

### Description

HZ-THZ BT-0008-1 is a SMA bias tee (also known as bias T) that operates from 10 MHz to 8 GHz with a bias rating of 50 VDC and 500 mA. This bias tee is configured with SMA inputs on the RF ports and SMA on the bias port. BT-0008-1 SMA bias T offers good electrical performance featuring 0.5 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: 10 MHz to 8 GHz
- Low Insertion Loss
- Isolation 30 dB
- 500 mA / 50 VDC Bias
- RF Power 1 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	SMA Female
DC/RF Port Connector	SMA Female
DC Port Connector	SMA Female

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		8	GHz
Impedance		50		Ohms
VSWR		1.5	1.8	: 1
Insertion Loss		0.5	1.5	dB
RF to Bias Isolation		30		dB
DC Current			500	mA
DC Voltage			50	Vdc
RF Power	1			W
DC Resistance		0.6		$\Omega$
Inductance		1.6		$\mu$ H
Capacitance		0.001		$\mu$ F
Risetime/Falltime		10		ps
Operating Temperature	-55		+105	$^{\circ}$ C
Storage Temperature	-55		+125	$^{\circ}$ C

Electrical Specification Notes:

Values at +25 $^{\circ}$ C, sea level.

### Mechanical Specifications

#### Size

Length 1.29 in [32.80 mm]

Width 0.71 in [18.00 mm]

Height 0.55 in [14.00 mm]

Weight 0.07 lbs [30.00 g]

Package Type Customized

### Outline Drawings

Unit: mm

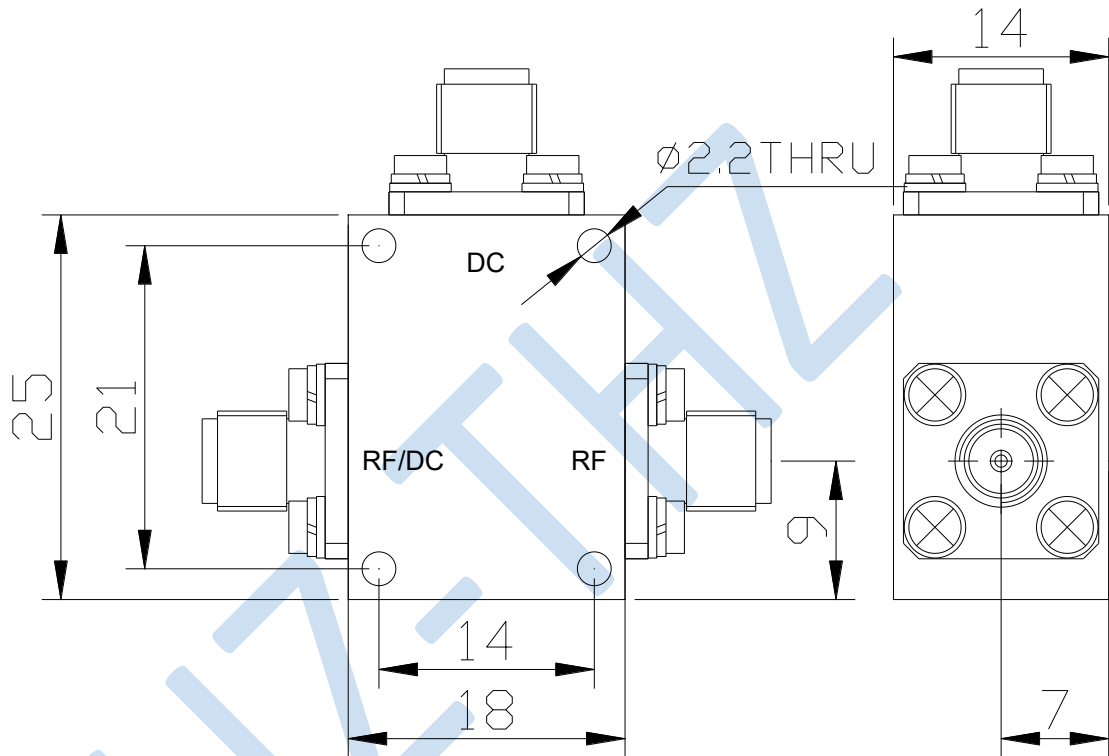
Tolerance:  $\pm$ 0.05 mm

# Bias Tee

BT-0008-1

10 MHz to 8 GHz, 500 mA and 50 VDC, SMA

HZ-THZ



## How To Order

**BT-0008-1**

Pls send request to [sales@hz-thz.com](mailto:sales@hz-thz.com).