

Broadband Bias Tee

10MHz-18GHz /100V DC/SMA

Model: TLBT-10M18G-100-SP

TLBT-10M18G-100-SP is a bias tee that operates from 10MHz to 18 GHz. The bias tee offers 1.2 dB insertion loss and -15 dB typical return loss. The bias tee can handle up to +100VDC bias voltage and 600 mA current. The all ports are equipped with SMA female connectors.

Features:

- Ultra Wide Band:10MHz-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	10MHz-18GHz			
Insertion Loss		1.2	2	dB
Return Loss		-15		dB
Isolation		30		dB
DC Voltage			100	V DC
DC Current			600	mA
RF Power			10	W

Mechanical Specifications:

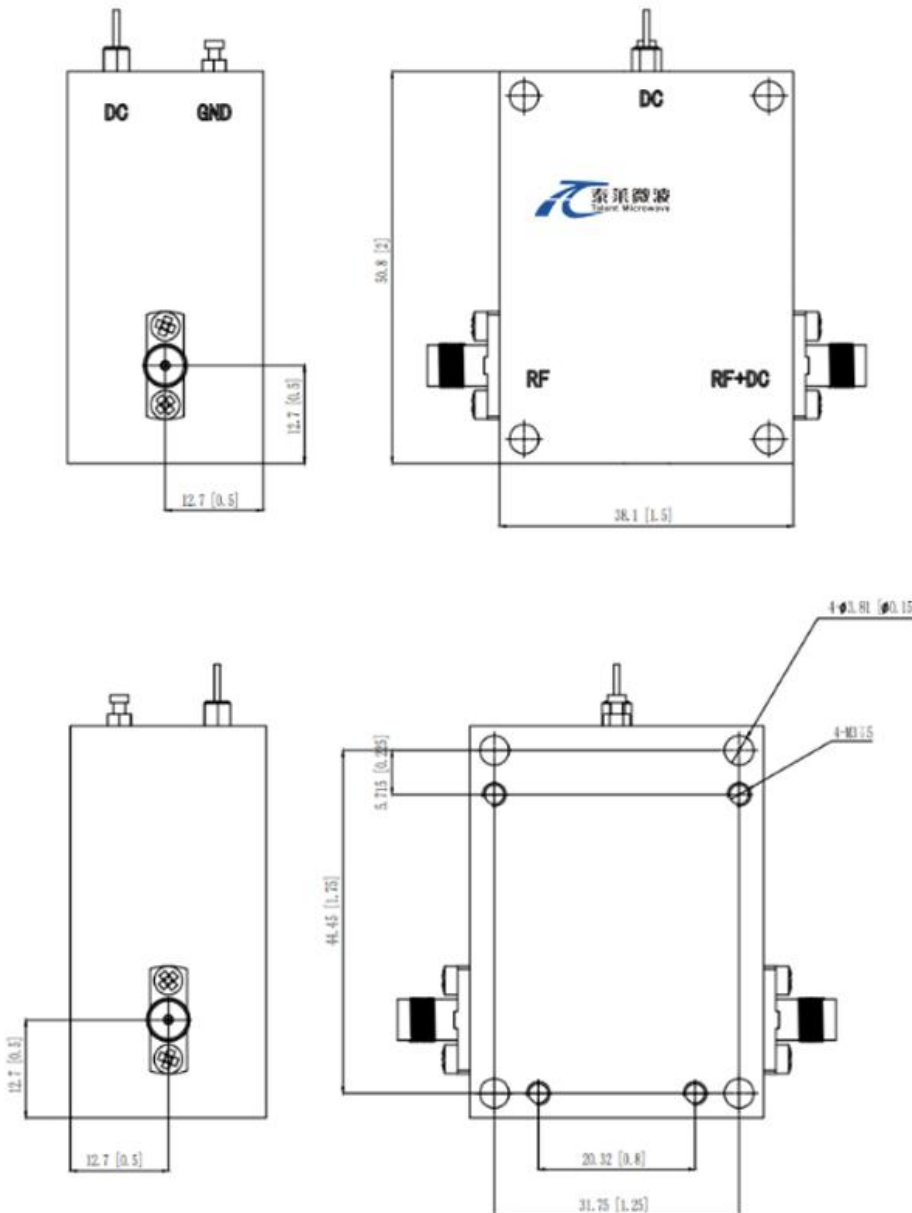
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Connector	Solder Pin	
Case Material	Aluminum	
Finish	True color conductive oxidation	
Size	50.8*38.1*25.4	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+100 V
RF Input Power	+40 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+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:

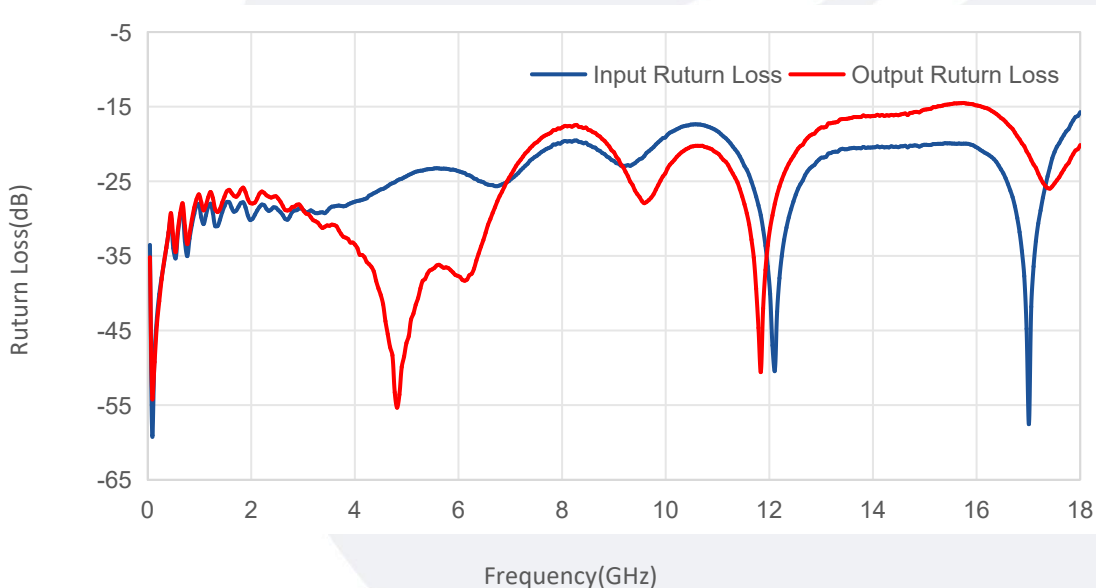
Base Number	Description	Revision
TLBT-10M18G-100-SP	Broadband Bias Tee SMA,10MHz-18 GHz,+100V	Rev.1.1

Notes:

1. All data taken @ +23° C unless otherwise specified.
2. Dimensions and specifications may be changed without prior notice.

Typical Performance Data:

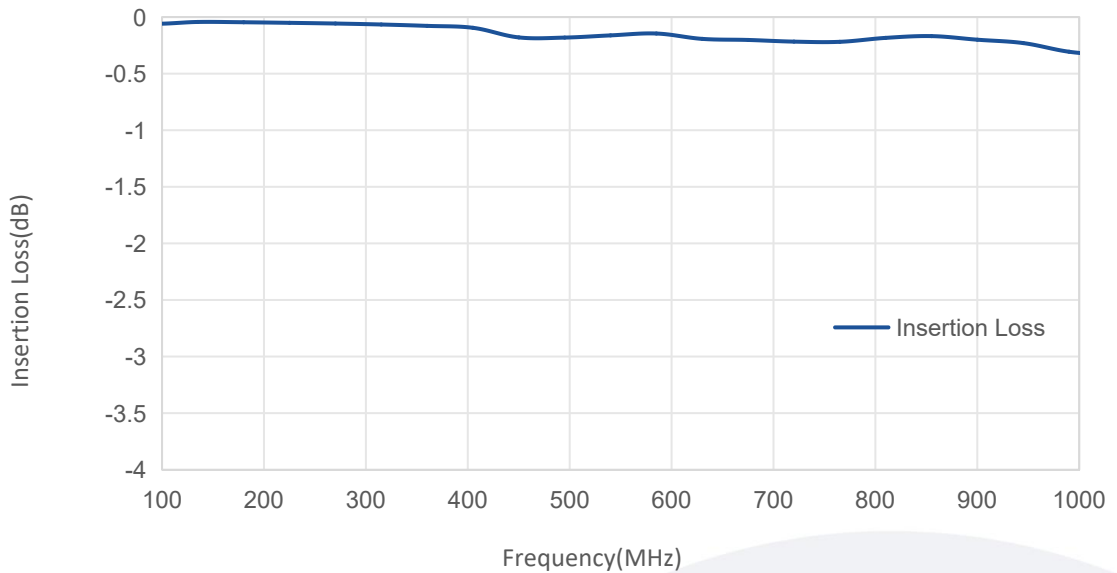
Return Loss vs Frequency



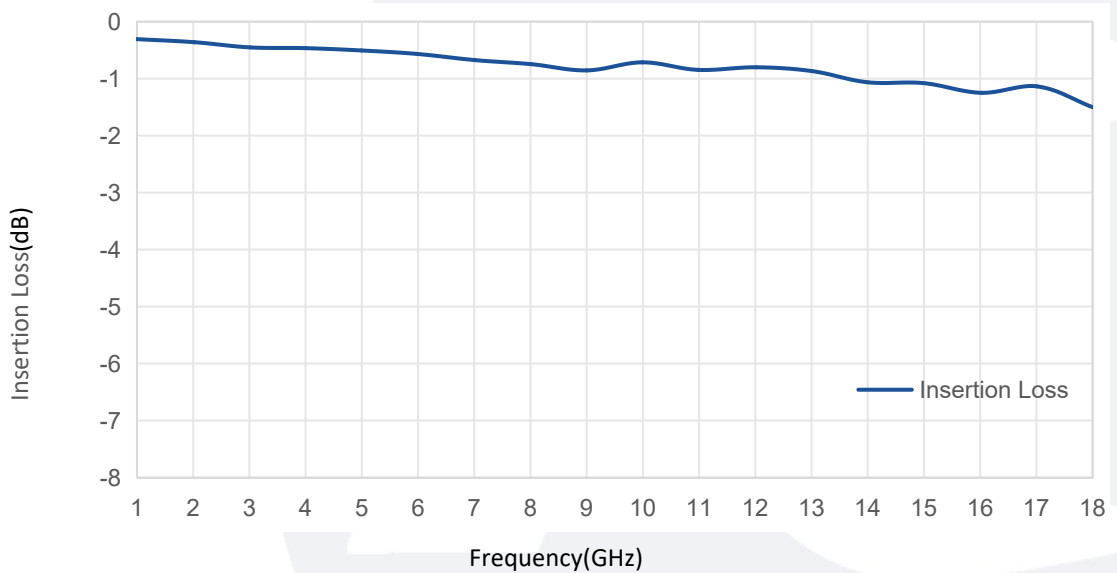
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

RF to Com Insertion Loss vs Frequency



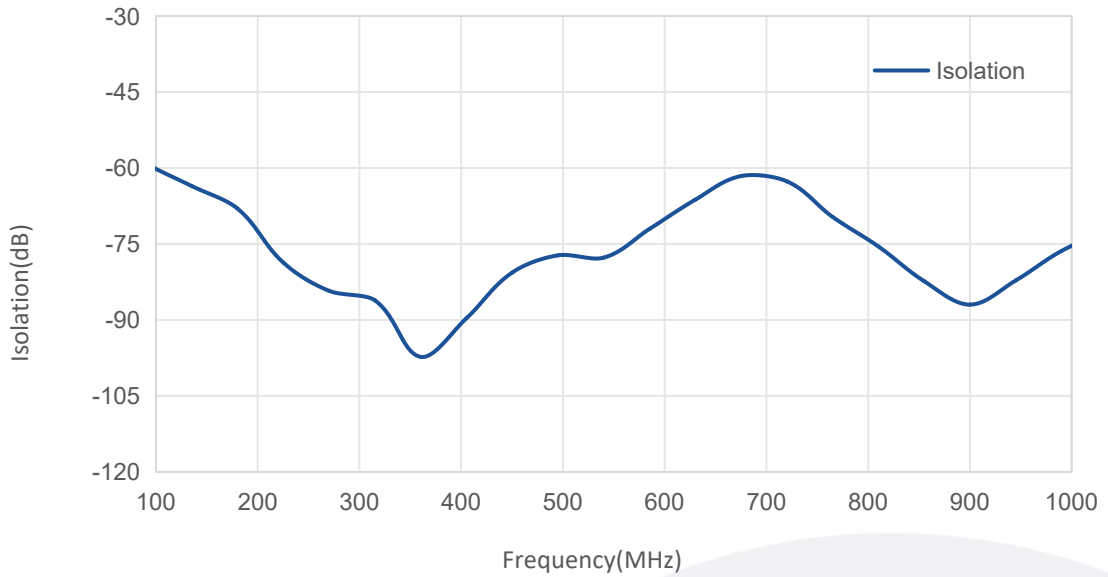
RF to Com Insertion Loss vs Frequency



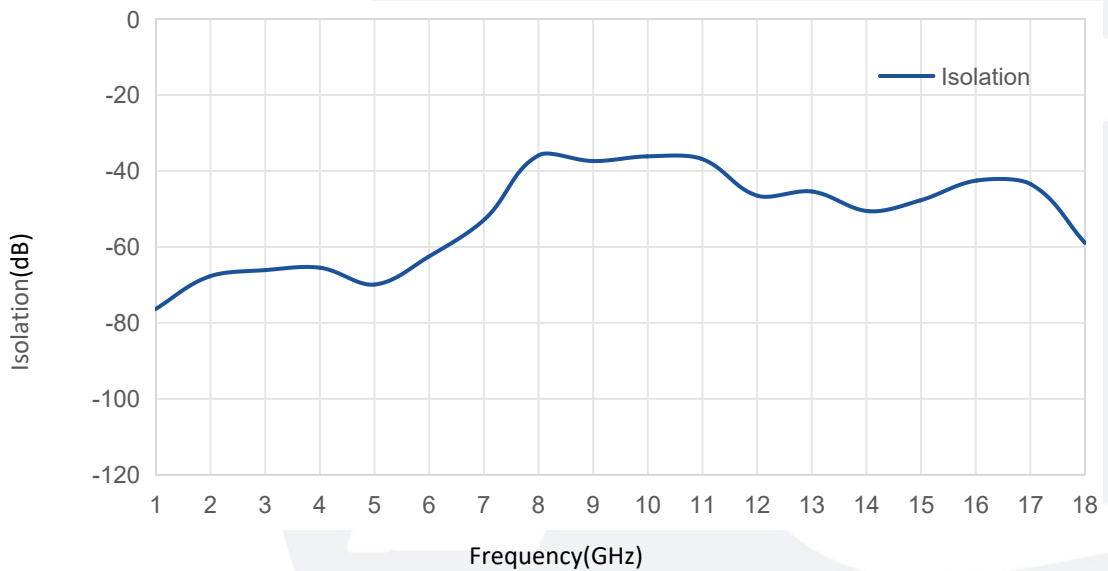
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

DC to Com Isolation vs Frequency



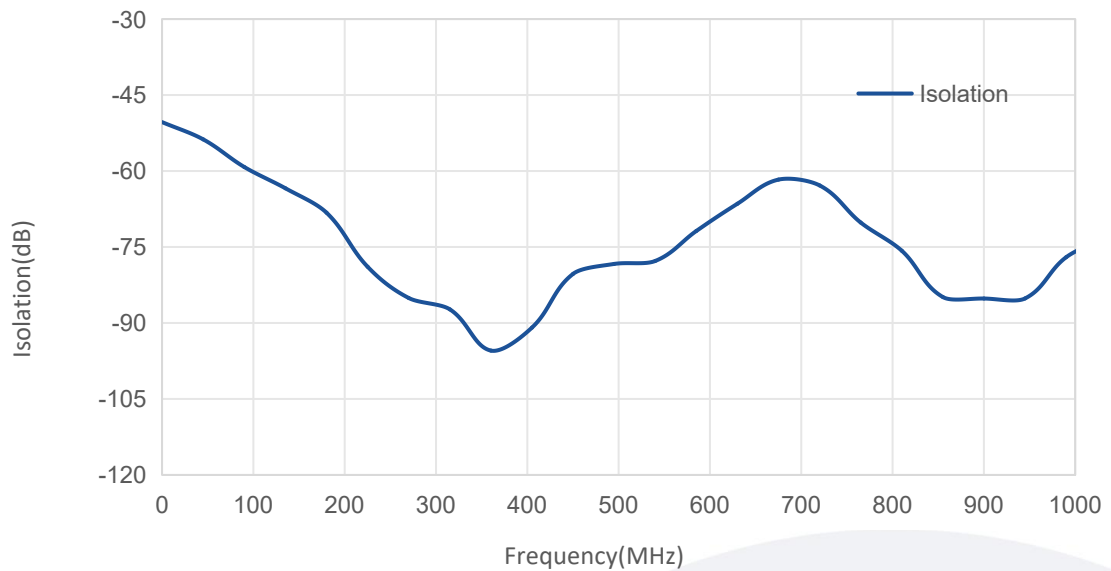
DC to Com Isolation vs Frequency



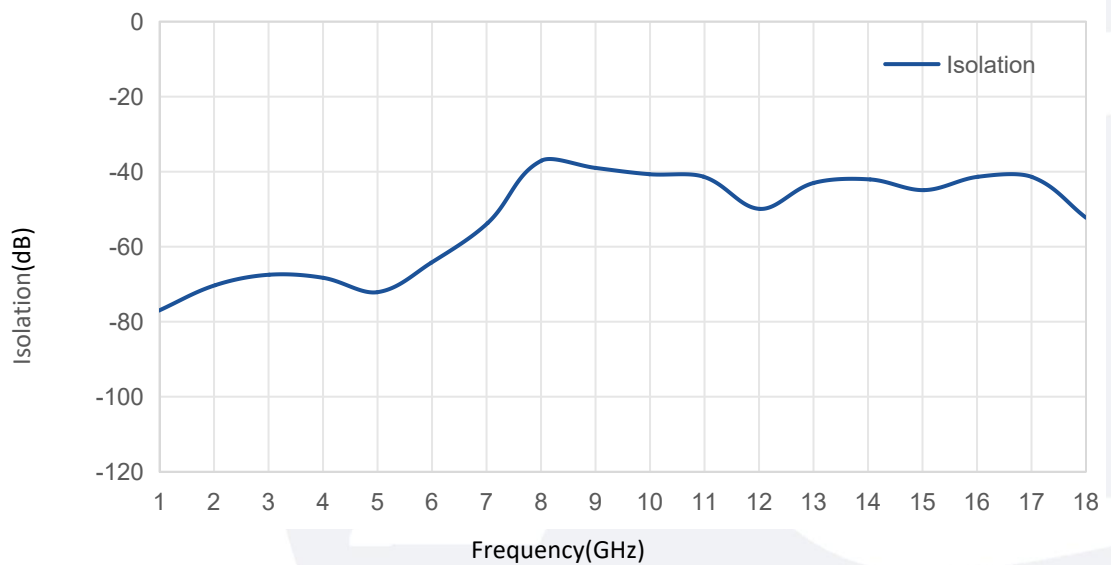
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

DC to RF Isolation vs Frequency



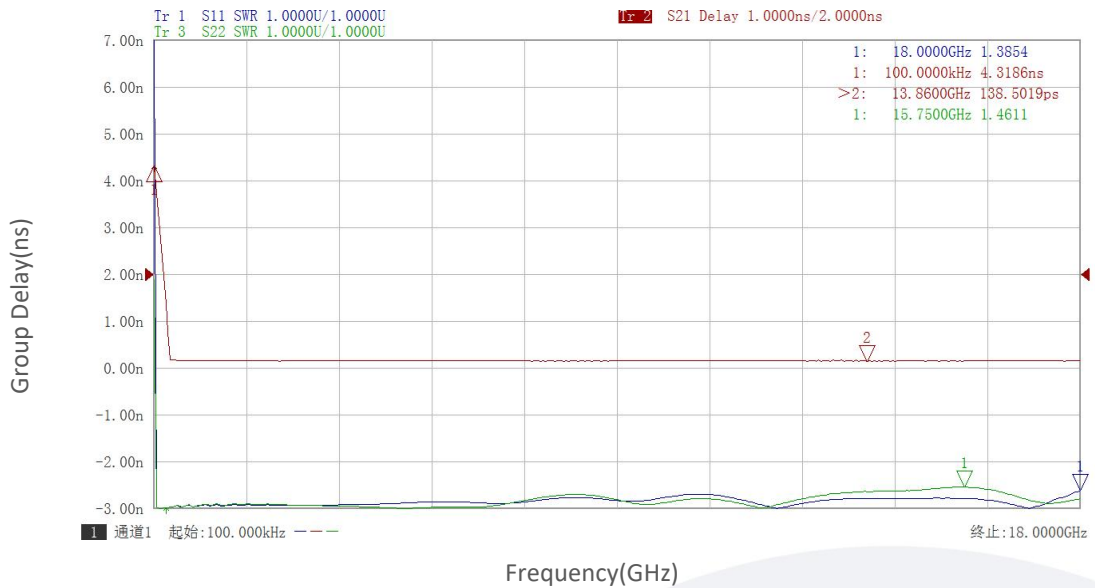
DC to RF Isolation vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Group Delay vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.