

Broadband Bias Tee

160KHz-110GHz /35V DC/1.0 mm

Model: TLBT-160K110G-35-1S

TLBT-160K110G-35-1S is a bias tee that operates from 160 KHz to 110 GHz. The bias tee offers 4.5 dB insertion loss and -10 dB return loss. The bias tee can handle up to +35 VDC bias voltage and 500 mA current. The RF ports are equipped with 1.0 mm female connectors. Other connector types are available under different model numbers.

Features:

- Ultra Wide Band:160KHz-110GHz
- Low Insertion Loss
- High Voltage
- High Current Capacity

Applications:

- Test Lab
- Sub-assemblies
- System Integrations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	160KHz-110GHz			
Insertion Loss		4	4.5	dB
Rreturn Loss		-10		dB
Isolation		30		dB
DC Voltage			35	V DC
DC Current			500	mA
RF Power			1	W

Mechanical Specifications:

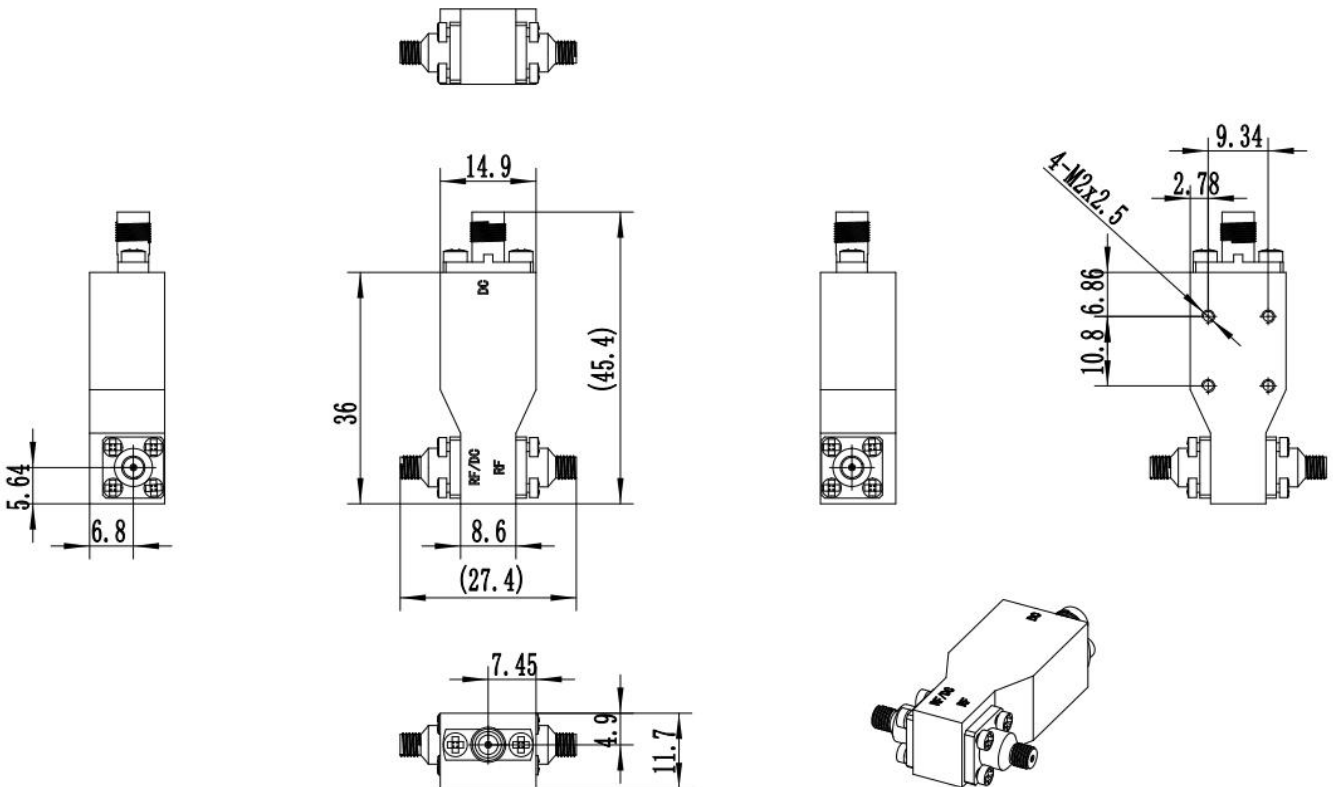
Parameter	Value	Units
Input /Output Connector	1.0mm Female/1.0mm Female	
DC Connector	SMA Female	
Case Material	Aluminum	
Finish	Blue Paint	
Size	14.9*36*11.7	mm
Weight	45	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+35 V
RF Input Power	+30 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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:

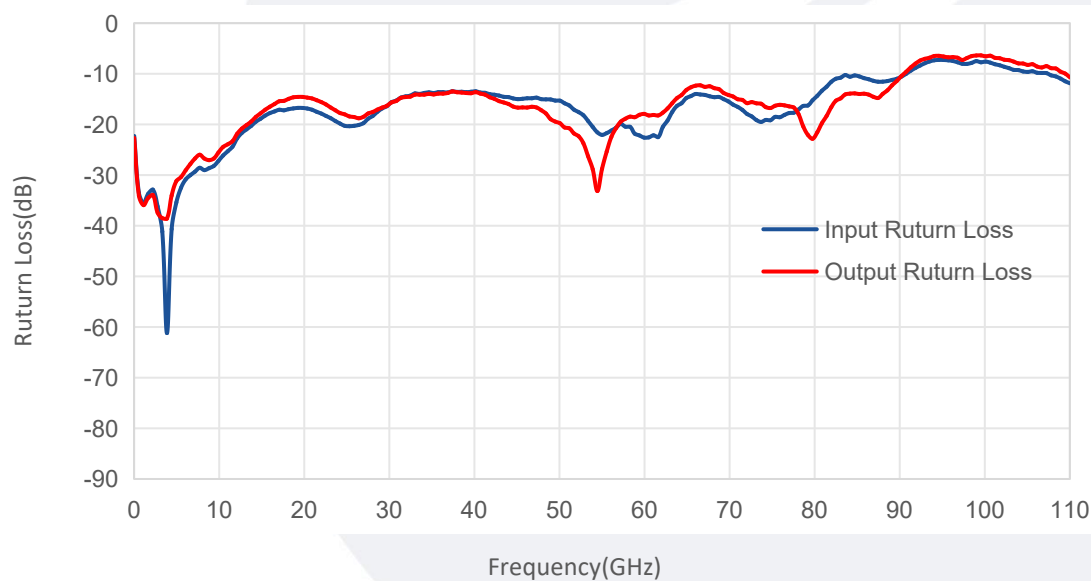
Base Number	Description	Revision
TLBT-160K110G-35-1S	Broadband Bias Tee 1.0mm,160KHz-110 GHz,+35V	Rev.1.1

Notes:

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

Typical Performance Data:

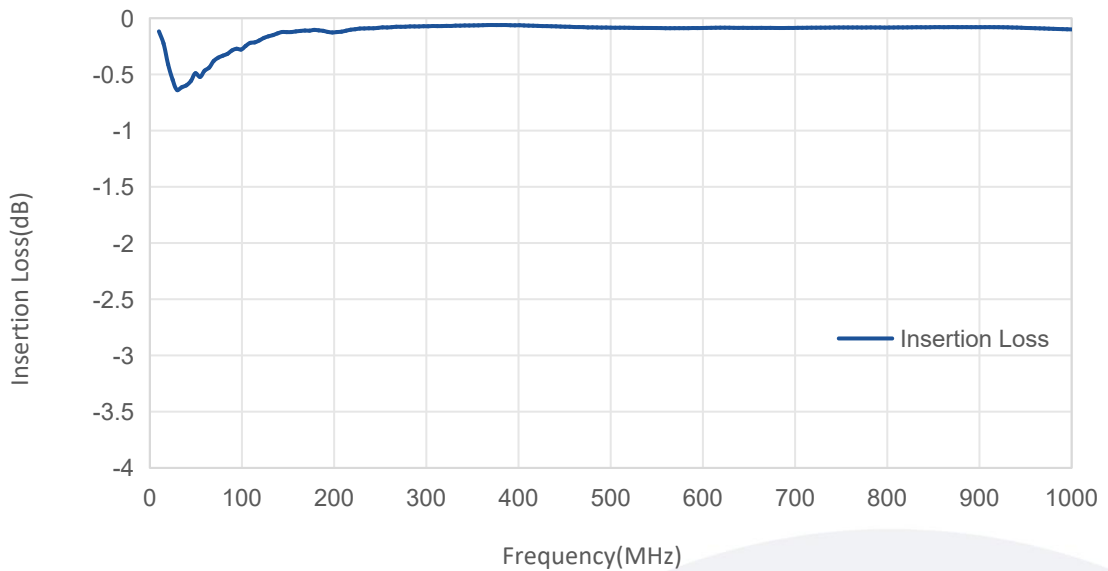
Return Loss vs Frequency



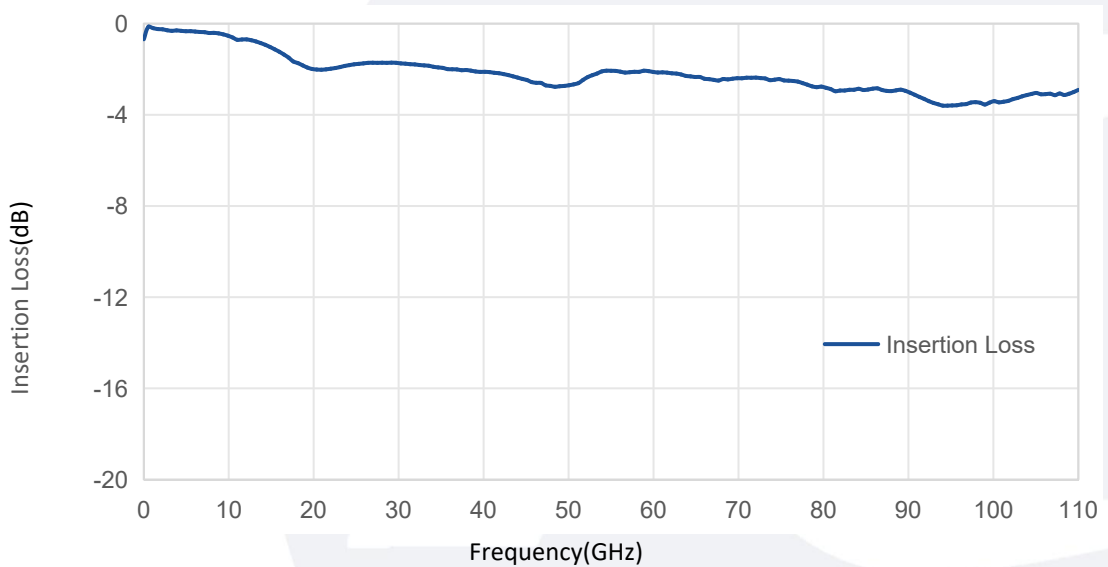
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

RF to Com Insertion Loss vs Frequency



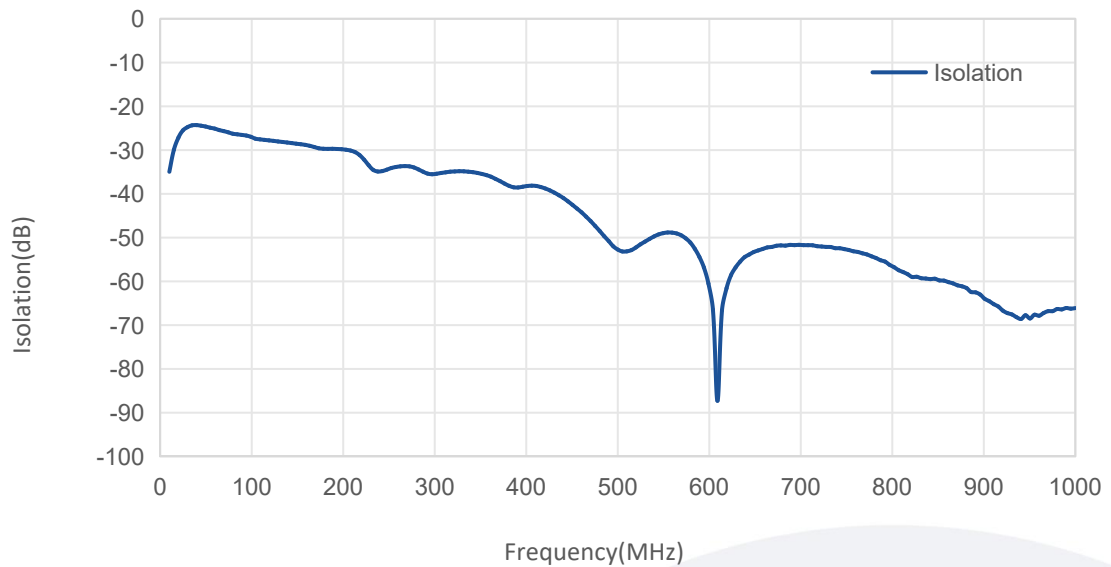
RF to Com Insertion Loss vs Frequency



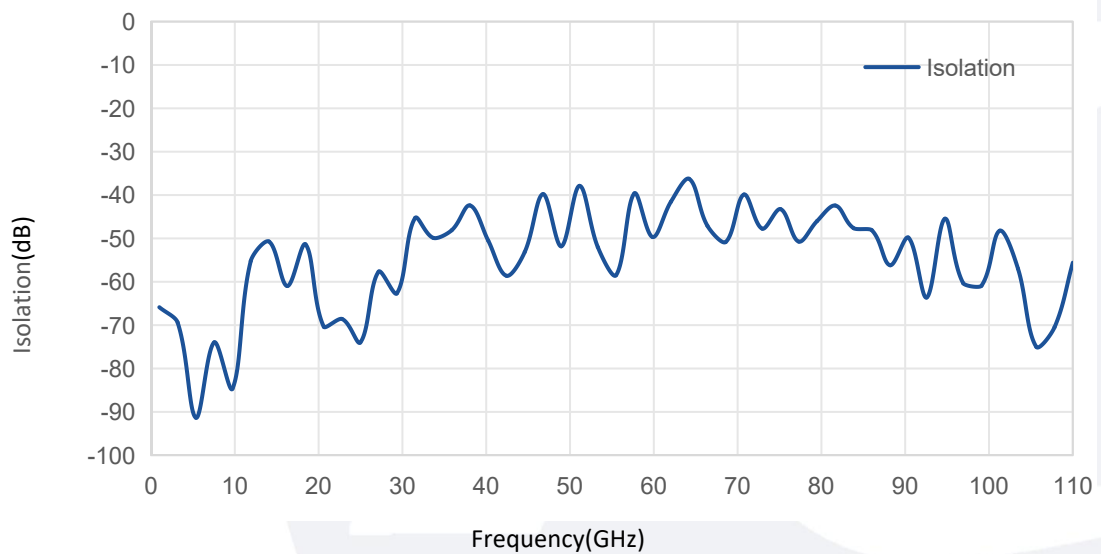
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

DC to Com Isolation vs Frequency



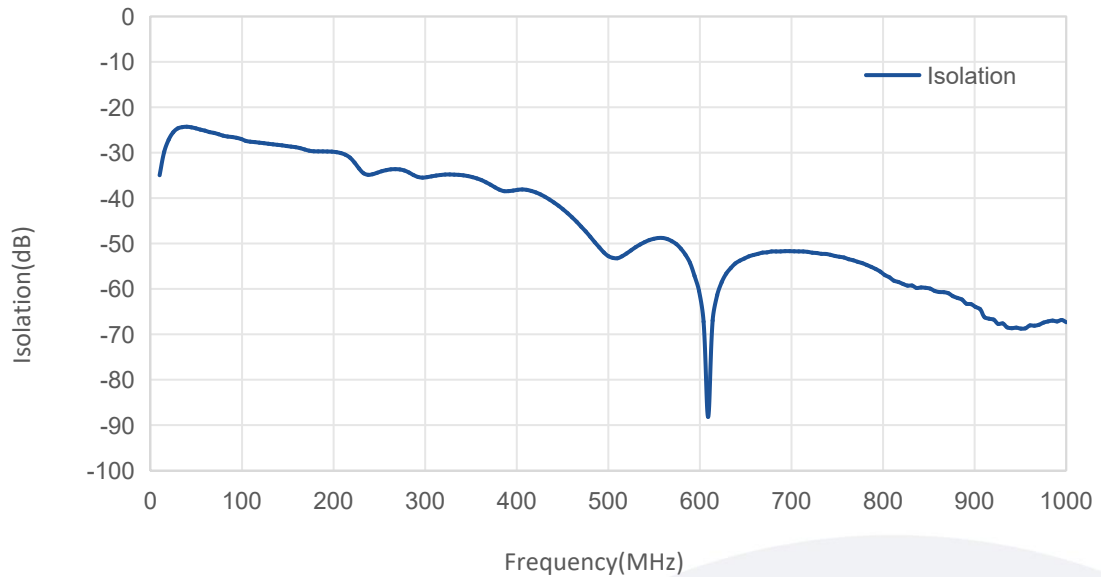
DC to Com Isolation vs Frequency



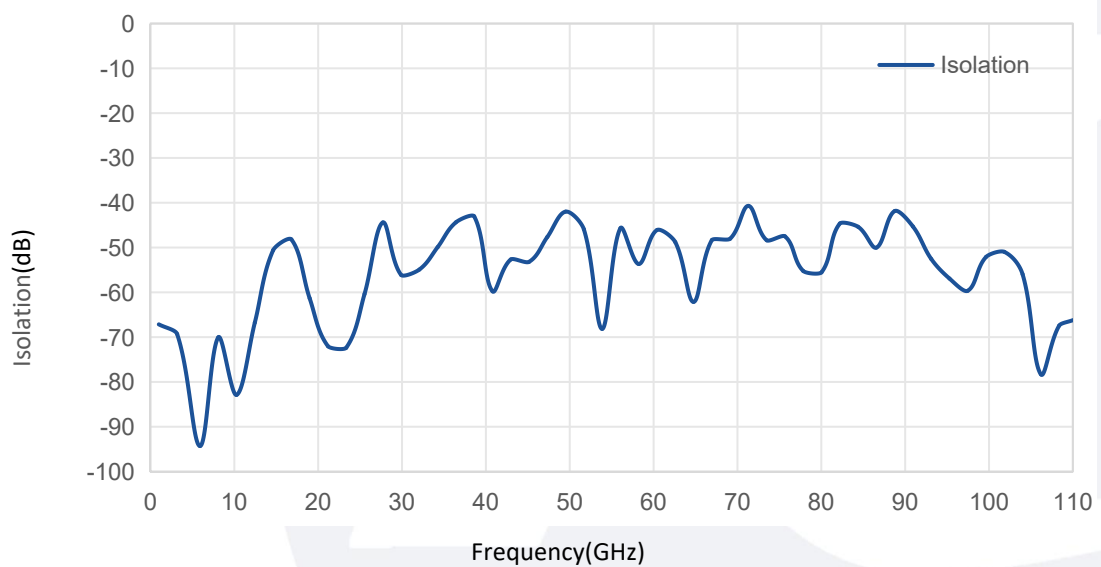
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

DC to RF Isolation vs Frequency



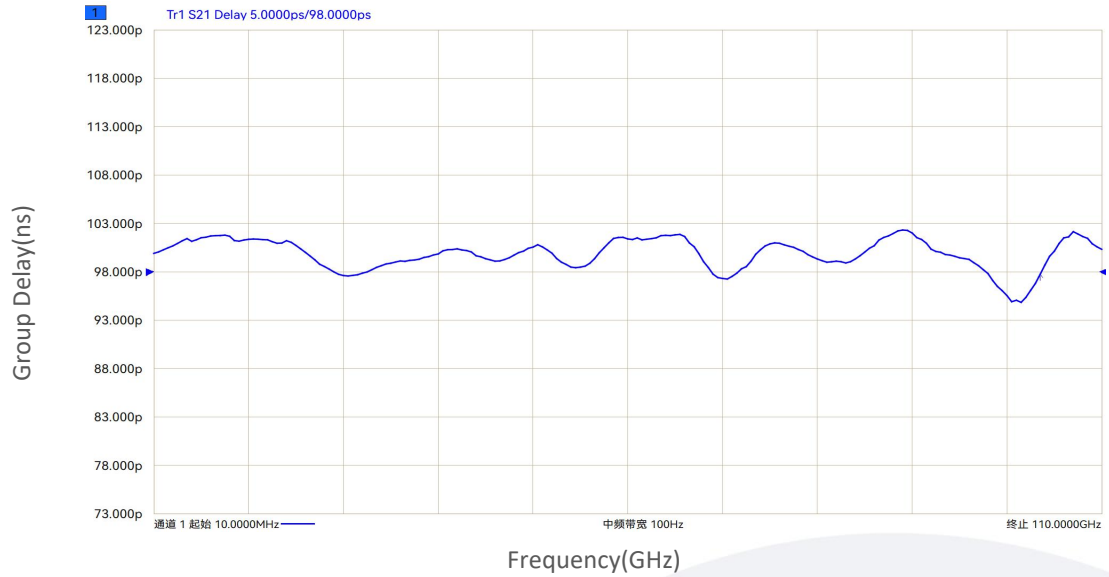
DC to RF Isolation vs Frequency



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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.