## **Bias Tee**

BT-0050-3

400 MHz to 50 GHz, 2000 mA and 100 VDC, 2.4mm

**HZ-THZ** 

#### **Description**

HZ-THZ BT-0050-3 is a 2.4mm bias tee (also known as bias T) that operates from 400 MHz to 50 GHz with a bias rating of 100 VDC and 2000 mA. This bias tee is configured with 2.4mm inputs on the RF ports and 2.4mm on the bias port. BT-0050-3 2.4mm bias T offers good electrical performance featuring 1.5 dB insertion loss and 30 dB isolation. Bias tees are typically used to inject a DC signal into an RF path such as when biasing an amplifier or any other active device, supplying power to the connected output without disrupting the RF signal. They can also be used as DC returns to provide a ground return path for the input device or DC blocks to prevent direct current signals from flowing through the output device. HZ-THZ bias tees are available in various connector configurations over different frequency bands to fit your needs, all of which shipped worldwide the same day.

#### **Features**

- Broadband: 400 MHz to 50 GHz
- Low Insertion Loss
- Isolation 30 dB
- 2000 mA / 100 VDC Bias
- RF Power 2 W Min

### **Applications**

- Amplifier Biasing
- Coax
- Wireless Systems
- DC Return / Block
- Test and Measurement
- Transmitting Power With a Single
- Communication Systems

#### **Configuration**

RF Port Connector
DC/RF Port Connector
DC Port Connector

2.4mm Female2.4mm FemaleSMA Female

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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.4		50	GHz
Impedance		50		Ohms
VSWR		1.5	2.0	: 1
Insertion Loss		1.5	3	dB
RF to Bias Isolation		30		dB
DC Current			2000	mA
DC Voltage			100	Vdc
RF Power	2			W
DC Resistance		0.5		Ω
Inductance		0.1		uН
Capacitance		0.000082		uF
Risetime/Falltime		10		ps
Operating Temperature	-55		+105	$^{\circ}\!\mathbb{C}$
Storage Temperature	-55		+125	$^{\circ}\! \mathbb{C}$

**Electrical Specification Notes:** 

Values at +25°C, sea level.

## **Mechanical Specifications**

Size

 Length
 1.26 in [32.00 mm]

 Width
 1.18 in [30.00 mm]

 Height
 0.39 in [10.00 mm]

Weight 0.07 lbs [30.00 g]

Package Type Customized

## **Outline Drawings**

Unit: mm

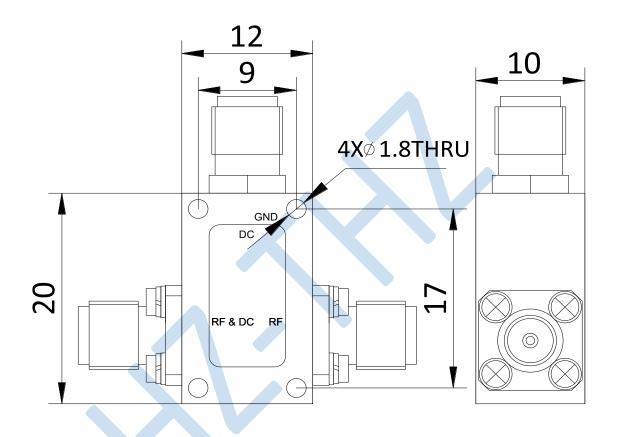
Tolerance: ±0.05 mm

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## **How To Order**

## BT-0050-3

Pls send request to sales@hz-thz.com.