

Broadband Bias Tee

30KHz-70GHz/20V DC/1.85 mm

Model: TLBT-30K70G-25-VS

TLBT-30K70G-25-VS is a bias tee that operates from 30 kHz to 70 GHz. The bias tee offers 4.0 dB insertion loss and -15 dB return loss. The bias tee can handle up to +25 VDC bias voltage and 500 mA current. The RF ports are equipped with 1.85 mm female connectors. Other connector types are available under different model numbers.

Features:

- Frequency range:30KHz-70GHz
- Low Insertion Loss
- High Voltage
- High Current Capacity

Applications:

- Test Lab
- Sub-assemblies
- System Integrations

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	30KHz		70GHz	
Insertion Loss		4.0		dB
Return Loss		-15		dB
Isolation		30		dB
DC Voltage			+25	V DC
DC Current			500	mA
RF Power			1	W

Mechanical Specifications:

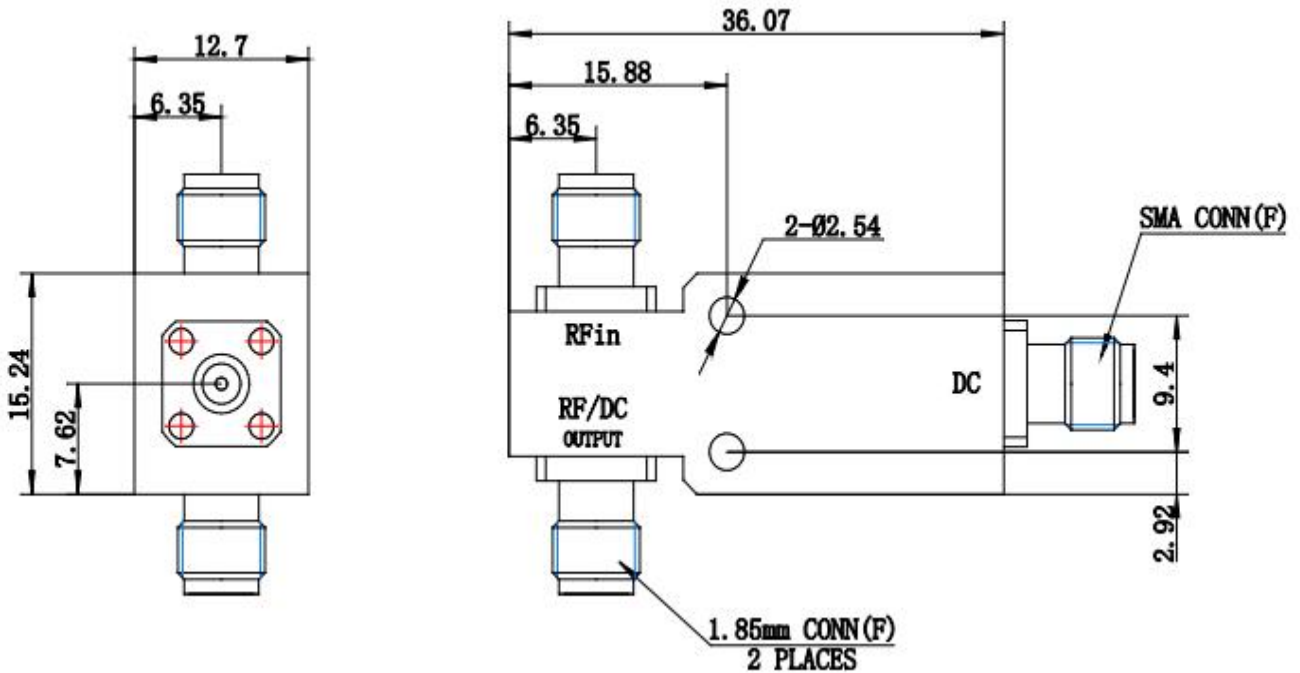
Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Connector	SMA Female	
Case Material	Aluminum	
Finish	Blue Paint	
Size	15.24*30.07*12.7	mm
Weight	45	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+25 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	0		+50	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			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			

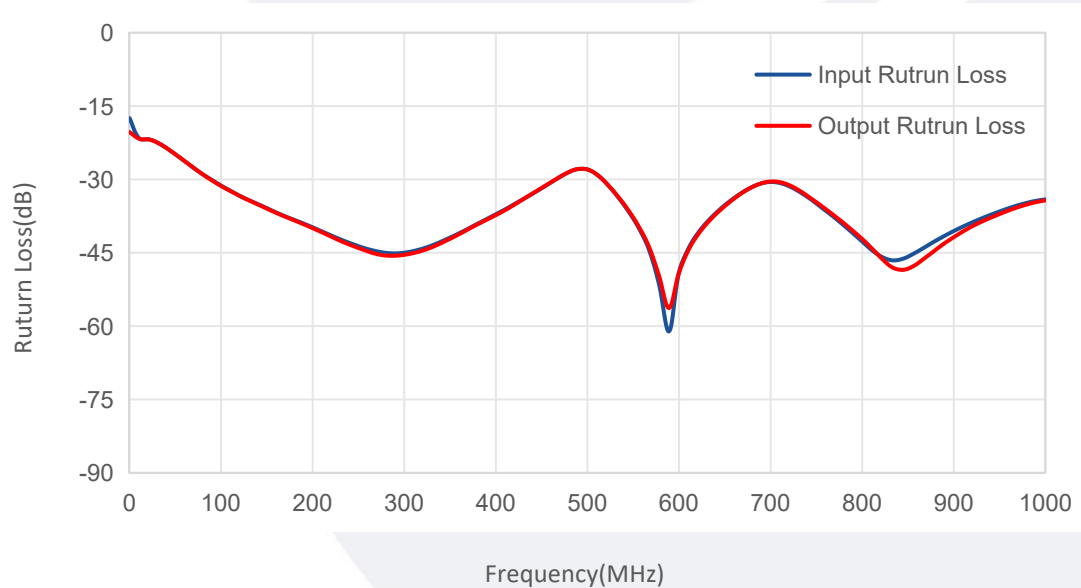
Ordering Information:

Base Number	Description	Revision
TLBT-30K70G-25-VS	Broadband Bias Tee 1.85mm,30KHz-70GHz,25V	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

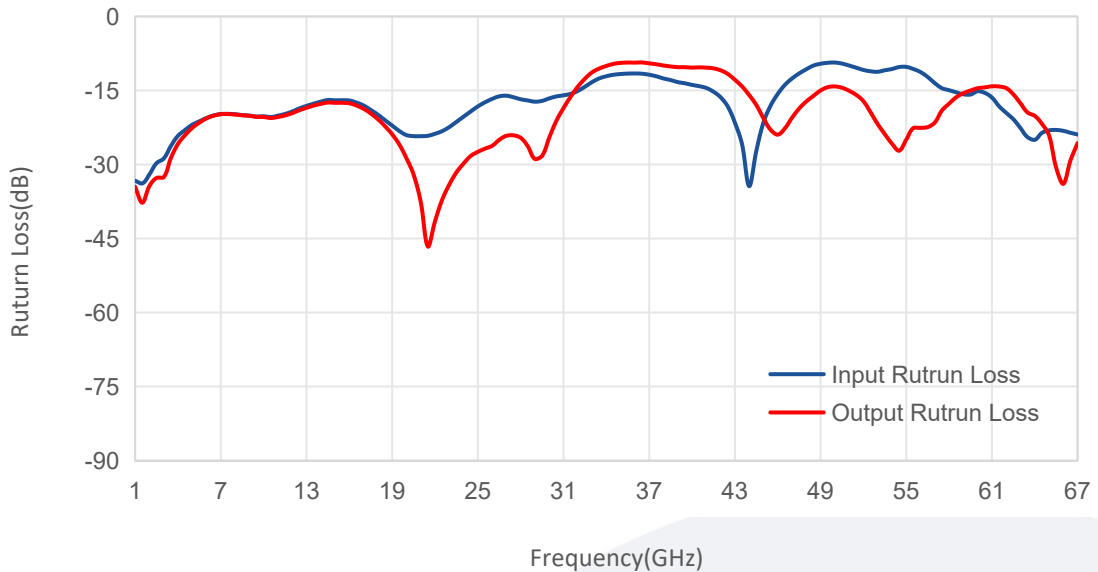


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

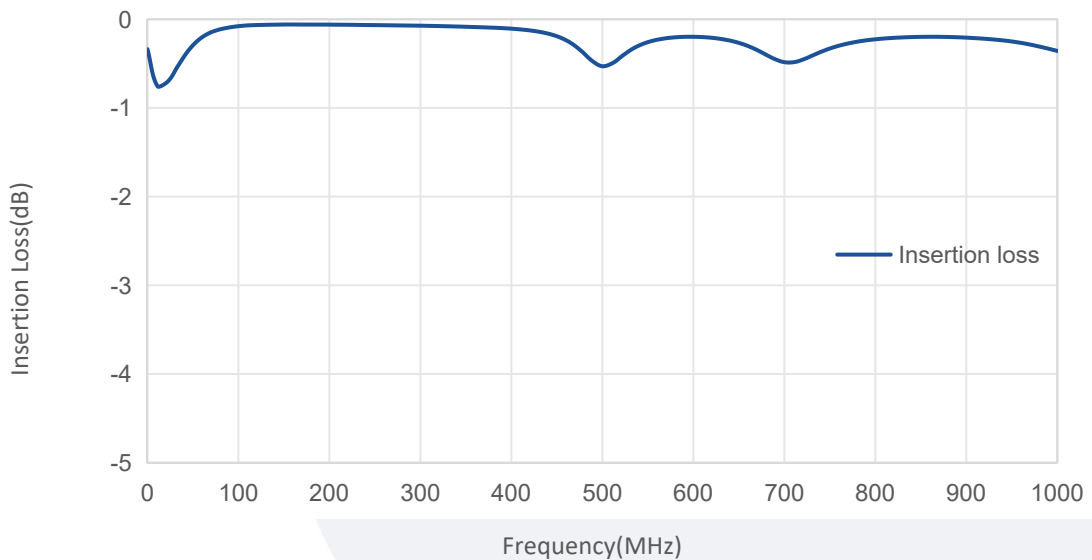


Typical Performance Data:

Return Loss vs Frequency



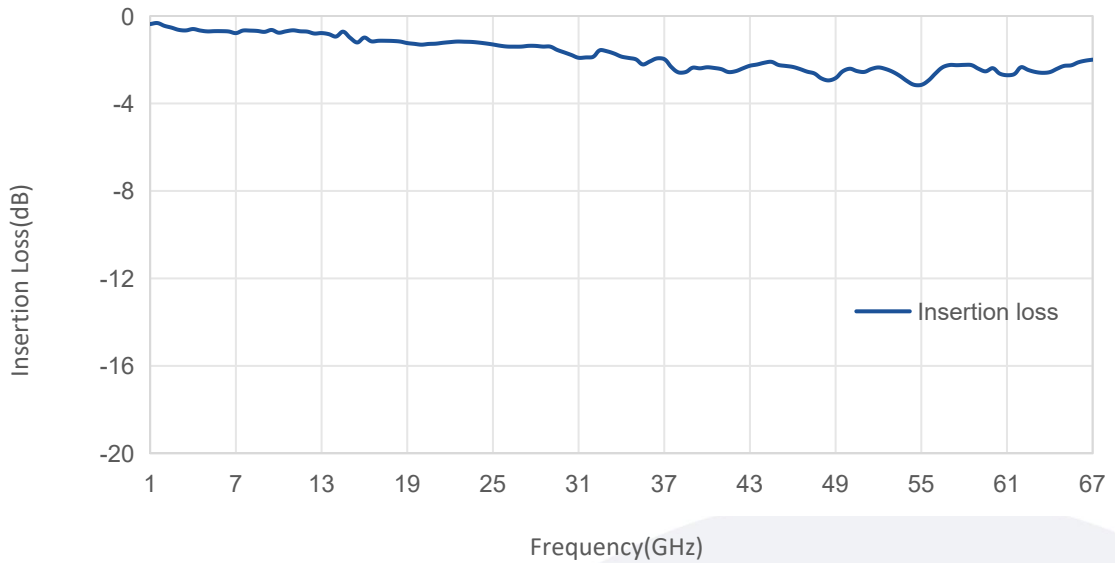
RF to Com Insertion Loss vs Frequency



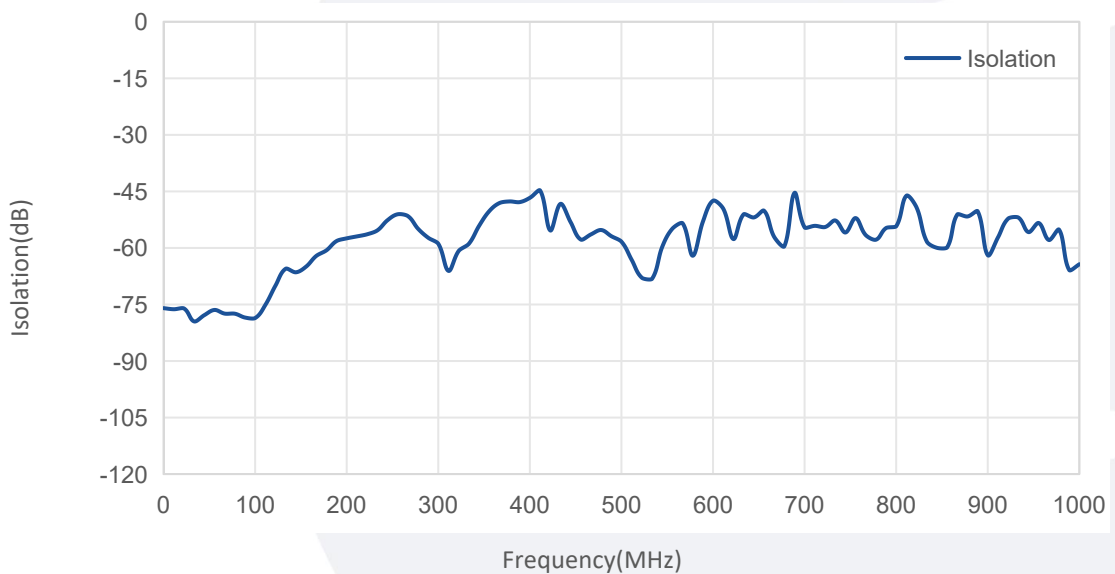
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Typical Performance Data:

RF to Com Insertion Loss vs Frequency



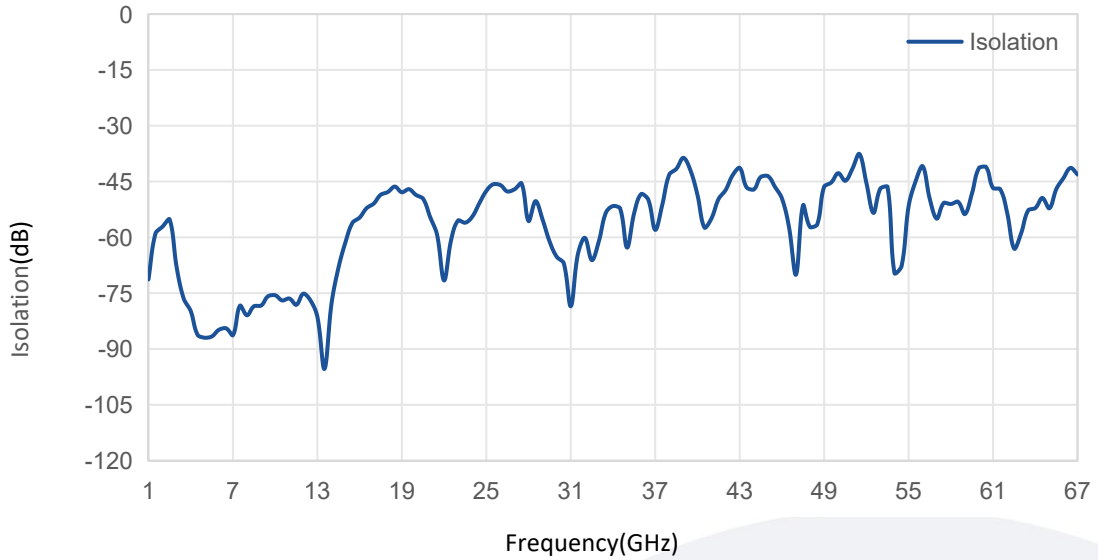
DC to Com Isolation vs Frequency



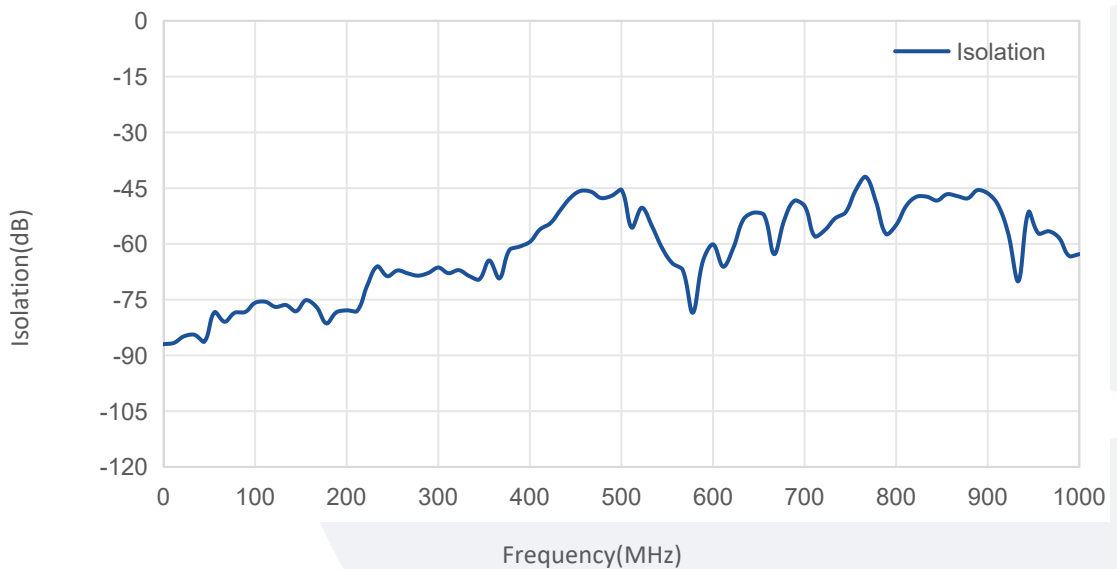
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Typical Performance Data:

DC to Com Isolation vs Frequency



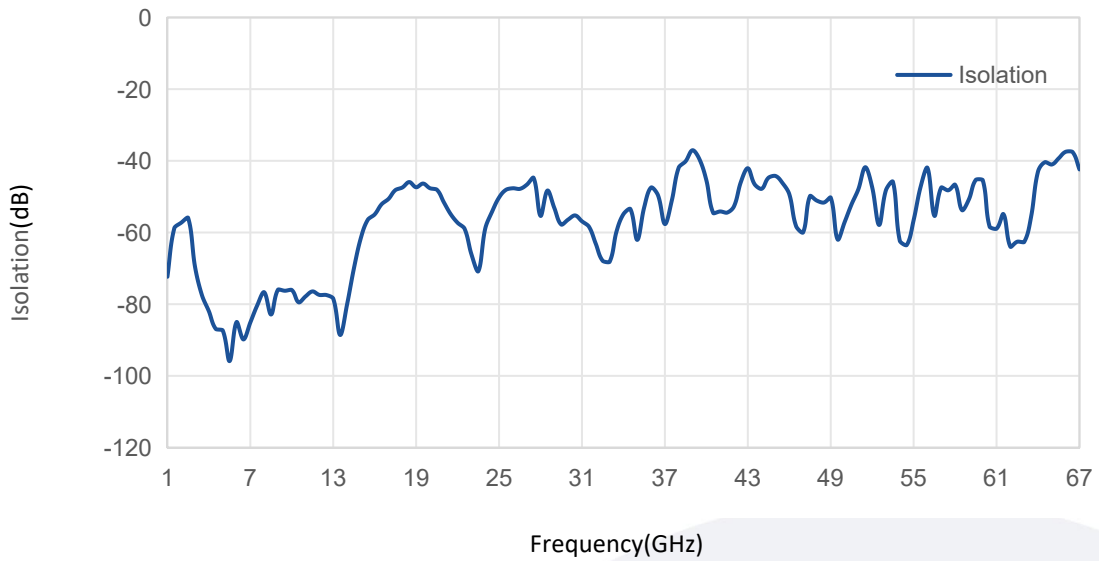
DC to RF Isolation vs Frequency



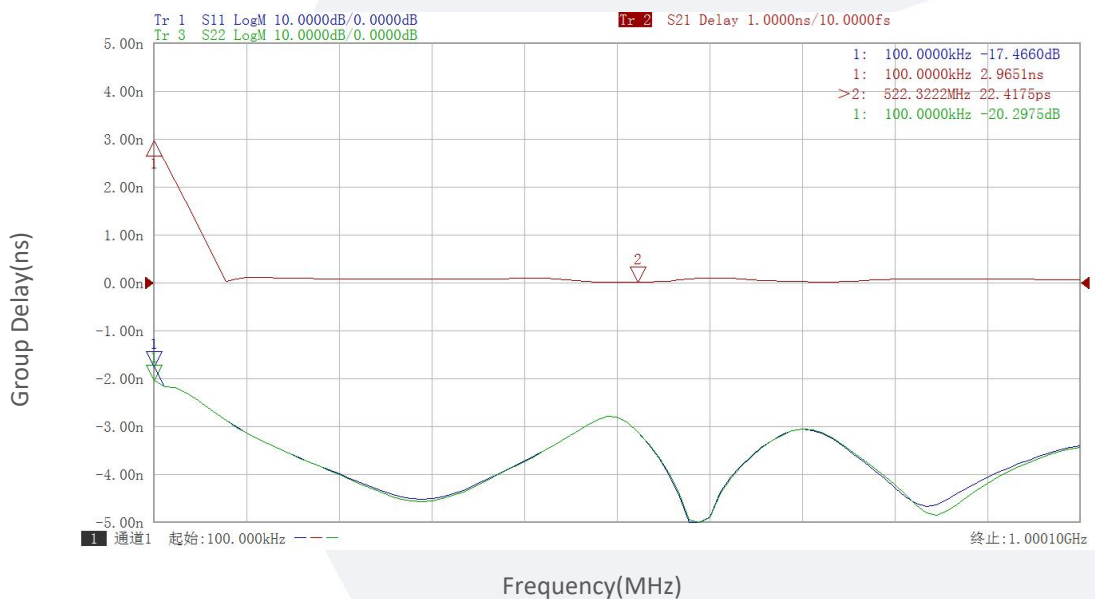
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Typical Performance Data:

DC to RF Isolation vs Frequency

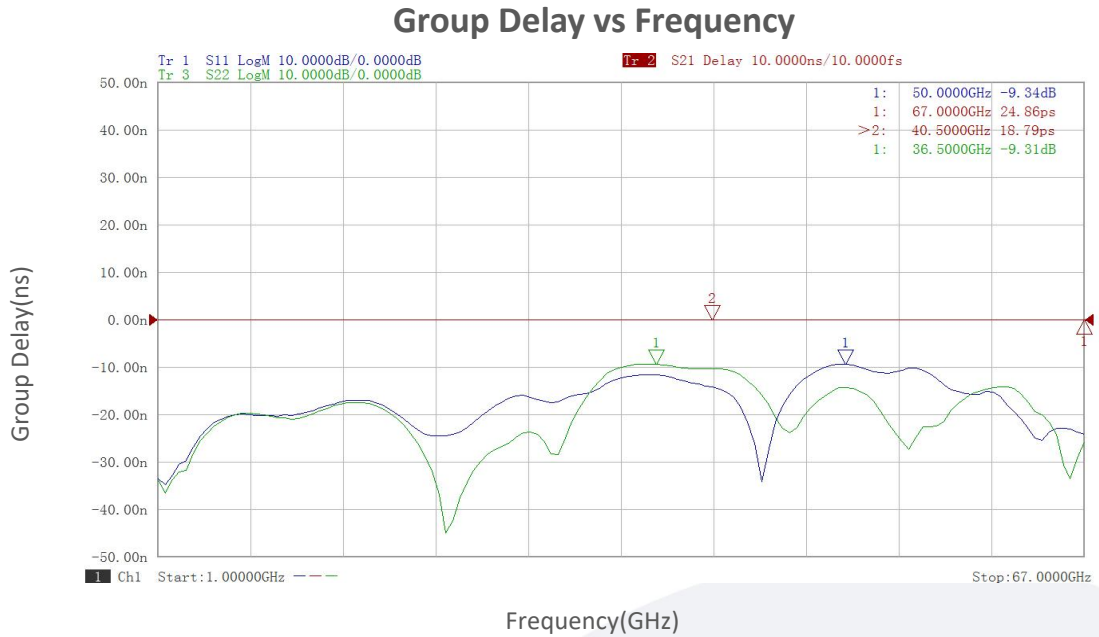


Group Delay vs Frequency



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.

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