



50 KHz to 26 GHz SMA Broadband Bias Tee,
Male Input, Rated to 750 MHz and 25 Volts, DC Pin

Bias Tees Technical Data Sheet

PE1638

Features

- General Purpose Broadband Bias Tee
- 50 KHz to 26 GHz Frequency Range
- Insertion Loss: 1.4 dB Typ
- Isolation: 50 dB typ
- VSWR: 1.5:1 typ
- 50 Ohms Input and Output Matched
- SMA Male RF Input Connector
- SMA Female RF Output Connector
- DC Connector: Solder Post Pin
- 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 PE1638 is a Broadband Bias Tee that operates from 50 KHz to 26 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 1.4 dB insertion loss, 50 dB RF to Bias Port Isolation, and 1.5:1 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 Solder Post Pin is used for the DC Connector. Operational Temperature is +15°C to +30°C.

Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	50KHz		26	GHz
Impedance		50		Ohms
VSWR		1.5:1	1.8:1	
Insertion Loss		1.4	3	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 26 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin PE1638](#)



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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

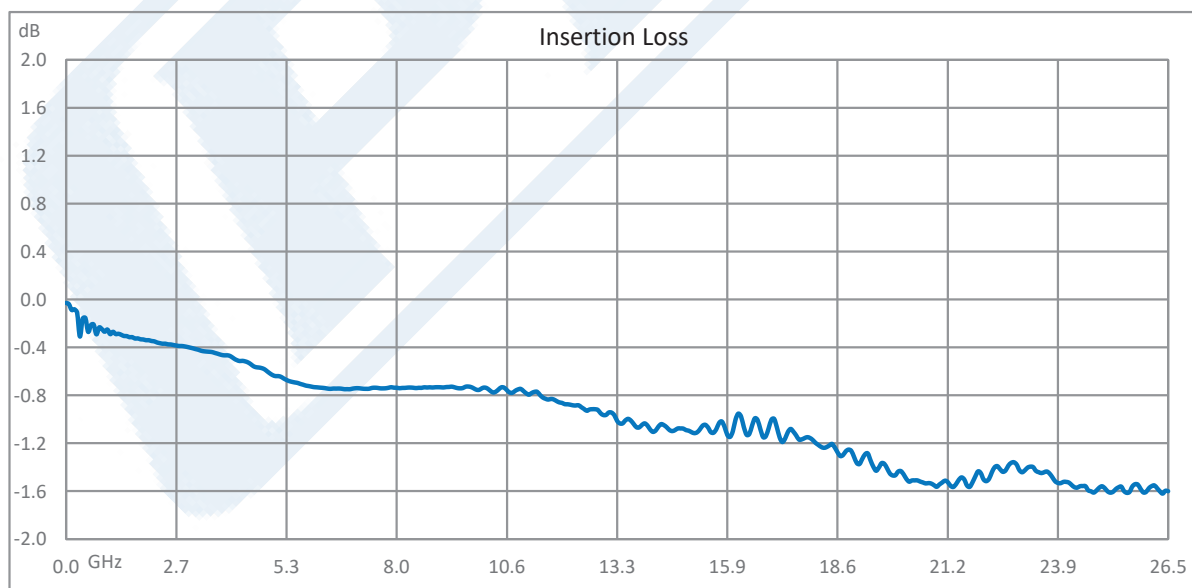
+15 to +30 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data



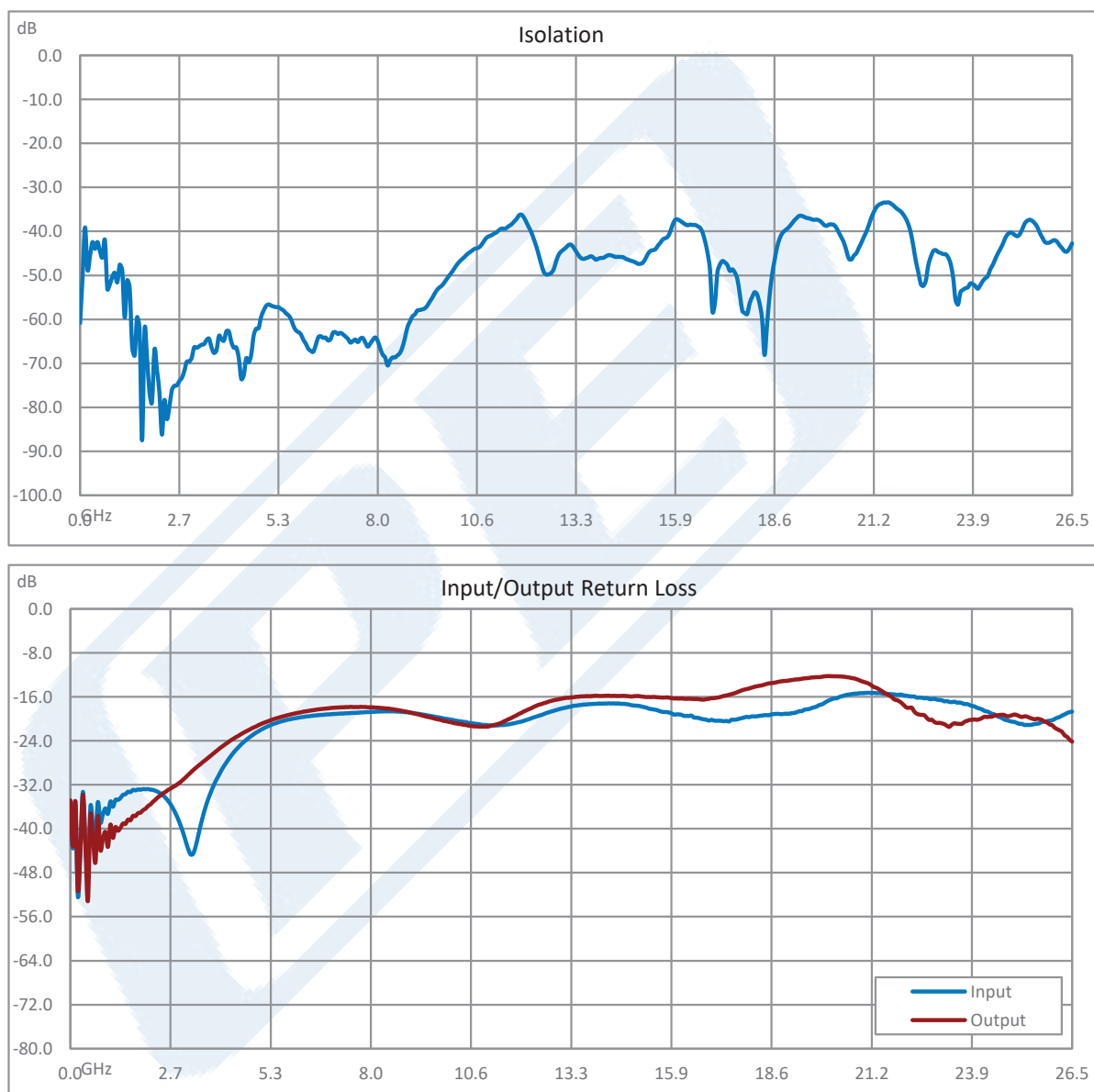
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50 KHz to 26 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability 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: [50 KHz to 26 GHz SMA Broadband Bias Tee, Male Input, Rated to 750 MHz and 25 Volts, DC Pin PE1638](https://www.pasternack.com/0.05-mhz-26-ghz-bias-tee-750-ma-25-volts-dc-pe1638-p.aspx)

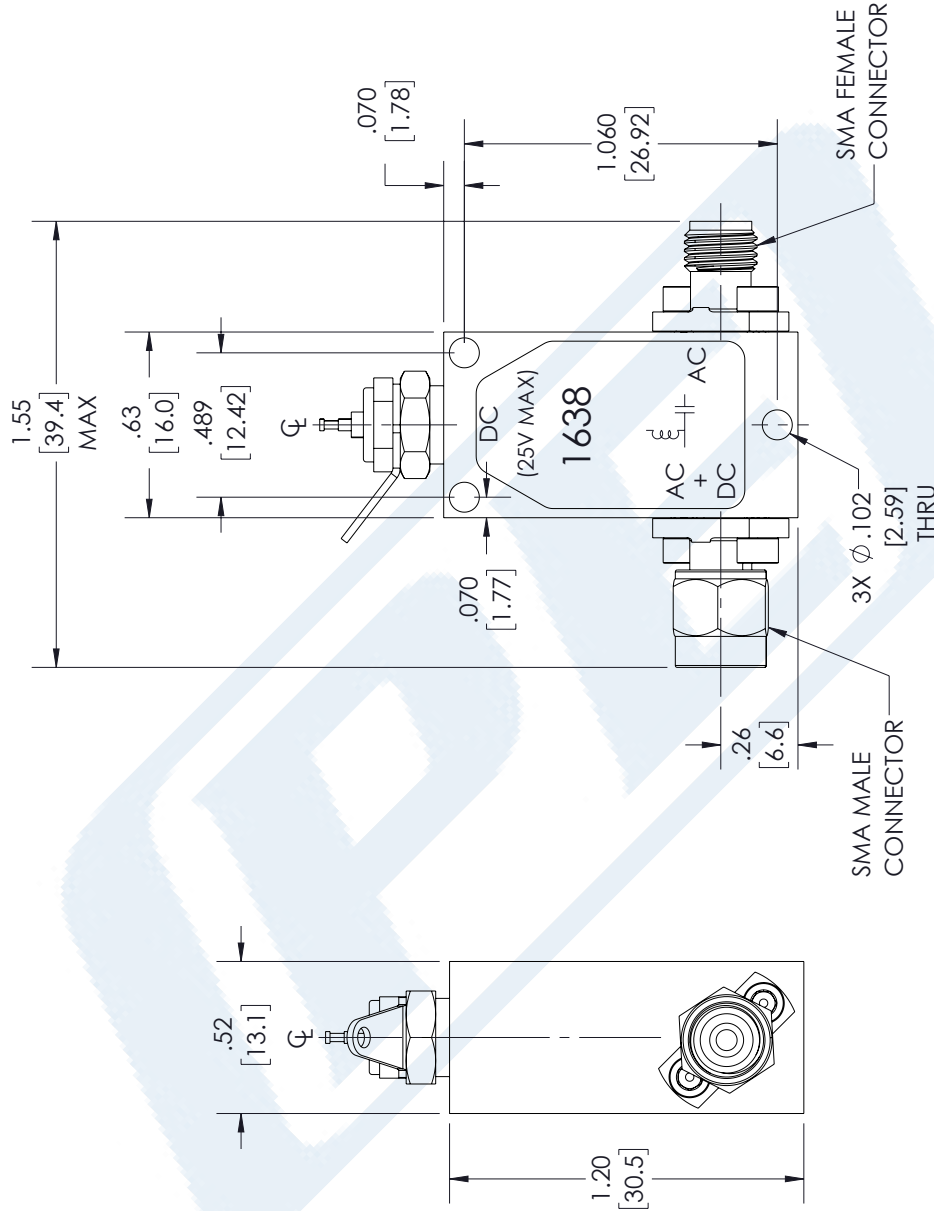
URL: <https://www.pasternack.com/0.05-mhz-26-ghz-bias-tee-750-ma-25-volts-dc-pe1638-p.aspx>

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.

PE1638 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.

THIRD-ANGLE PROJECTION



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SCALE N/A

REV A



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