

TURBT-100K18G18SSCryo

TURBT-100K18G18SSCryo is a cryogenic bias tee that operates from 100 KHz to 18 GHz. The cryogenic bias tee offers 2.0 dB insertion loss and -15 dB typical return loss. The cryogenic RF choke can handle up to +18 VDC bias voltage and 700 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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	100KHz-18GHz			
插损 Insertion Loss			2	dB
回波损耗 Rreturn Loss		-15		dB
隔离 Isolation	35			dB
直流电压 DC Voltage			18	V DC
直流电阻 DC Resistance		4		Ω
直流电流 DC Current			700	mA
射频功率 RF Power			1	W

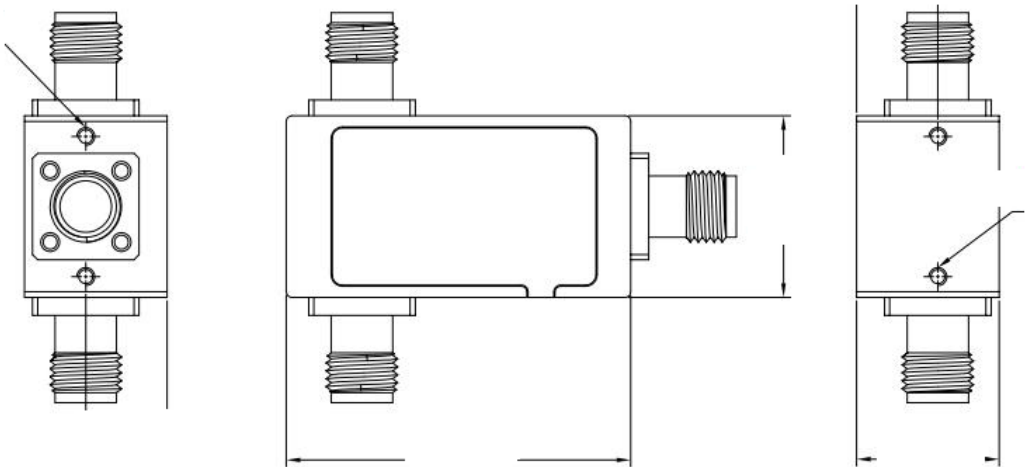
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流接口 DC Connector	SMA Female	
壳体材料 Case Material	OFC	

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+18 V
输入功率 RF Input Power	+30 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm



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

温度环境 Environmental Conditions:

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

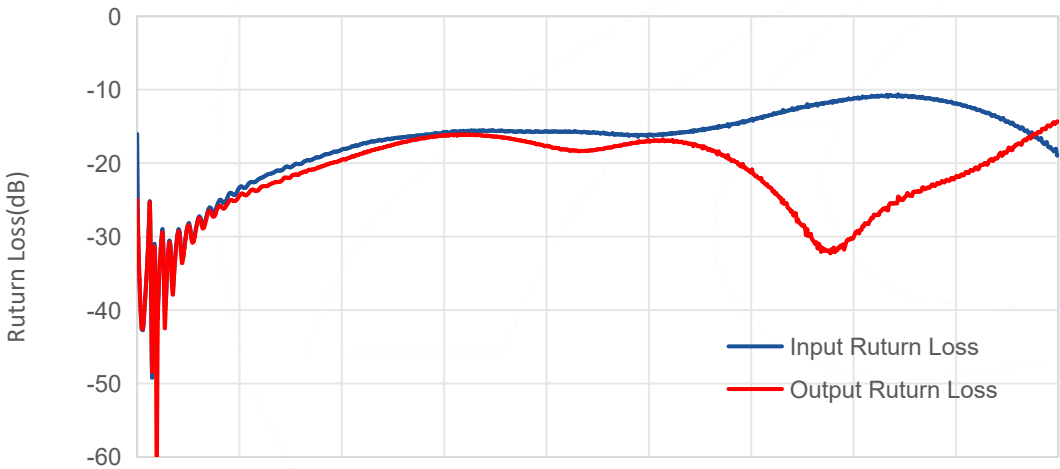
订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TURBT-100K18G18SSCryo	Cryogenic Bias Tee SMA,100KHz-18 GHz,+18V	Rev.1.1

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

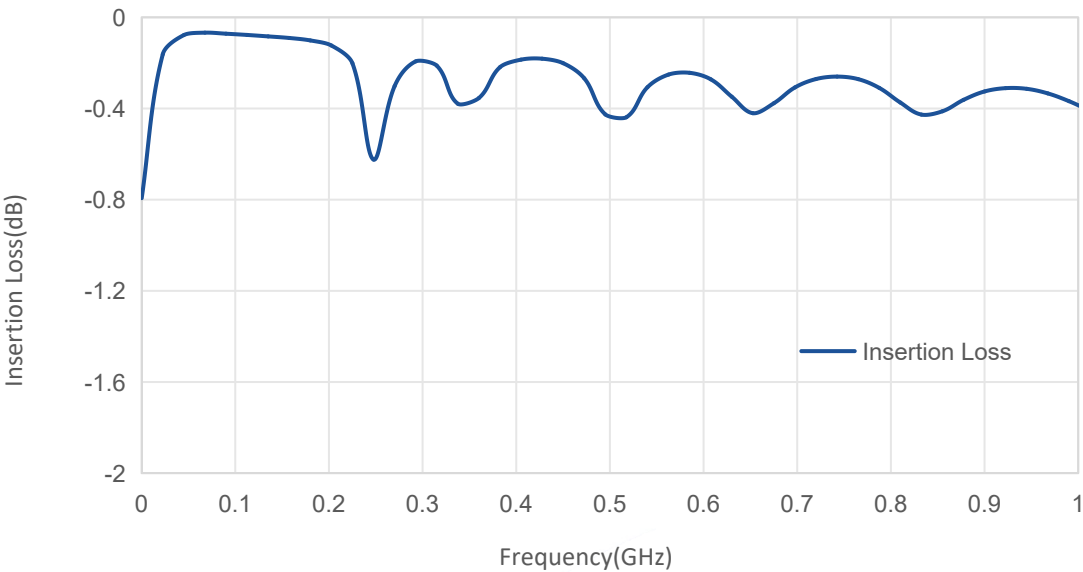
典型曲线 Typical Performance Data:

298K: Return Loss vs Frequency

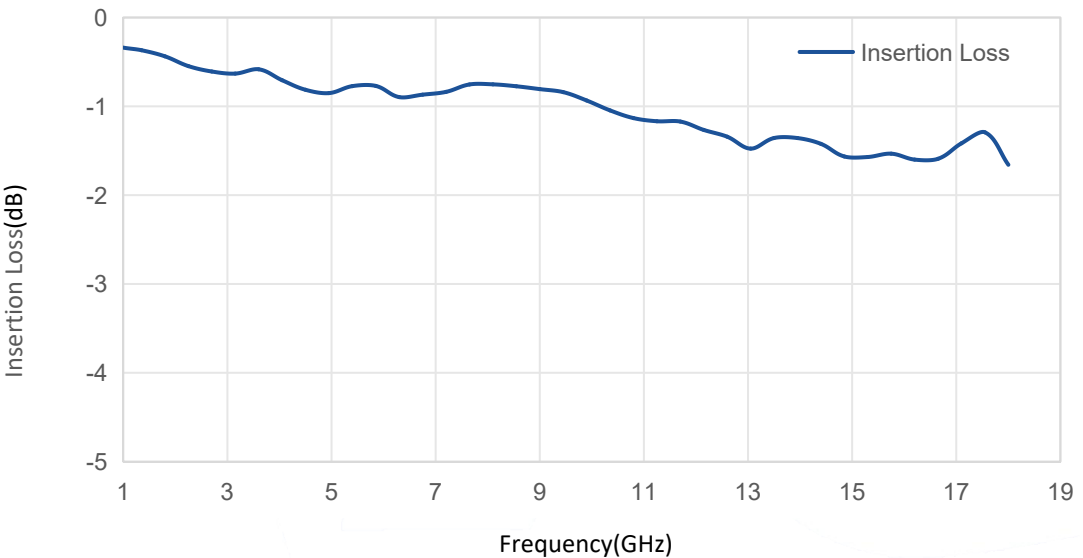


典型曲线 Typical Performance Data:

298K: RF to Com Insertion Loss vs Frequency

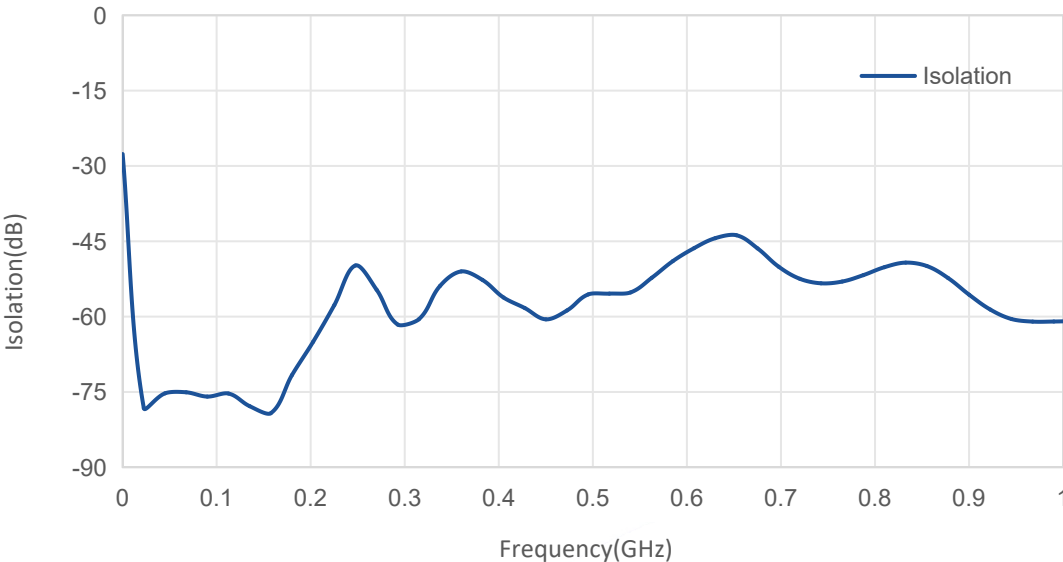


298K: RF to Com Insertion Loss vs Frequency

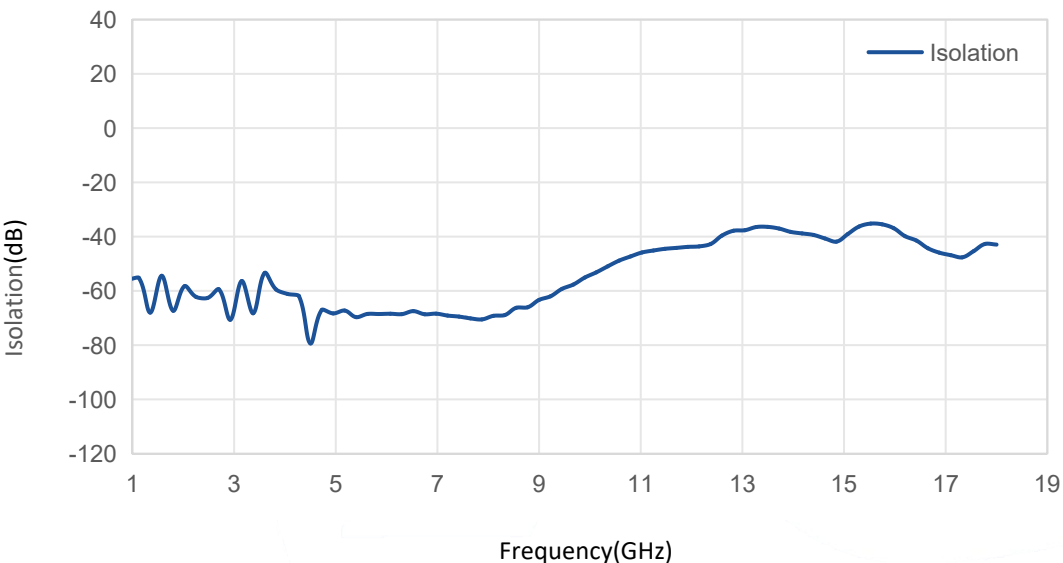


典型曲线 Typical Performance Data:

298K: DC to Com Isolation vs Frequency

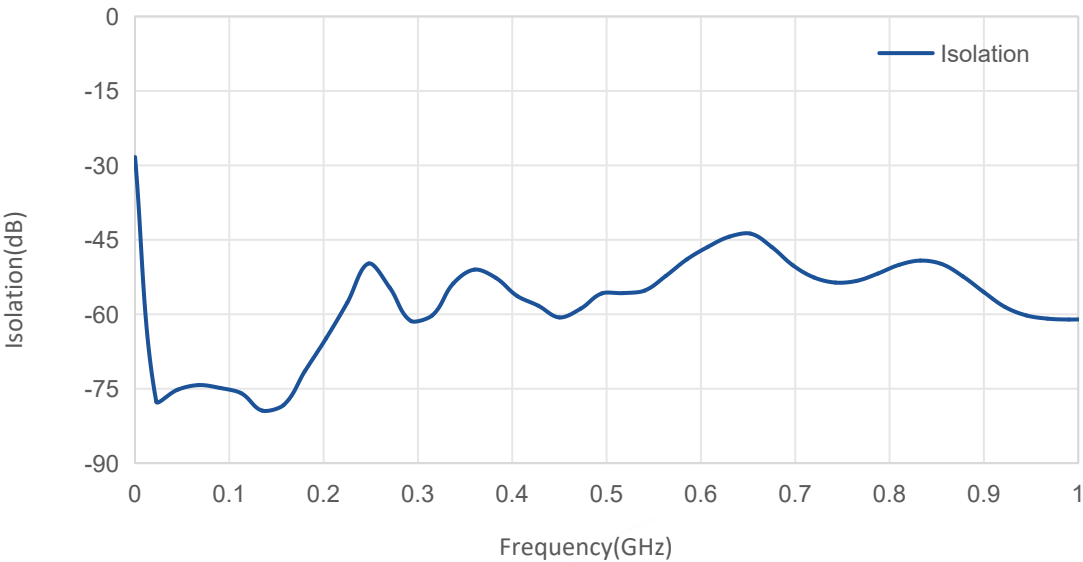


298K: DC to Com Isolation vs Frequency

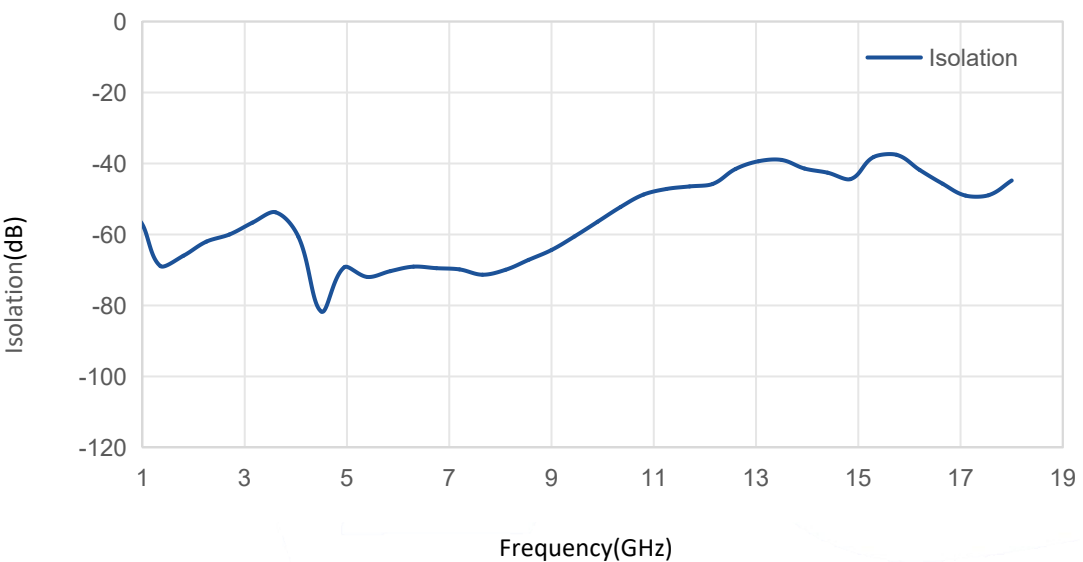


典型曲线 Typical Performance Data:

298K: DC to RF Isolation vs Frequency

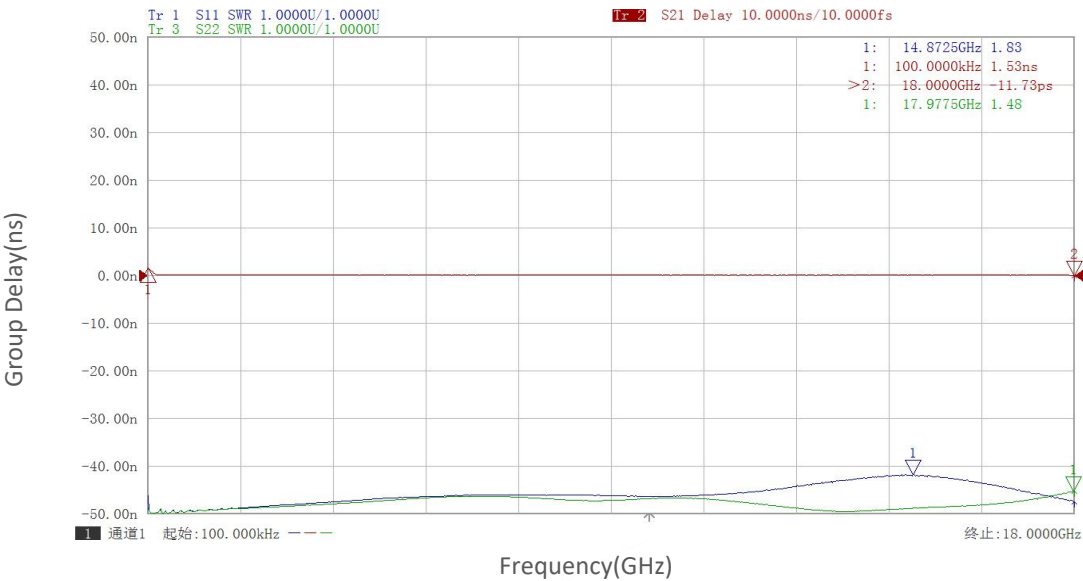


298K: DC to RF Isolation vs Frequency

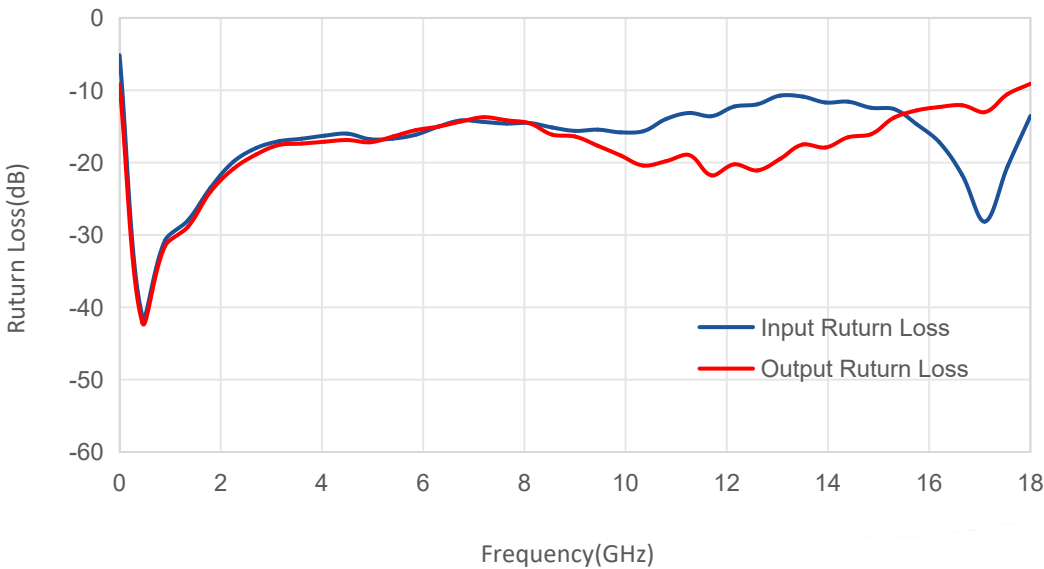


典型曲线 Typical Performance Data:

298K: Group Delay vs Frequency

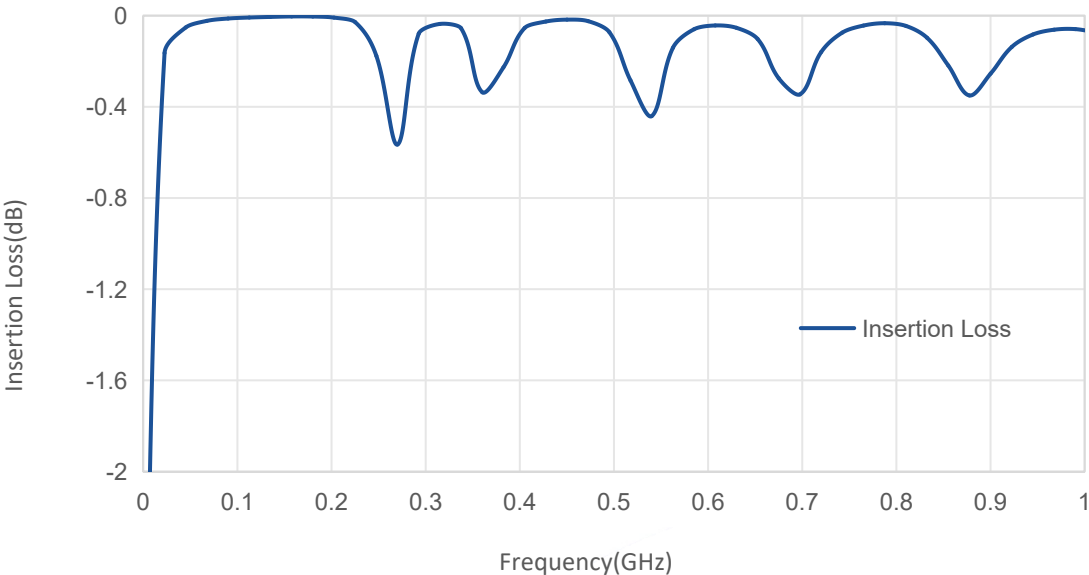


77K: Return Loss vs Frequency

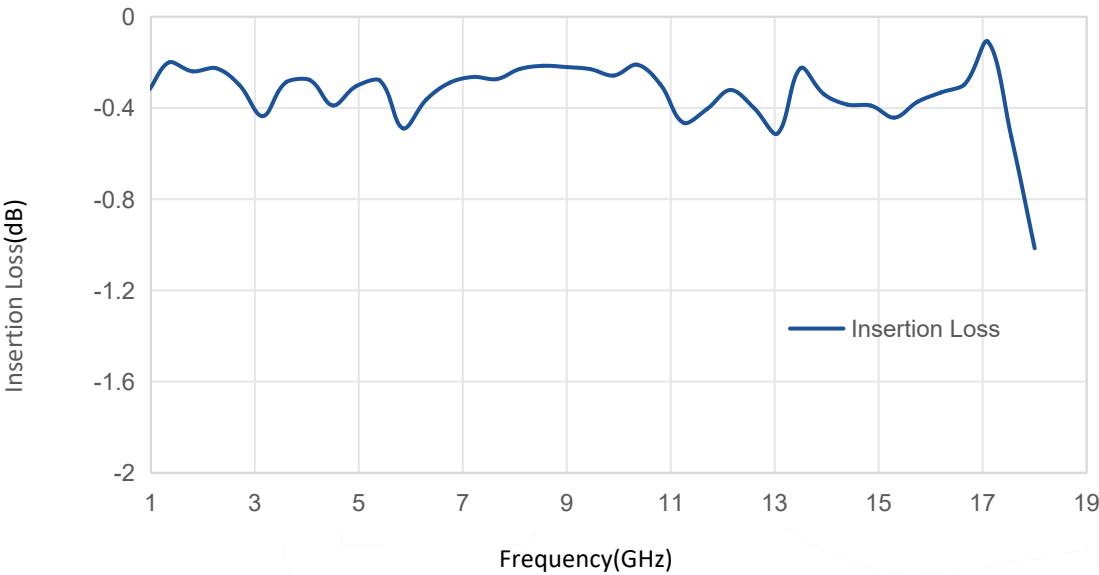


典型曲线 Typical Performance Data:

77K: RF to Com Insertion Loss vs Frequency

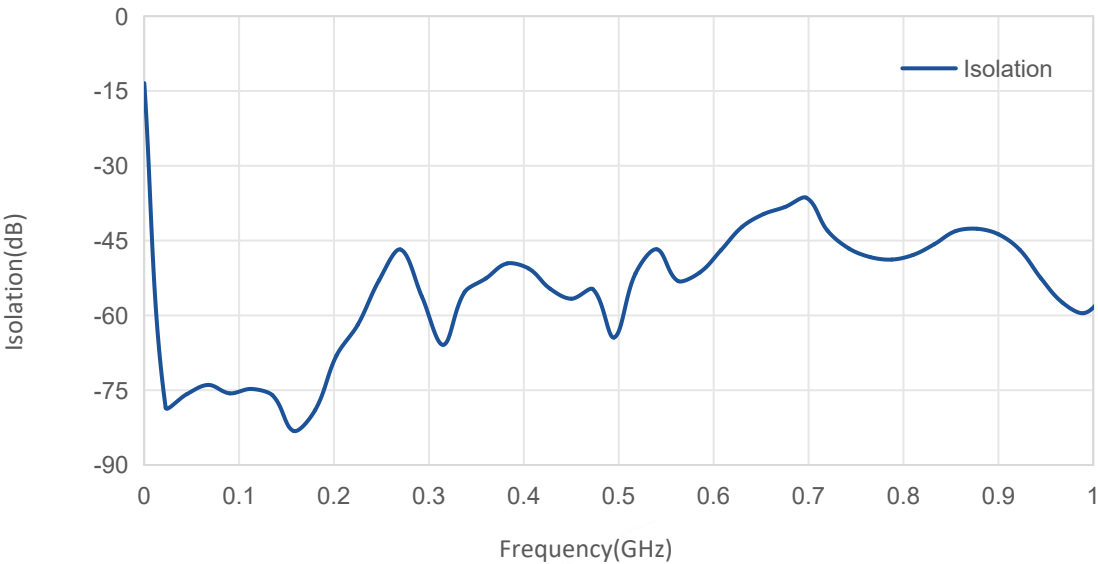


77K: RF to Com Insertion Loss vs Frequency

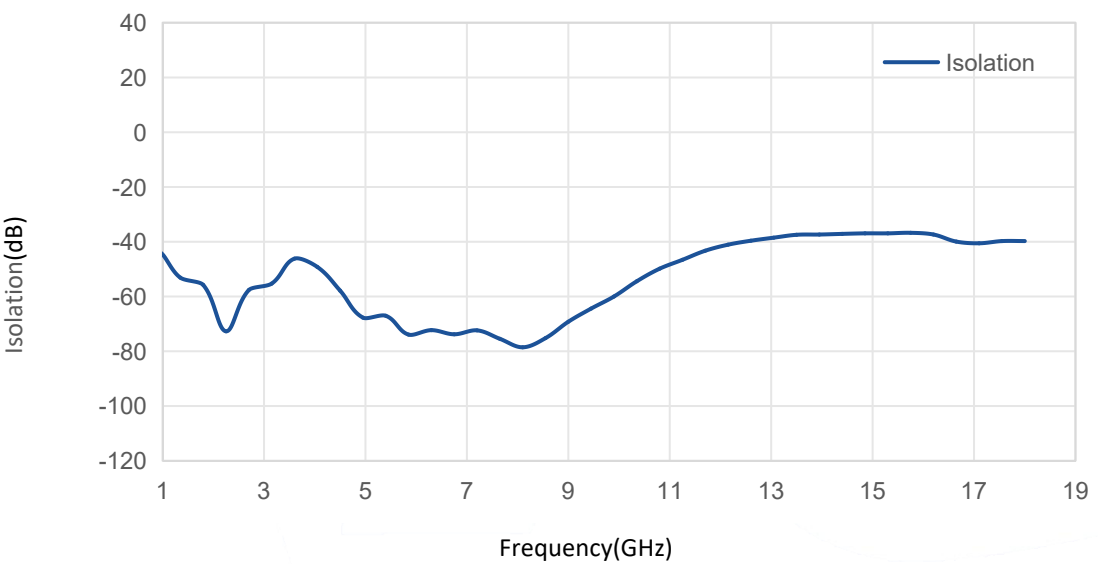


典型曲线 Typical Performance Data:

77K: DC to Com Isolation vs Frequency

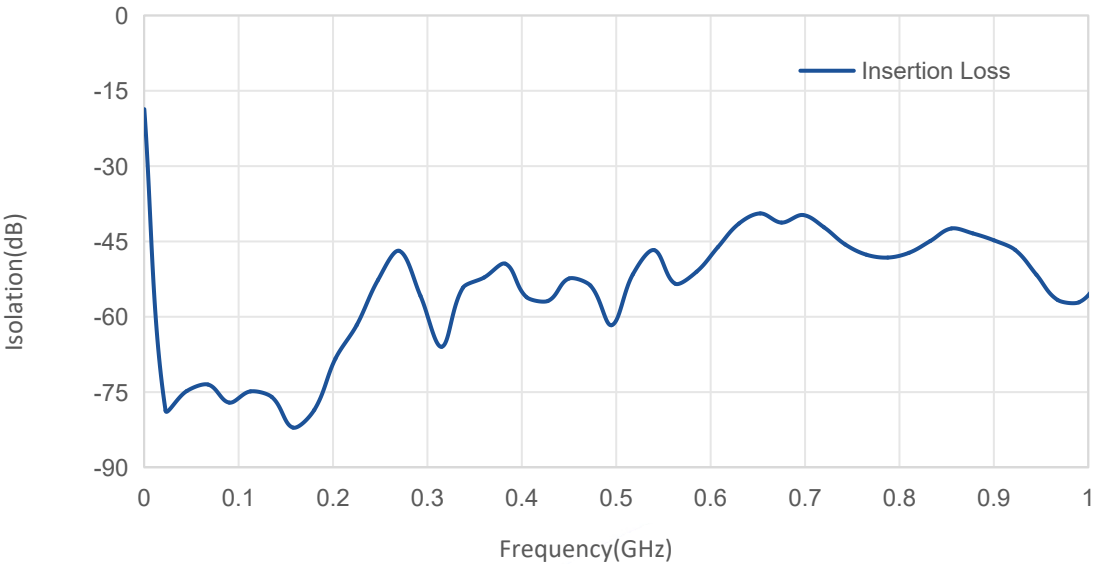


77K: DC to Com Isolation vs Frequency

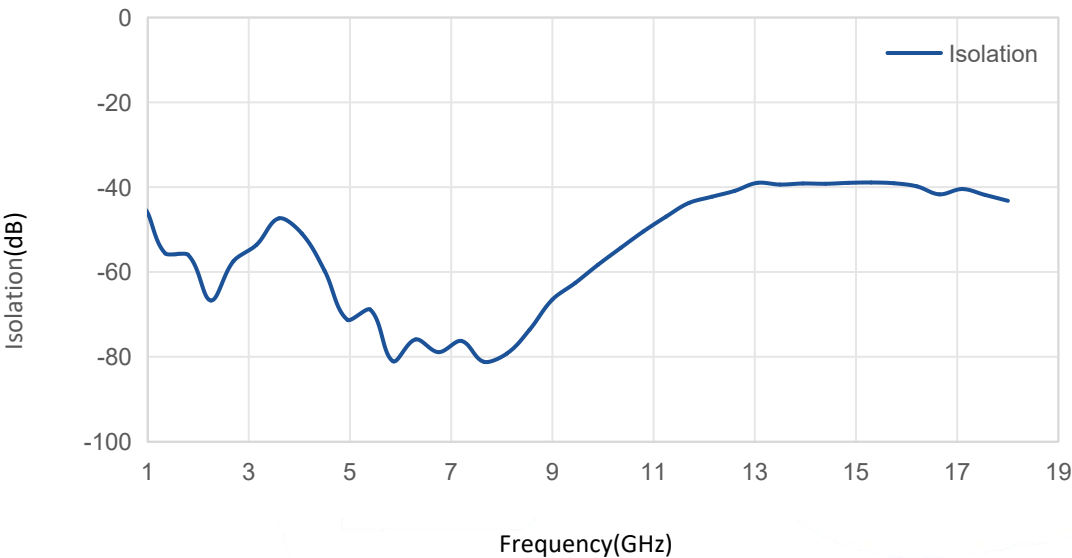


典型曲线 Typical Performance Data:

77K: DC to RF Isolation vs Frequency



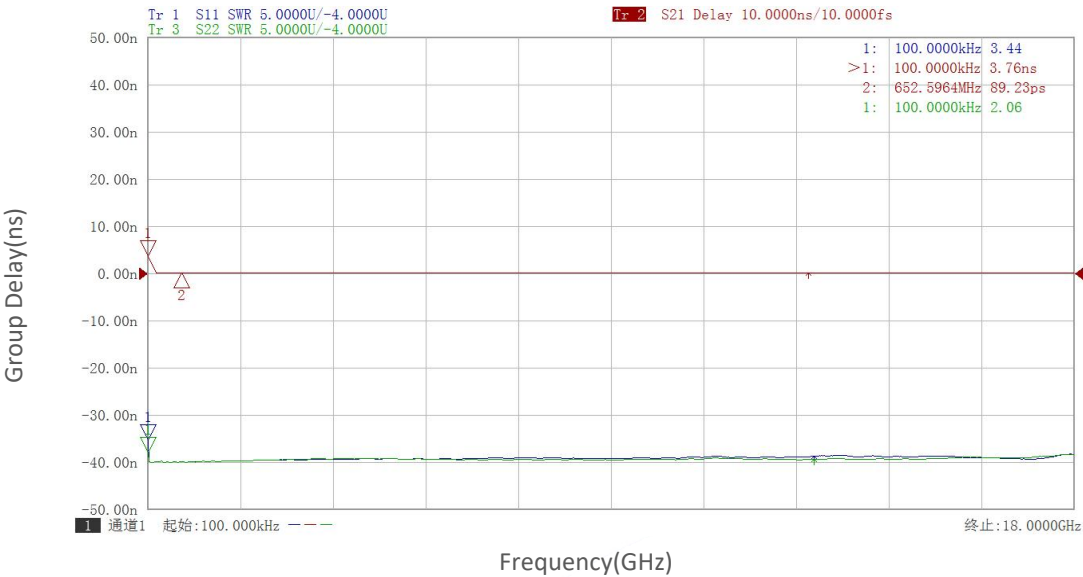
77K: DC to RF Isolation vs Frequency



典型曲线 Typical Performance Data:

77K:

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.