## **Bias Tee**

BT-0040

30 KHz to 40 GHz, 500 mA and 25 VDC, 2.92mm

**HZ-THZ** 

## **Description**

HZ-THZ BT-0040 is a 2.92mm bias tee (also known as bias T) that operates from 30 KHz to 40 GHz with a bias rating of 25 VDC and 500 mA. This bias tee is configured with 2.92mm inputs on the RF ports and 2.92mm on the bias port. BT-0040 2.92mm bias T offers good electrical performance featuring 1.0 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: 30 KHz to 40 GHz
- Low Insertion Loss
- Isolation 30 dB
- 500 mA / 25 VDC Bias
- RF Power 1 W Max

## **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

2.92mm Female 2.92mm Female SMA Female 30 KHz to 40 GHz, 500 mA and 25 VDC, 2.92mm

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.00003		40	GHz
Impedance		50		Ohms
VSWR		1.5	2.0	: 1
Insertion Loss		1.0	2.5	dB
RF to Bias Isolation		30		dB
DC Current			500	mA
DC Voltage			25	Vdc
RF Power			1	W
DC Resistance		0.8		Ω
Inductance		470		uН
Capacitance		0.22		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
 1.72 in [43.80 mm]

 Width
 1.20 in [30.60 mm]

 Height
 0.51 in [13.00 mm]

Weight 0.07 lbs [30.00 g]

Package Type Customized

## **Outline Drawings**

Unit: mm

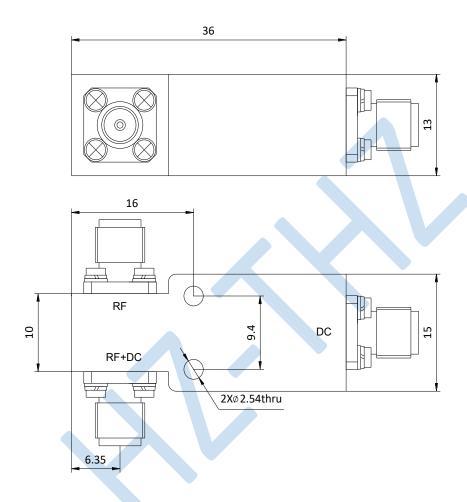
Tolerance: ±0.05 mm

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## **How To Order**

### BT-0040

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