

**Model: TLSP4T0.1G18GA**
**Absorption, Broadband MMIC Switch  
 0.1-18 GHz, SP4T, SMA**
**Feature:**

- Ultra Wide Band: 0.1-18 GHz
- Low Insertion Loss: 3.5 dB
- Power Handling : 27 dBm
- High Isolation
- Switch Type: Absorption

**电气特性 Electrical Specifications:**

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.1-18			GHz
插损 Insertion Loss		3.5	5.5	dB
隔离 Isolation		65		dB
切换速度 Switch Speed		100		ns
输入驻波 Input VSWR		2.0	3.0	:1
输出驻波 Output VSWR		2.0	3.0	:1
耐功率 Power Handling			27	dBm
直流电压 DC Voltage		+5		V DC
直流电流 DC Supply Current		20		mA
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

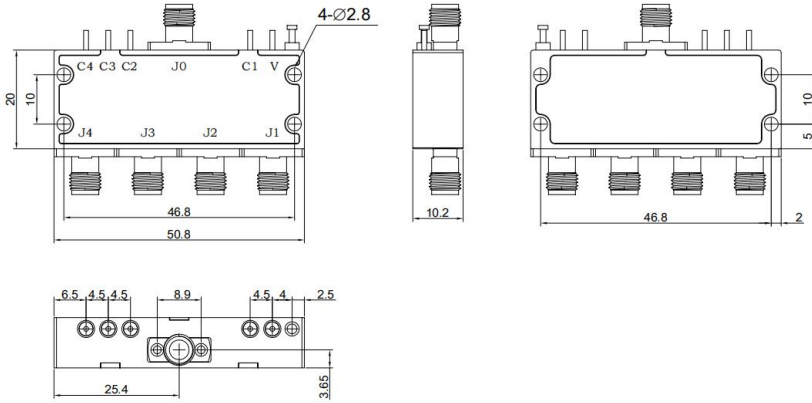
参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	SMA Female	
直流控制接口 Control Bias	Solder Pin	
尺寸 Size	50.8*30*10.2	mm
重量 Weight	-	g

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+/-5%
输入功率 RF Input Power	30 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

**外形尺寸 Outline Drawing:**

Unit: mm



**真值表 Truth Table**

TTL Control Input				Signal Path State
C4	C3	C2	C1	
0	0	0	1	J0-J1
0	0	1	0	J0-J2
0	1	0	0	J0-J3
1	0	0	0	J0-J4
1: +3.3V/+5V 0:0V				

1. Dimensions are in mm [inches]
  2. Tolerances: Outline drawing  $\pm 0.2$  [0.008] Hole  $\pm 0.2$  [0.008]
- NOTE: ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME



**温度环境 Environmental Conditions:**

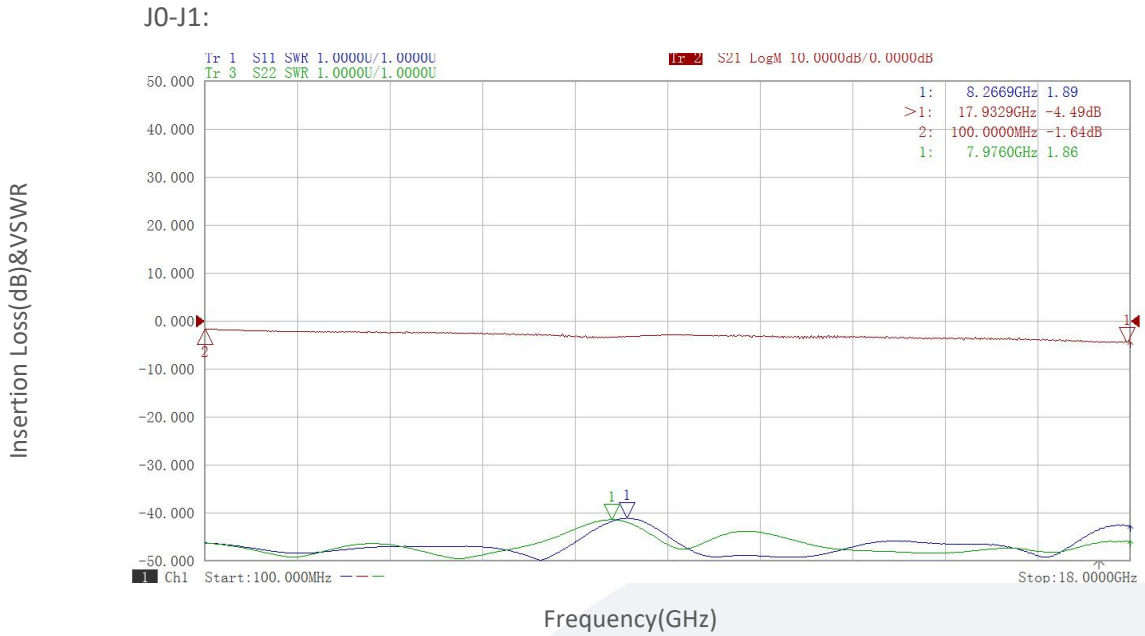
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-20		+70	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**订货信息 Ordering Information:**

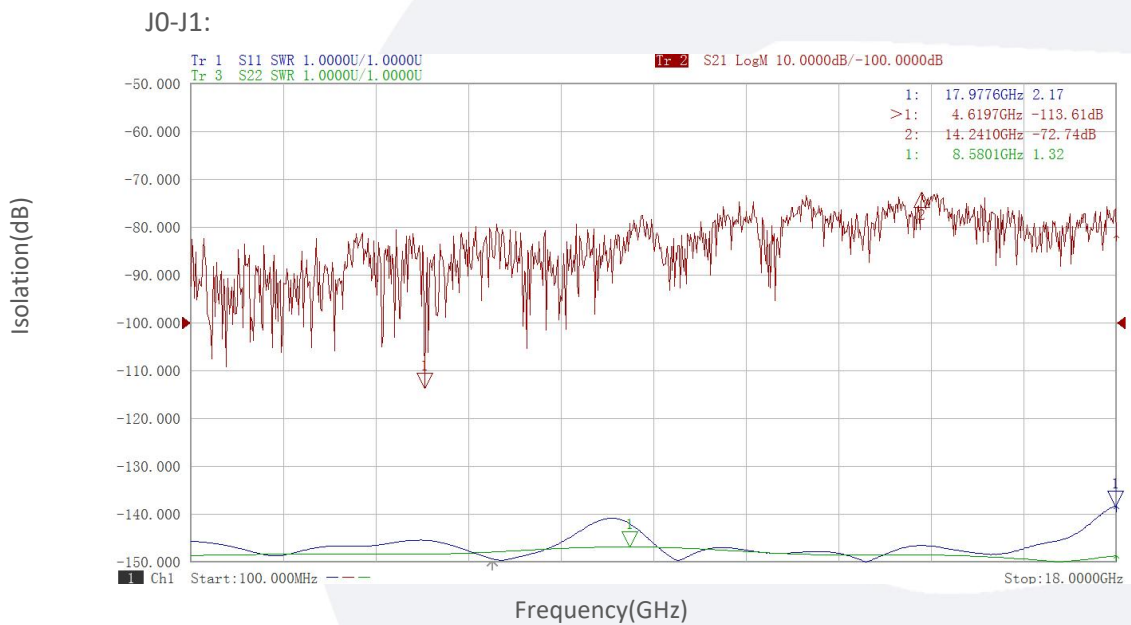
标准型号 Part Number	描述 Description	版本号 Revision
TLSP4T0.1G18GA	Absorption, Broadband MMIC Switch 0.1-18 GHz, SP4T, SMA	Rev.1.1

典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency



Isolation vs Frequency

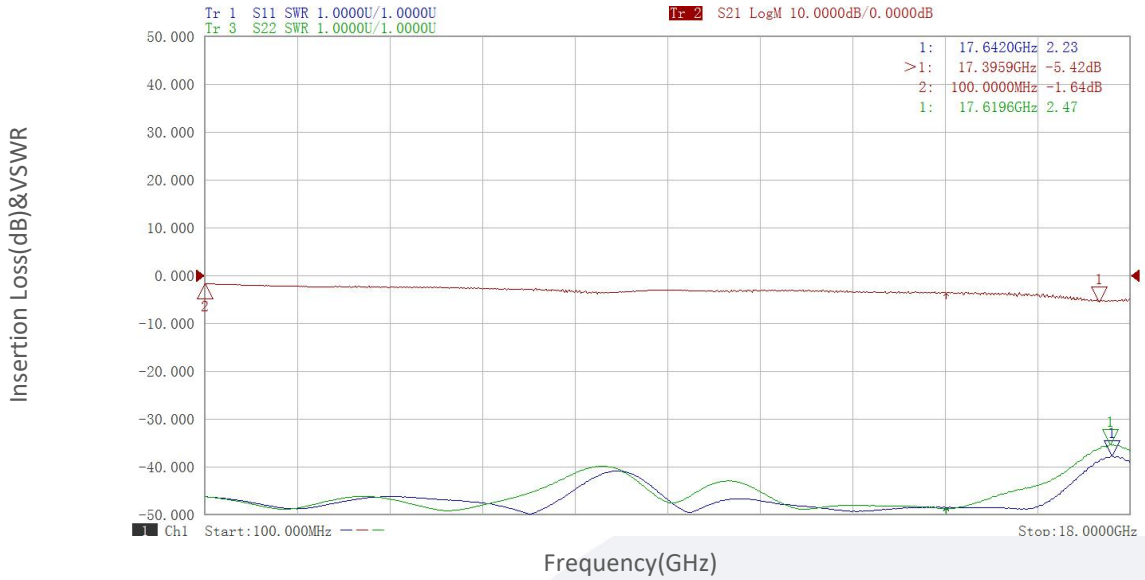


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

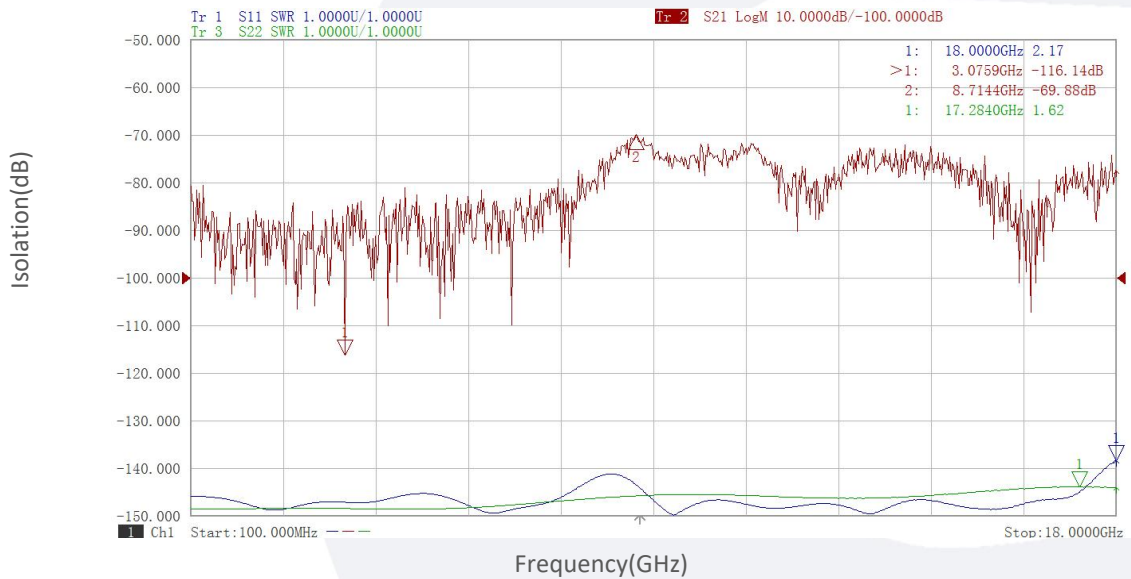
### Insertion Loss&VSWR vs Frequency

J0-J2:



### Isolation vs Frequency

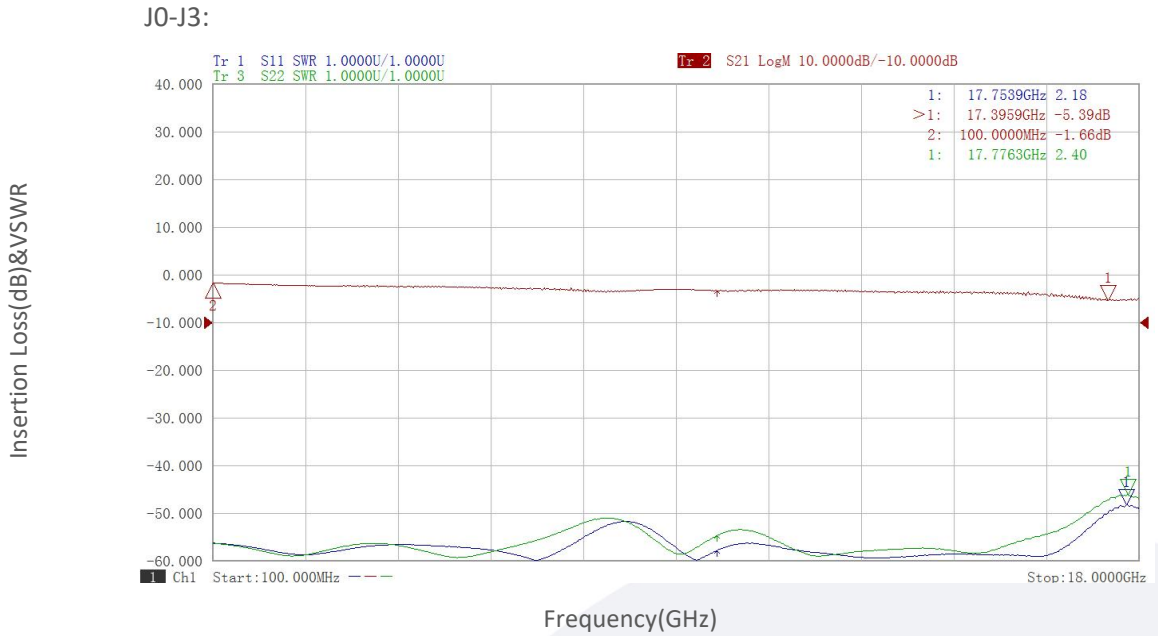
J0-J2:



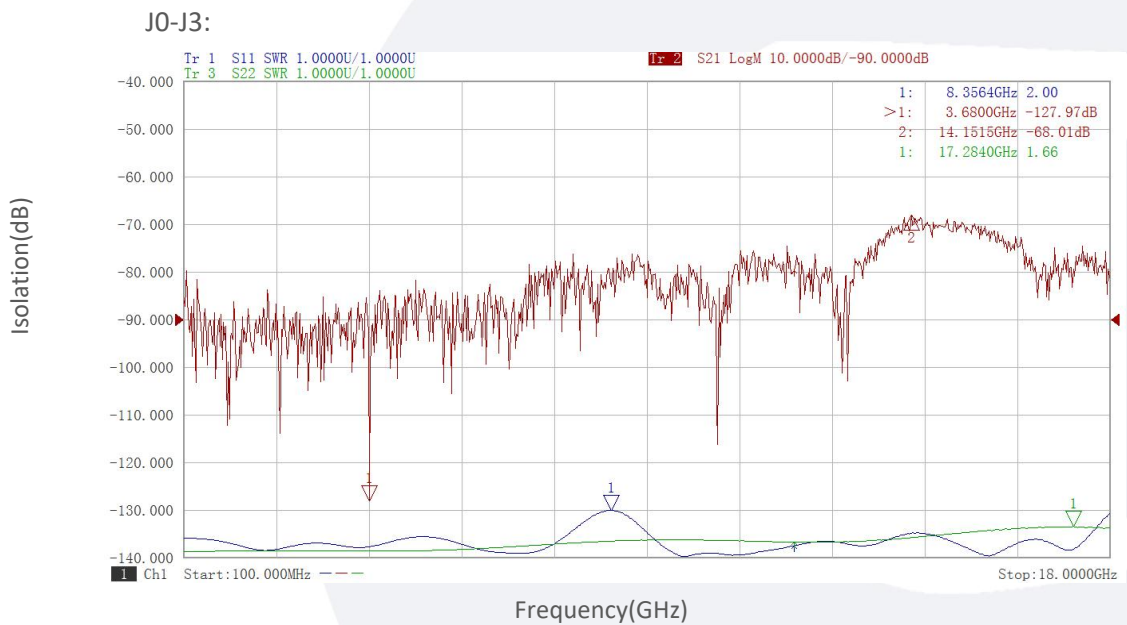
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典型曲线 Typical Performance Data:

### Insertion Loss&VSWR vs Frequency



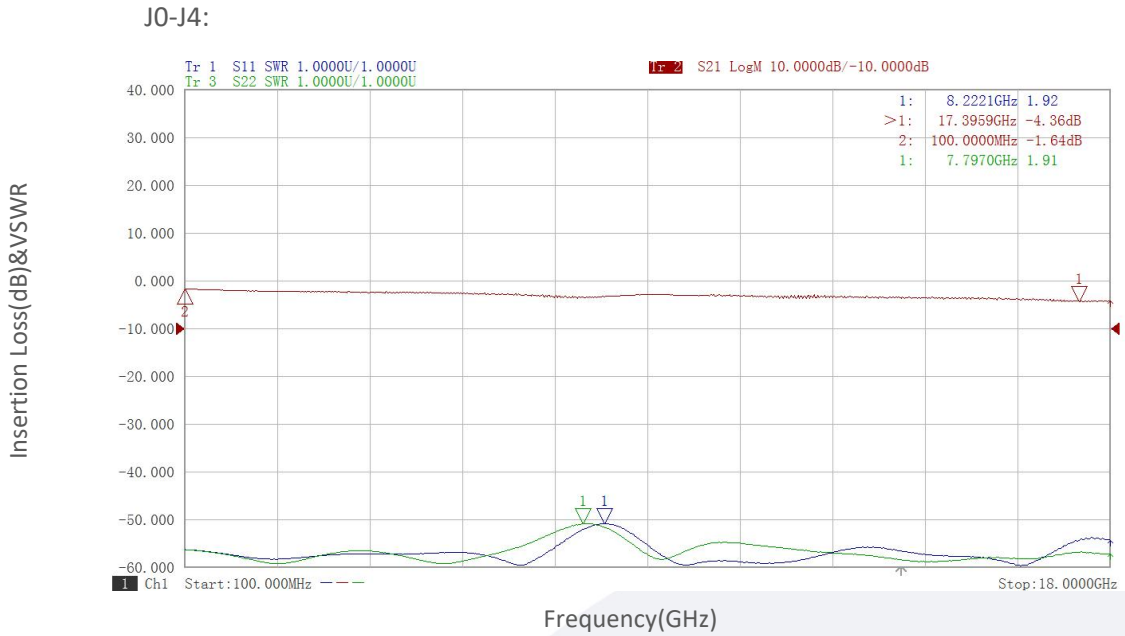
### Isolation vs Frequency



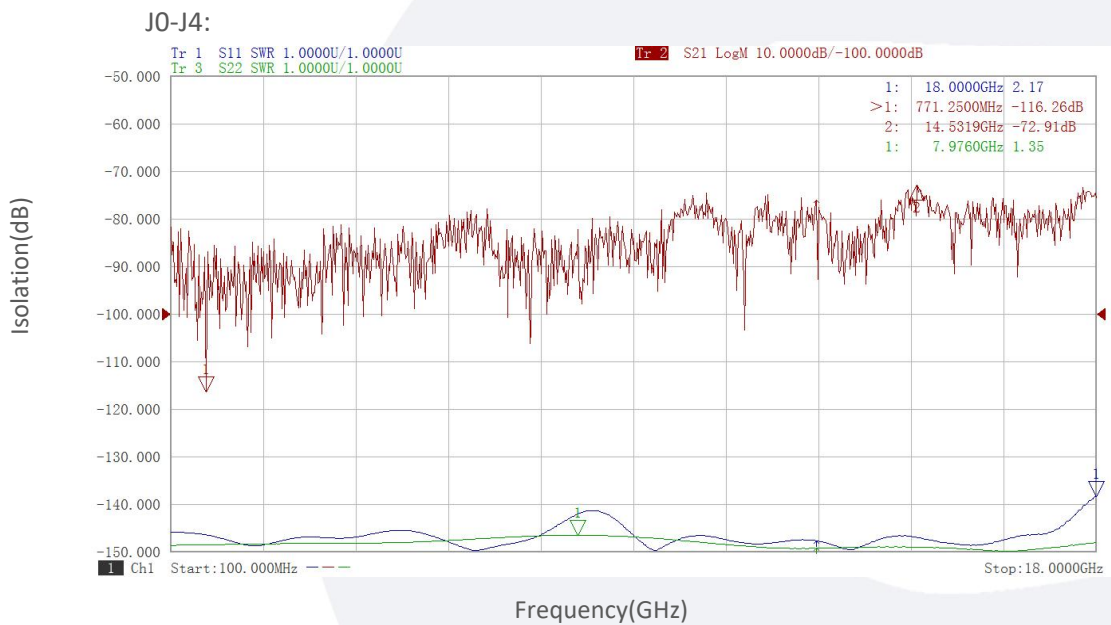
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典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency



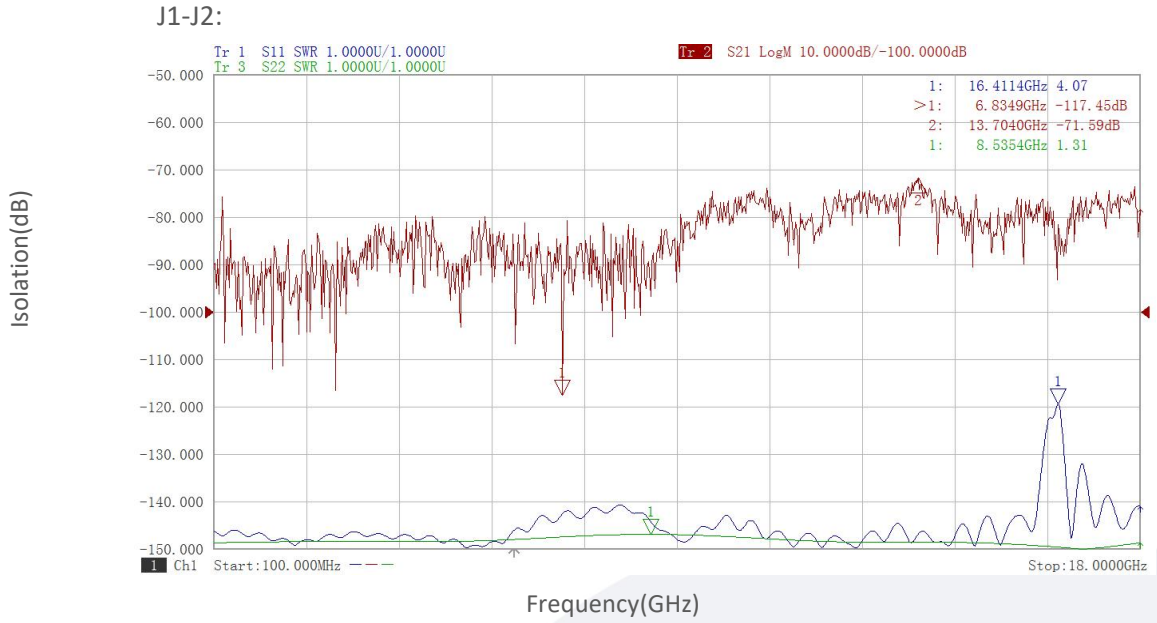
Isolation vs Frequency



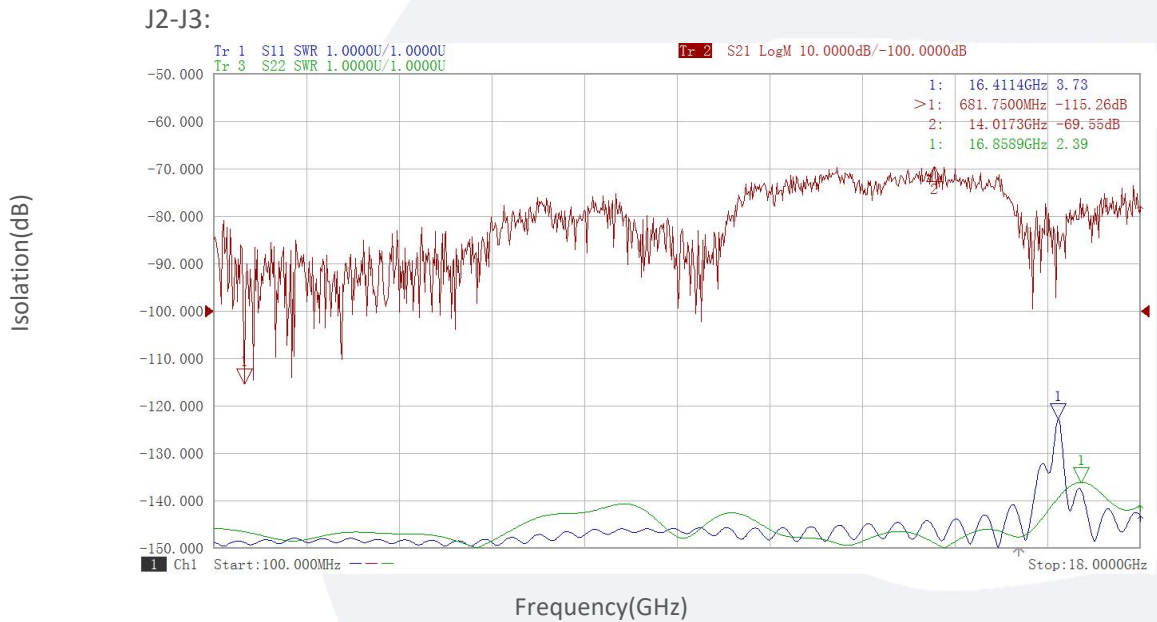
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Isolation vs Frequency



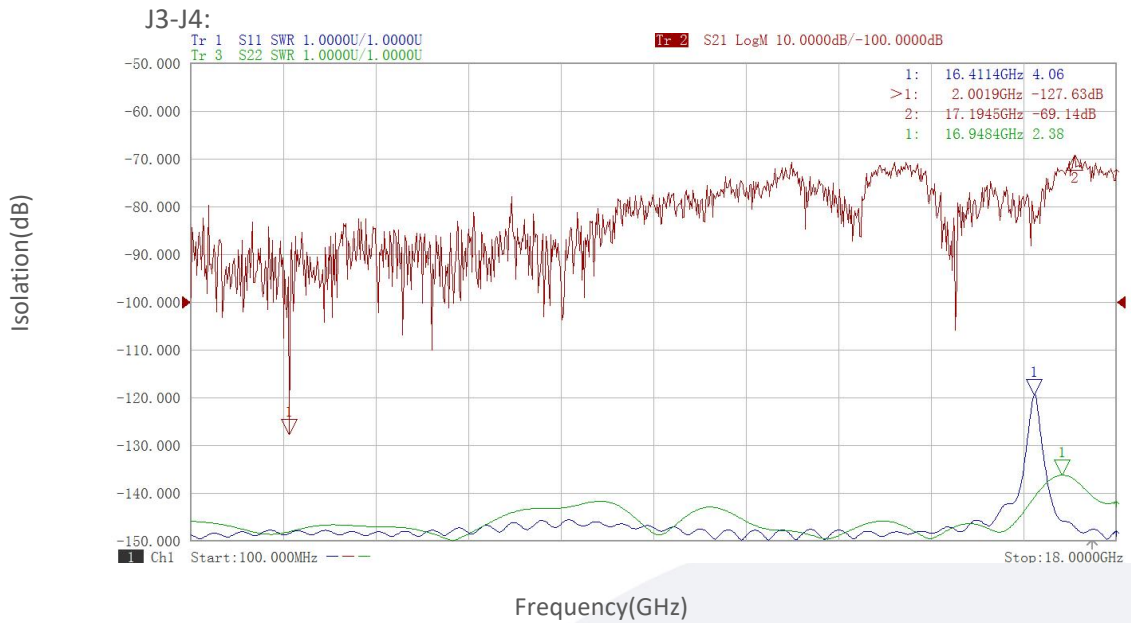
Isolation vs Frequency



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Isolation vs Frequency



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