

Broadband Bias Tee

16KHz-43GHz /50V DC/2.92 mm

Model: TLBT-16K43G-50-KS

TLBT-16K43G-50-KS is a bias tee that operates from 16 kHz to 43 GHz. The bias tee offers 3.0 dB insertion loss and -12 dB return loss. The bias tee can handle up to +50 VDC bias voltage and 500 mA current. The RF ports are equipped with 2.92 mm female connectors. Other connector types are available under different model numbers.

Features:

- Ultra Wide Band:16KHz-43GHz
- Low Insertion Loss
- High Voltage
- High Current Capacity

Applications:

- Test Lab
- Sub-assemblies
- System Integrations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	16KHz-43GHz			
Insertion Loss			3	dB
Ruturn Loss		-12		dB
Isolation		30		dB
DC Voltage			50	V DC
DC Current			500	mA
Power Handling			1	W

Mechanical Specifications:

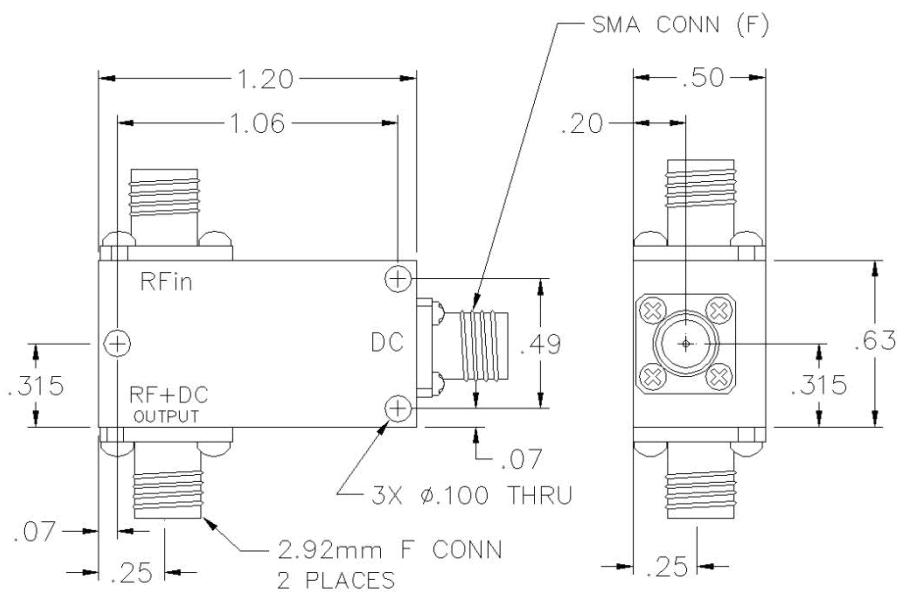
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Connector	SMA Female	
Case Material	Aluminum	
Finish	Blue Paint	
Size	15*32*10	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+50 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			

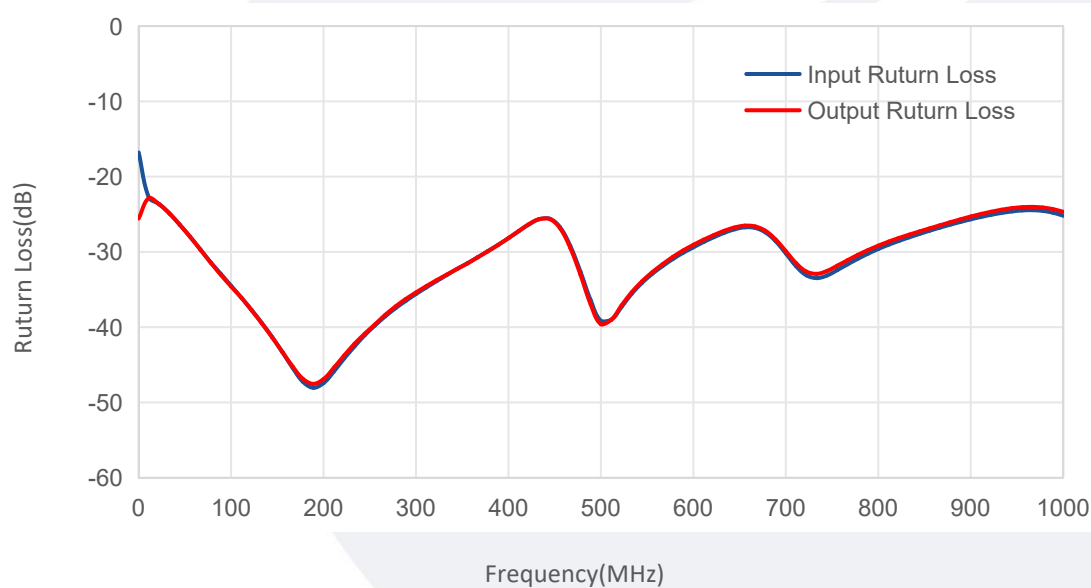
Ordering Information:

Base Number	Description	Revision
TLBT-16K43G-50-KS	Broadband Bias Tee 2.92mm,16KHz-43GHz,+50V	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:

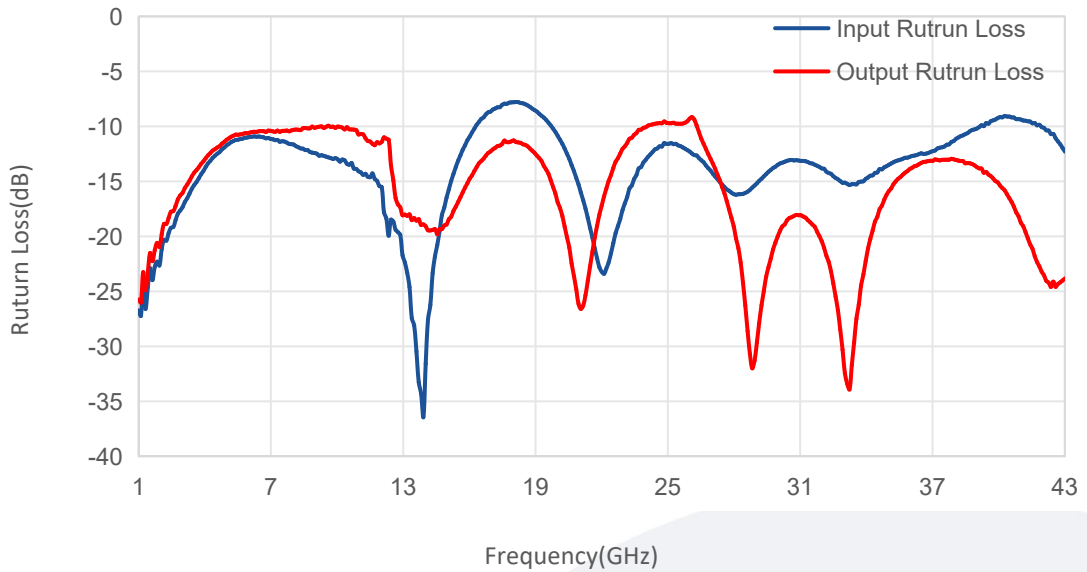
Return Loss vs Frequency



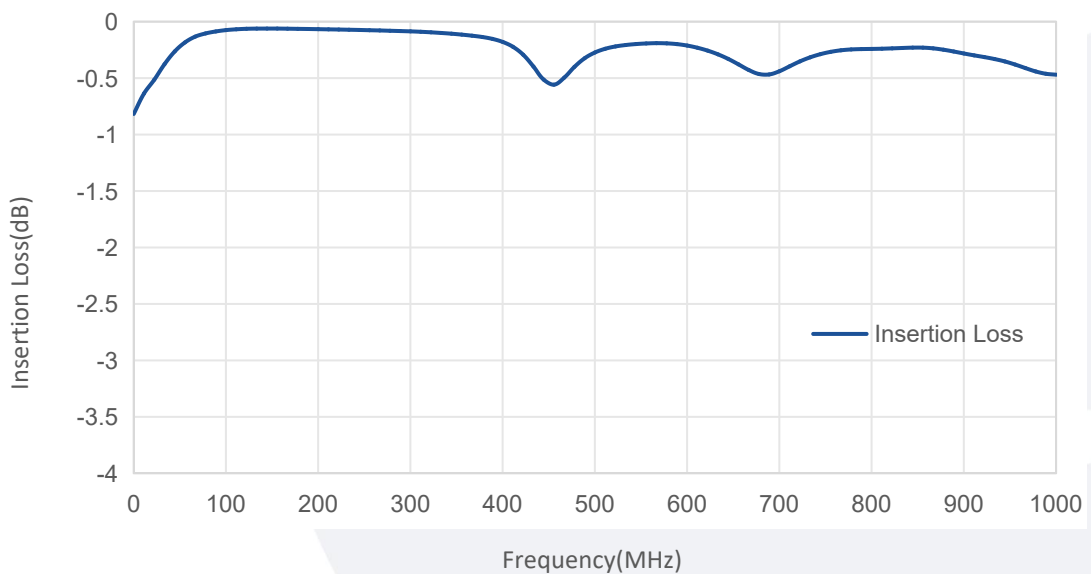
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Return Loss vs Frequency



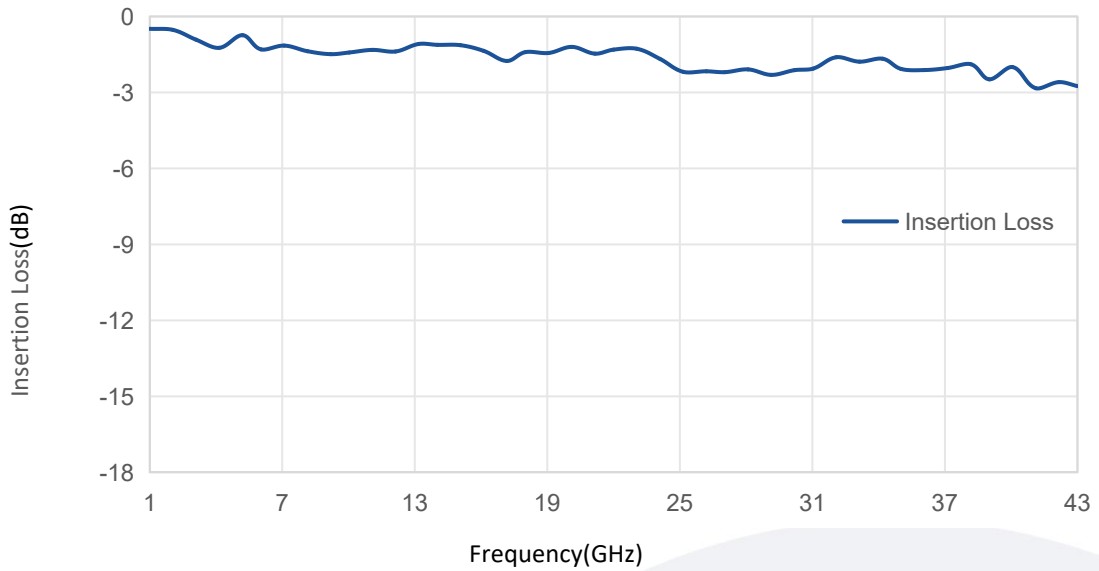
RF to Com Insertion Loss vs Frequency



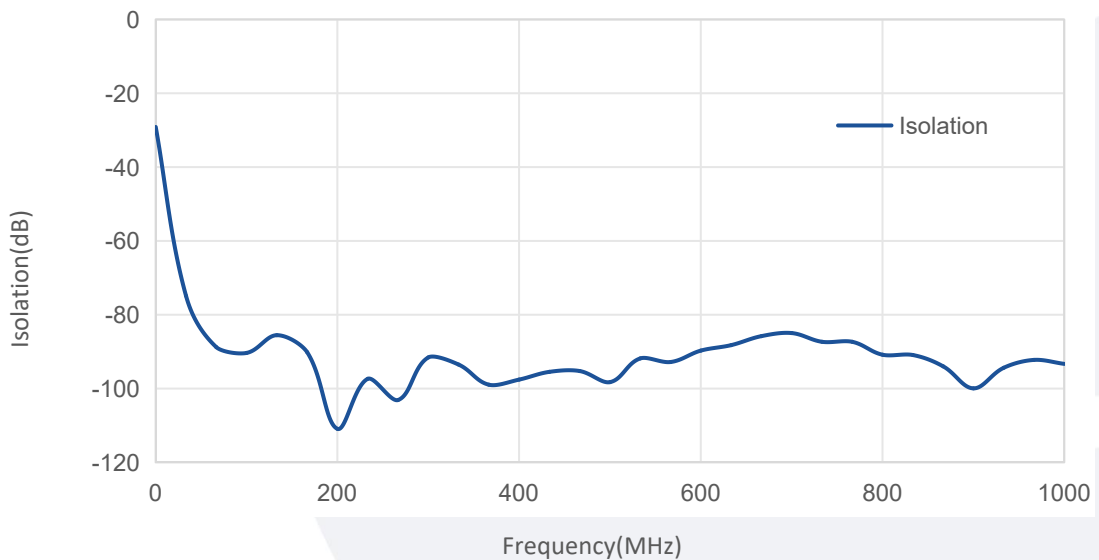
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Typical Performance Data:

RF to Com Insertion Loss vs Frequency



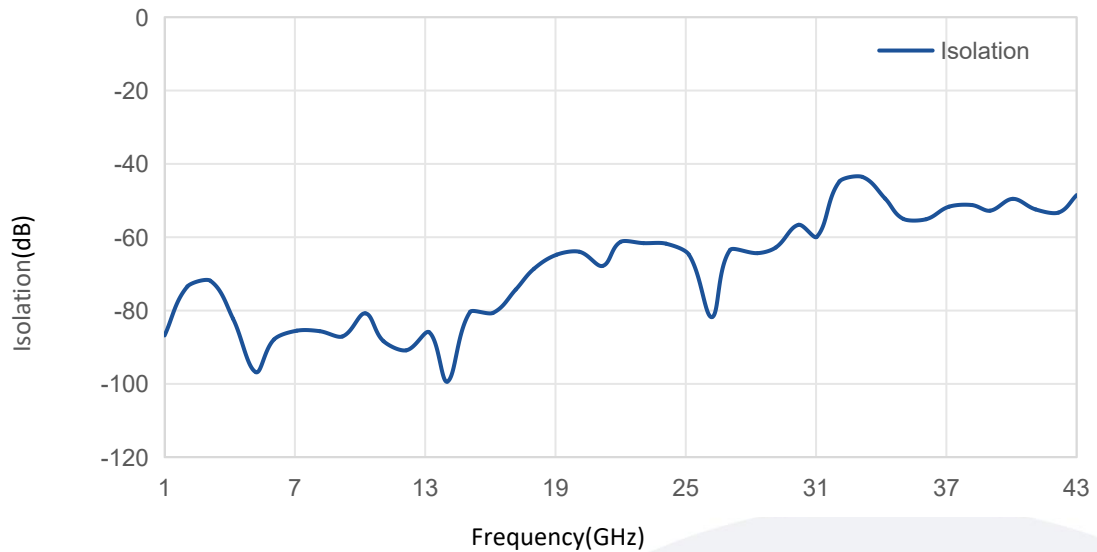
DC to Com Isolation vs Frequency



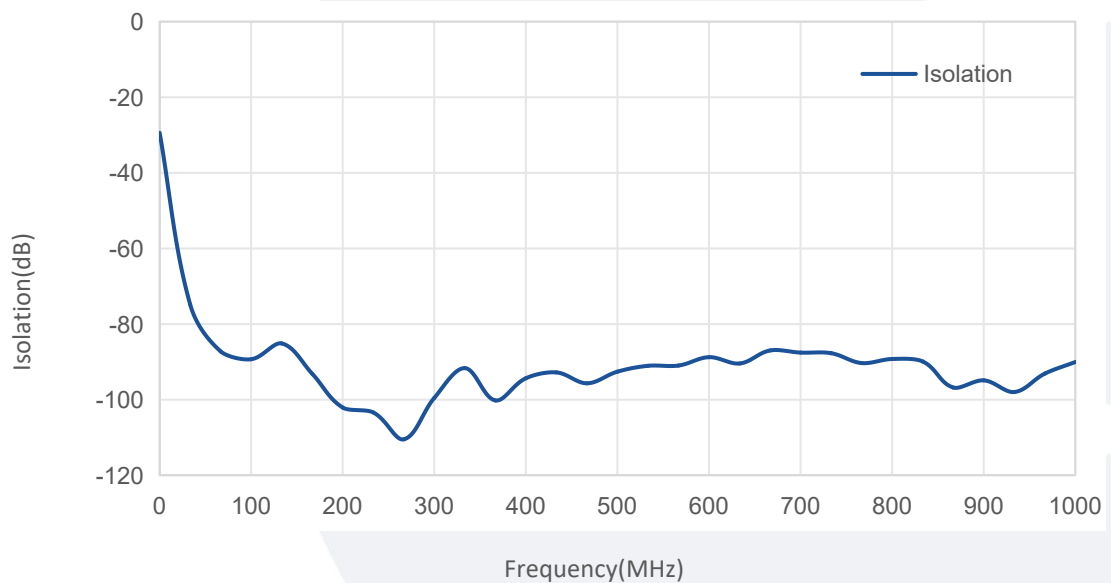
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Typical Performance Data:

DC to Com Isolation vs Frequency



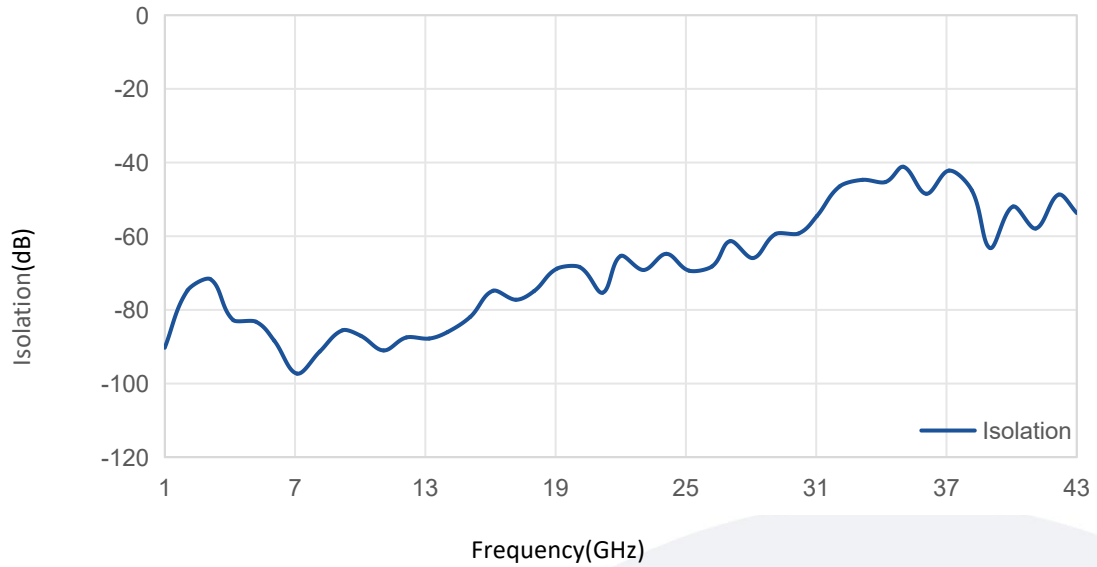
DC to RF Isolation vs Frequency



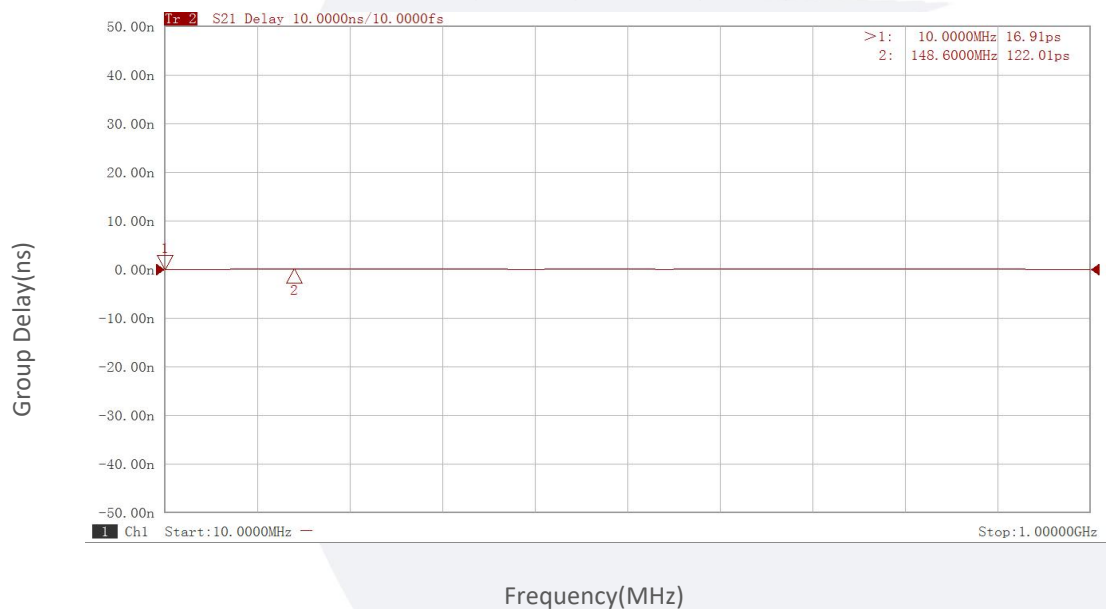
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Typical Performance Data:

DC to RF Isolation vs Frequency

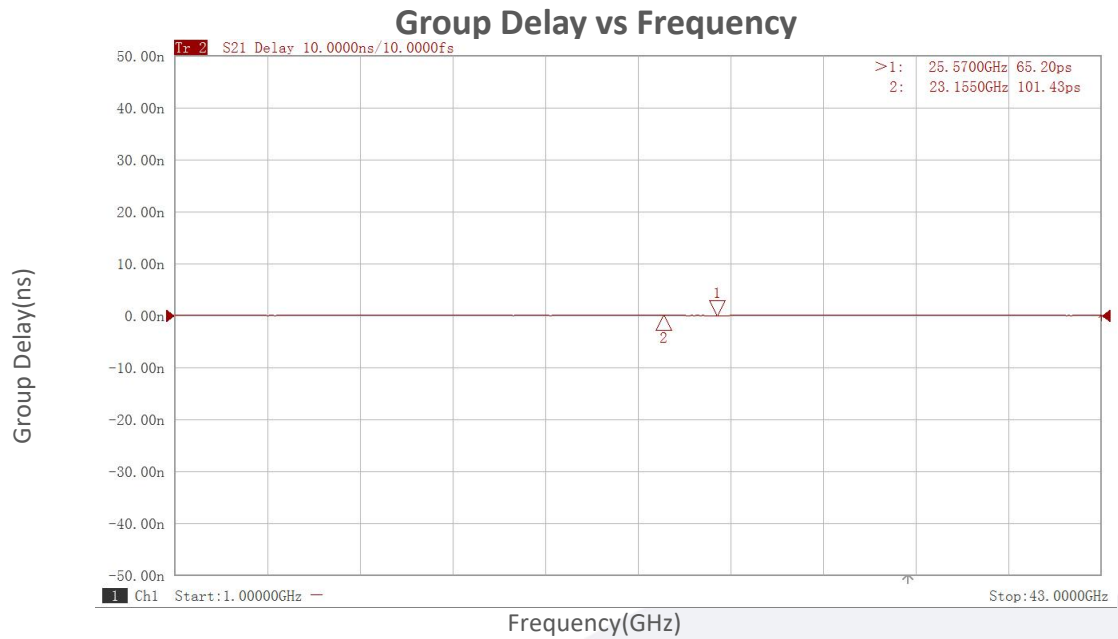


Group Delay vs Frequency



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