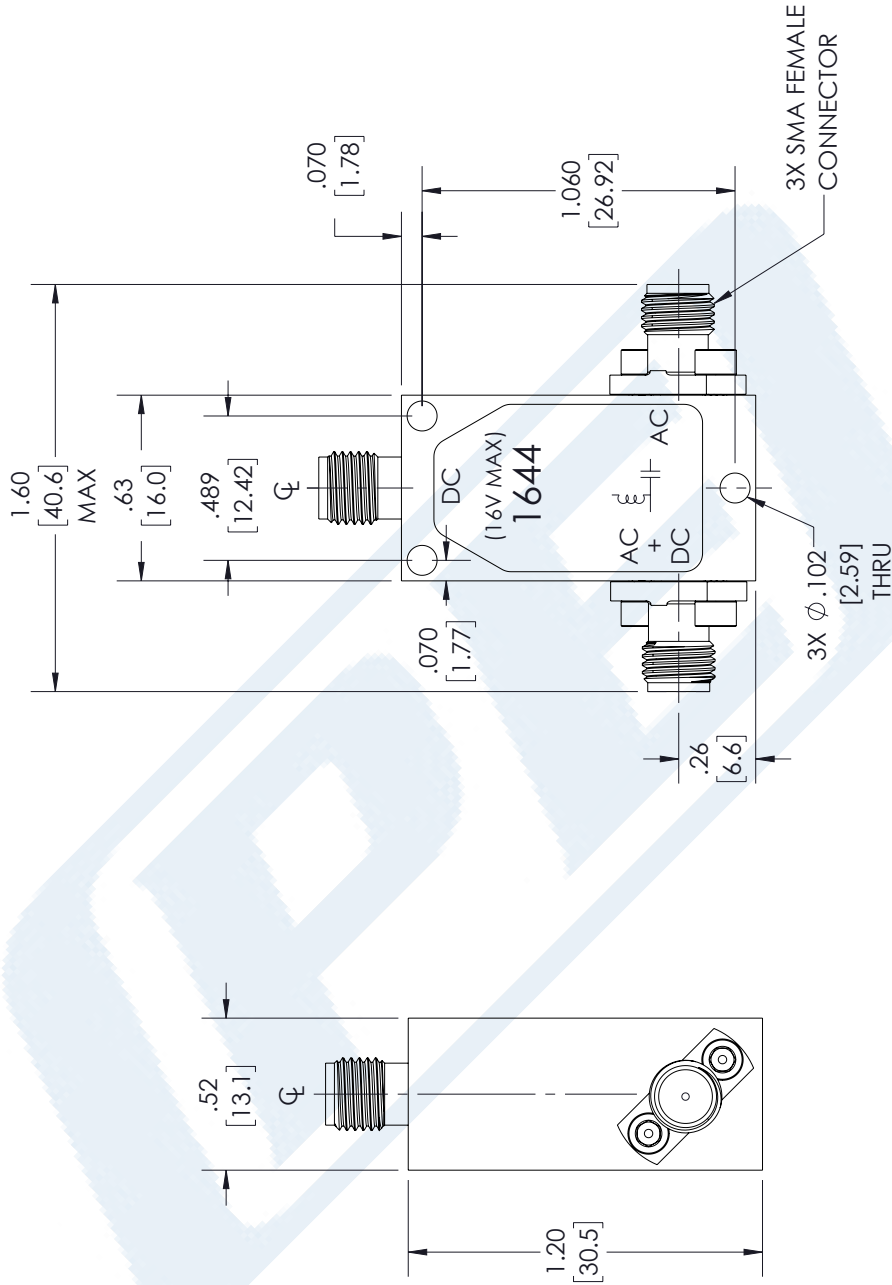
URL: <https://www.pasternack.com/0.012-mhz-40-ghz-bias-tee-150-ma-16-volts-dc-pe1644-p.aspx>

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PE1644 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]
 .XX = ±.02 [.51]
 .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% / -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

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