



1 GHz to 6 GHz SMA High Current Bias Tee, Rated 7 Amps and 100 Volts, DC SMA Connector

Bias Tees Technical Data Sheet

PE1653

Features

- High Current Bias Tee
- 1 GHz to 6 GHz Frequency Range
- Insertion Loss: 0.5 dB Typ
- Isolation: 30 dB typ
- VSWR: 1.2:1 typ
- RF Input Power Handling 50W max
- 50 Ohms Input and Output Matched
- SMA Female RF Input Connector
- SMA Female RF Output Connector
- DC Connector: SMA Female
- Operational Temperature: -55°C to +105°C
- Rating: 7 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 PE1653 is a High Current Bias Tee that operates from 1 GHz to 6 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 0.5 dB insertion loss, 30 dB RF to Bias Port Isolation, and 1.2:1 VSWR. The Bias Tee is rated for 7 Amps and +100 Volts max DC voltage. Maximum RF input power handling is 50W. The compact package uses an SMA Female connector at the RF input and an SMA Female connector at the RF output. An SMA Female Connector is used for the DC port. Operational Temperature is -55°C to +105°C.

Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		6	GHz
Impedance		50		Ohms
VSWR		1.2:1	1.5:1	
Insertion Loss		0.5	1	dB
RF to Bias Isolation		30		dB
DC Voltage			100	Vdc
DC Current			7	A
Input Power (CW)			50	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1 GHz to 6 GHz SMA High Current Bias Tee, Rated 7 Amps and 100 Volts, DC SMA Connector PE1653](#)



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3dB Bandwidth 8 10 KHz

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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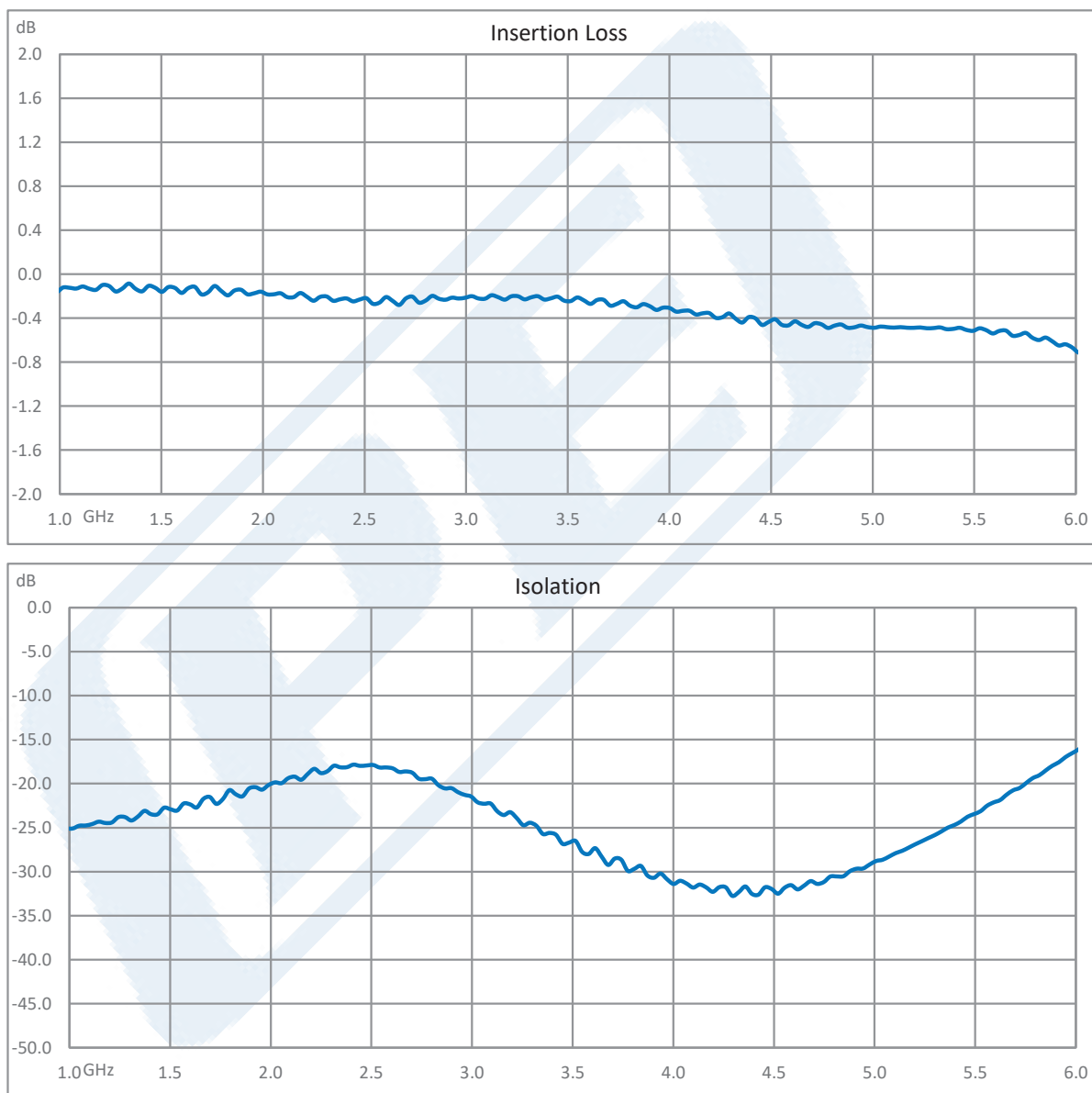


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Typical Performance Data



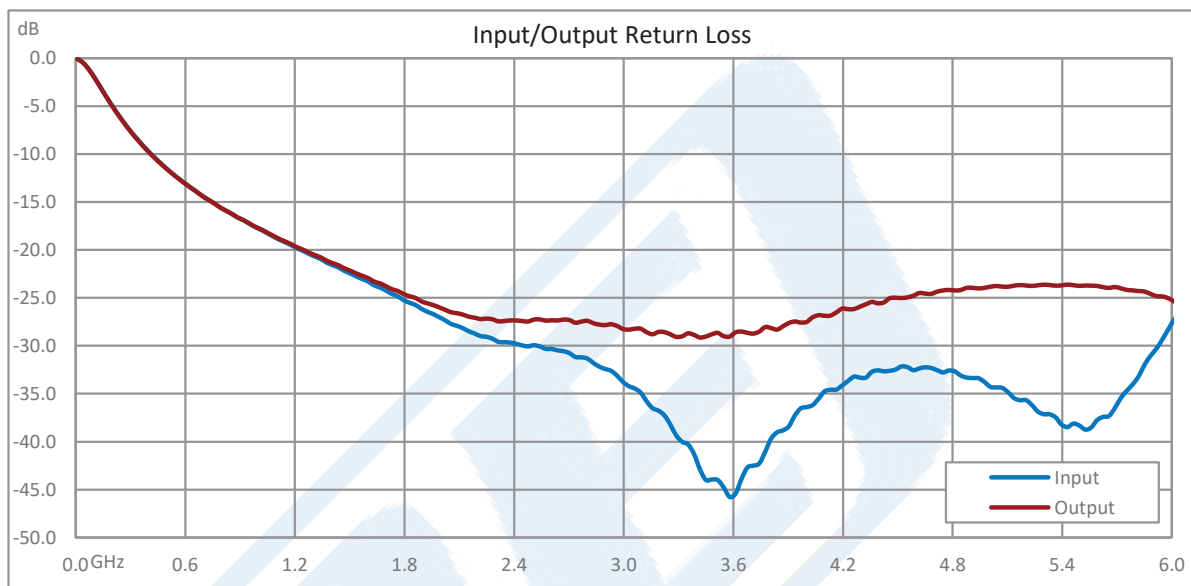
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1 GHz to 6 GHz SMA High Current Bias Tee, Rated 7 Amps and 100 Volts, DC SMA Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability 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: [1 GHz to 6 GHz SMA High Current Bias Tee, Rated 7 Amps and 100 Volts, DC SMA Connector PE1653](https://www.pasternack.com/1-6-ghz-bias-tee-7000-ma-100-volts-dc-pe1653-p.aspx)

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