

## Cryogenic Baise Tee

100KHz-18GHz /50V DC/SMA

Model: TLBT-100K18G-50-SS-Cryo

TLBT-100K18G-18-SS-Cryo is a cryogenic baise tee that operates from 100 KHz to 18 GHz. The cryogenic baise tee offers 2.0 dB insertion loss and -15 dB typical return loss. The cryogenic RF choke can handle up to +50 VDC bias voltage and 500 mA current. The all ports are equipped with SMA female connectors.

### Features:

- Frequency range:100KHz-18GHz
- Low Insertion Loss
- High Voltage
- High Current Capacity

### Applications:

- Test Lab
- Sub-assemblies
- System Integrations

### Electrical Characteristics:

| Parameter       | Min    | Typ | Max   | Units    |
|-----------------|--------|-----|-------|----------|
| Frequency range | 100KHz |     | 18GHz |          |
| Insertion Loss  |        | 2   |       | dB       |
| Return Loss     |        | -15 |       | dB       |
| Isolation       | 35     |     |       | dB       |
| DC Voltage      |        |     | 50    | V DC     |
| DC Resistance   |        | 4   |       | $\Omega$ |
| DC Current      |        |     | 500   | mA       |
| RF Power        |        |     | 1     | W        |

### Mechanical Specifications:

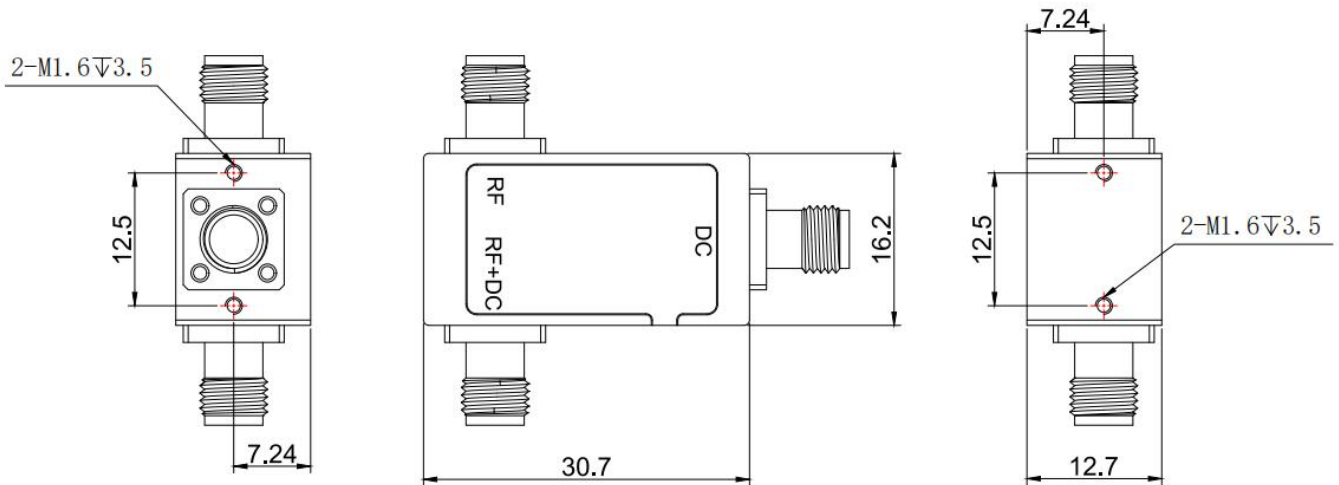
| Parameter            | Value                 | Units |
|----------------------|-----------------------|-------|
| 输入 /Output Connector | SMA Female/SMA Female |       |
| DC Connector         | SMA Female            |       |
| Case Material        | OFC                   |       |
| Finish               | Bue Paint             |       |
| Size                 | 30.7*16.2*12.7        | mm    |

## Absolute Maximum Ratings:

| Parameter             | Value                |
|-----------------------|----------------------|
| 供Supply Bias Voltage  | +50 V                |
| RF Input Power        | +30 dBm              |
| ESD sensitivity (HBm) | Class 0, passed 150V |

## Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly  
adhere to ESD precautions  
to prevent electrostatic  
damage.

## Environmental Conditions:

| Parameter                       | Min                                                 | Typ | Max   | Units |
|---------------------------------|-----------------------------------------------------|-----|-------|-------|
| Operating Temperature           | 10mK                                                |     | +85°C |       |
| Non-operating Temperature       | -55                                                 |     | +125  | °C    |
| Relative humidity               |                                                     | 95  |       | %     |
| Altitude                        | 10,000                                              |     |       | feet  |
| Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |       |       |
| Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |     |       |       |

## Ordering Information:

| Base Number             | Description                                   | Revision |
|-------------------------|-----------------------------------------------|----------|
| TLBT-100K18G-50-SS-Cryo | Cryogenic Baise Tee<br>SMA,100KHz-18 GHz,+50V | Rev.1.2  |

### Notes:

1. All data taken @ +23° C unless otherwise specified.
2. Dimensionsandspecificationsmay be changed withoutprior notice.