

**Model: TLDA0.1G50G-62-6**
**Digital Attenuator**  
**0.1-50 GHz, 6-Bit, 1 dB LSB, 62 dB Range**
**Feature:**

- Ultra Wide Band: 0.1-50GHz
- 6-Bit, 1 dB LSB, 62 dB Range
- Low Insertion Loss
- High Attenuator Accuracy

**电气特性 Electrical:**

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	0.1-50			GHz
插损 Insertion Loss	<a href="#">10dB@0.1-20GHz</a> 15dB@20-40GHz 20dB@40-50GHz			dB
衰减范围 Attenuation Range		62		dB
控制位数 Control Bit TTL		6		Bit
衰减步进 Attenuation Step		1		dB
切换速度 Switch Speed		50		ns
输入驻波 Input VSWR		2.2	2.5	:1
输出驻波 Output VSWR		2.2	2.5	:1
最大输入功率 Input Max Power			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 :**

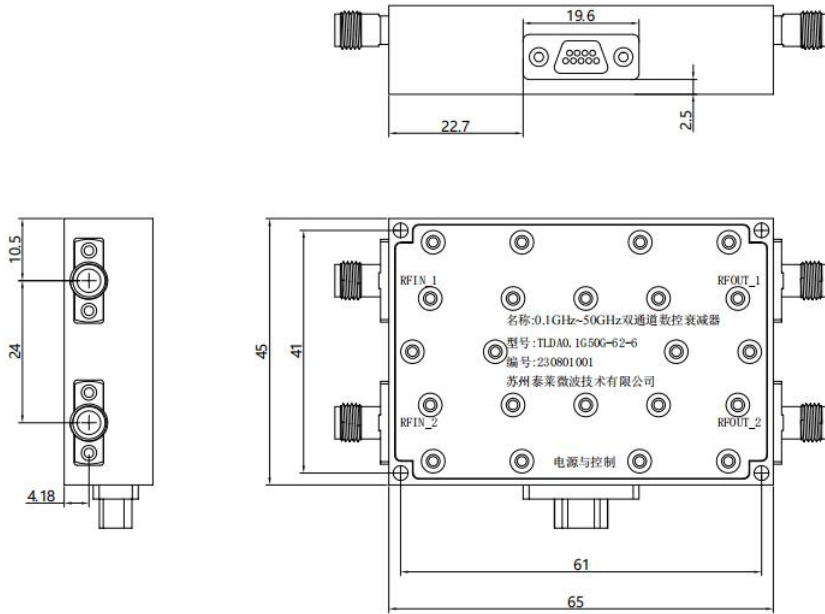
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	2.4mm Female	
控制连接器 Control Connector	J30J-9ZKSP	
尺寸 Size	/	mm
重量 Weight	TBD	g

**绝对最大值 Absolute Maximum Ratings:**

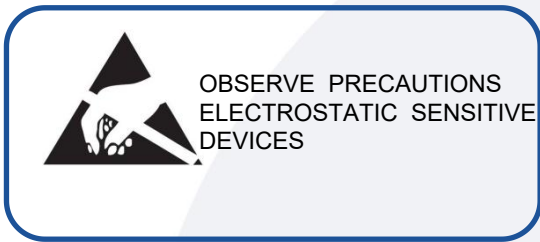
参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	27 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸Outline Drawing:

Unit: mm(Inches)



J30J-9ZKSP	
引脚 Pin #	功能Function
1、6	+12V
2、5、7、9	GND
3	TX
4	RX
8	NC



**温度环境 Environmental Conditions:**

参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°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:**

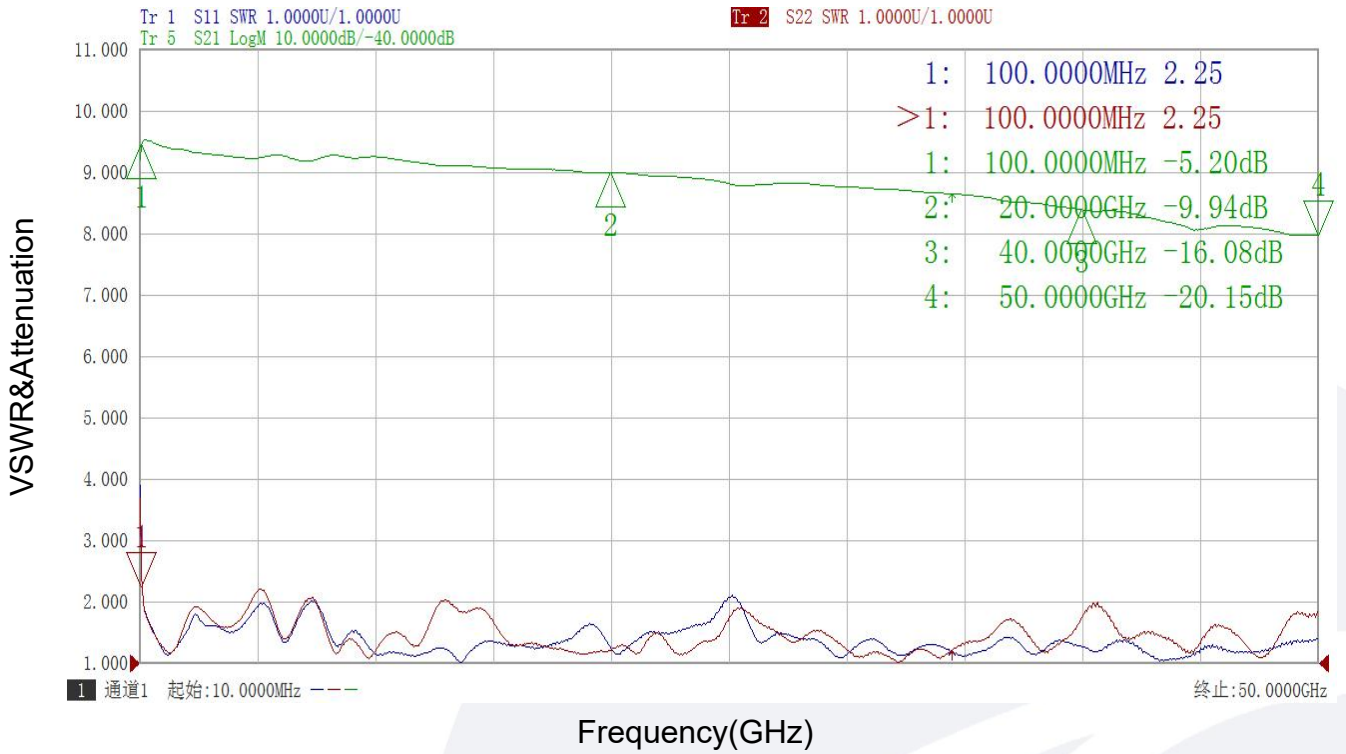
标准型号 Part Number	描述 Description	版本号Revision
TLDA0.1G50G-62-6	Digital Attenuator 0.1-50 GHz, 6-Bit, 1 dB LSB, 62 dB Range	Rev.1.1

典型曲线 Typical Performance Data:

Channel 1

0dB

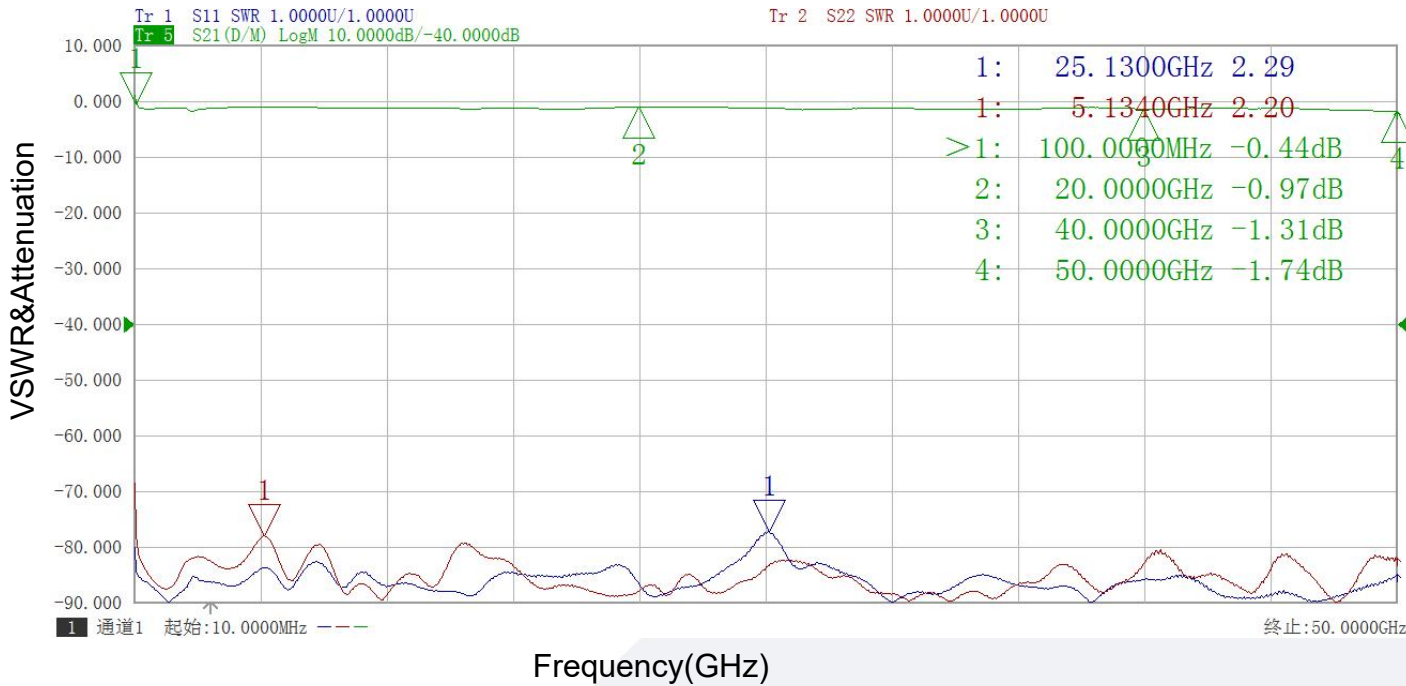
### VSWR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

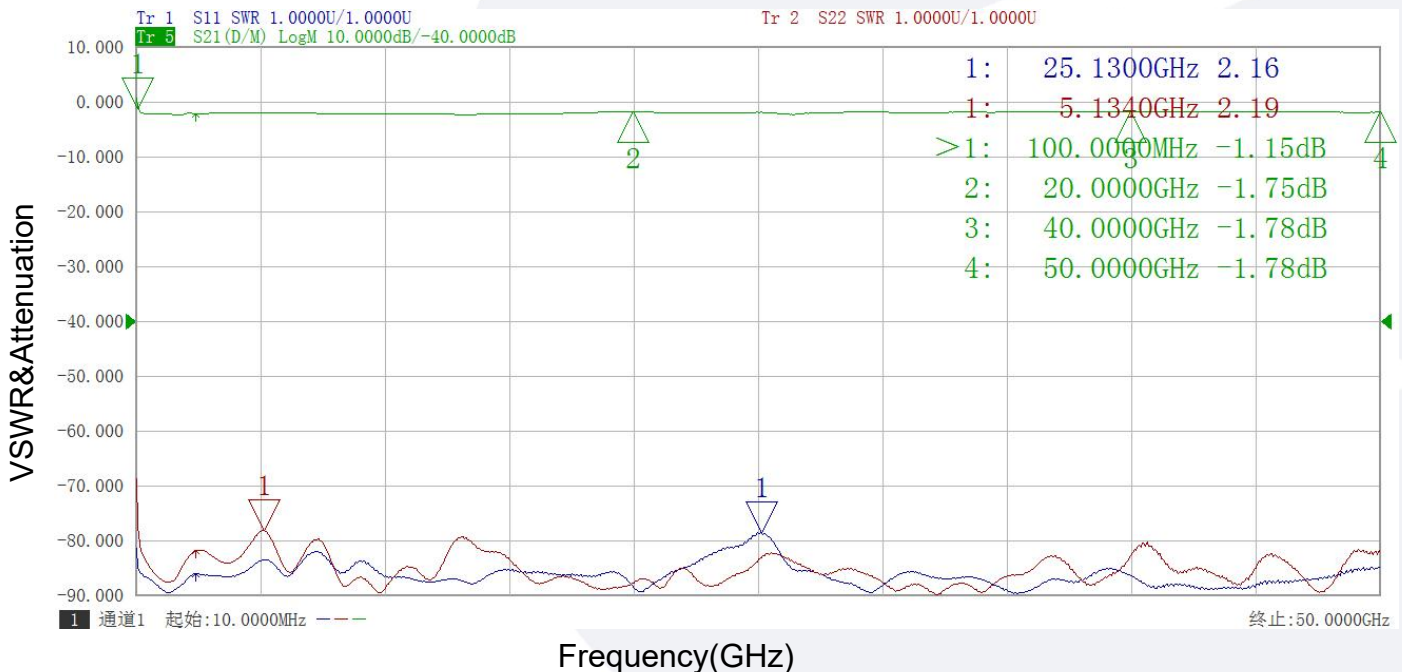
1dB

VSWR&Attenuation vs Frequency



2dB

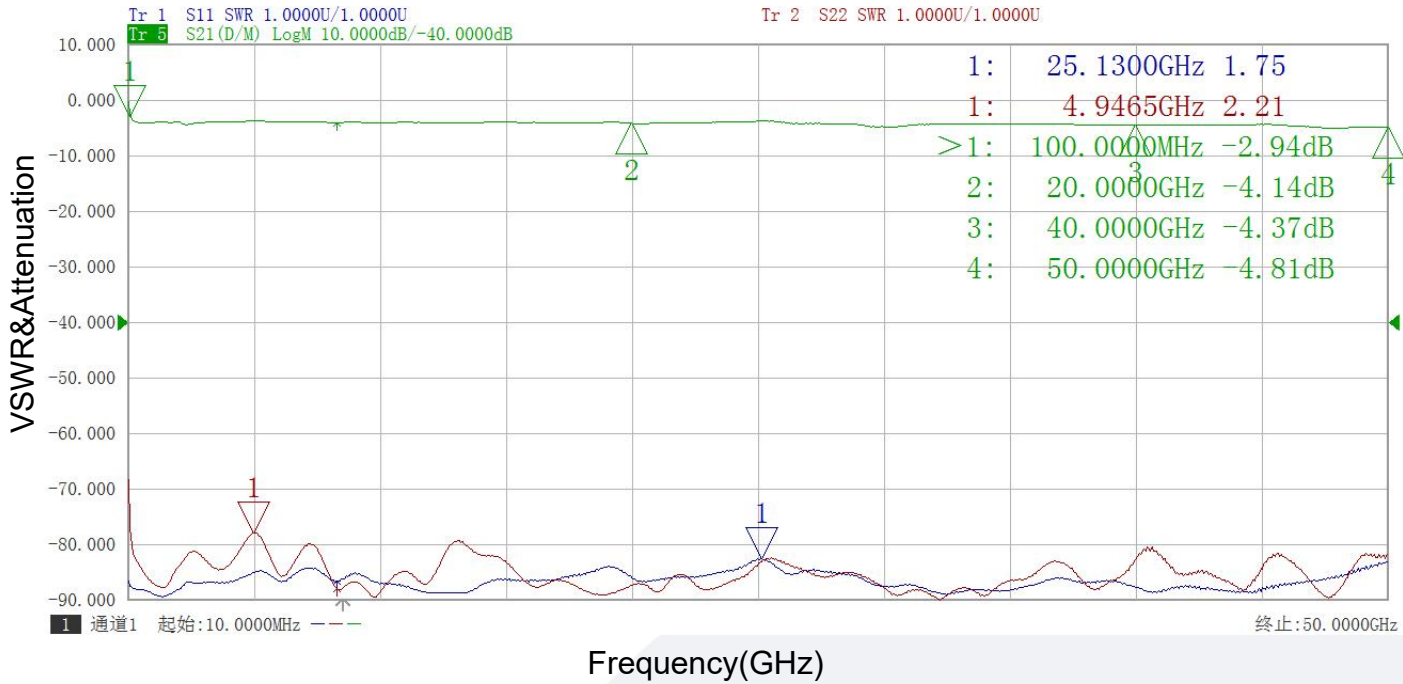
VSWR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

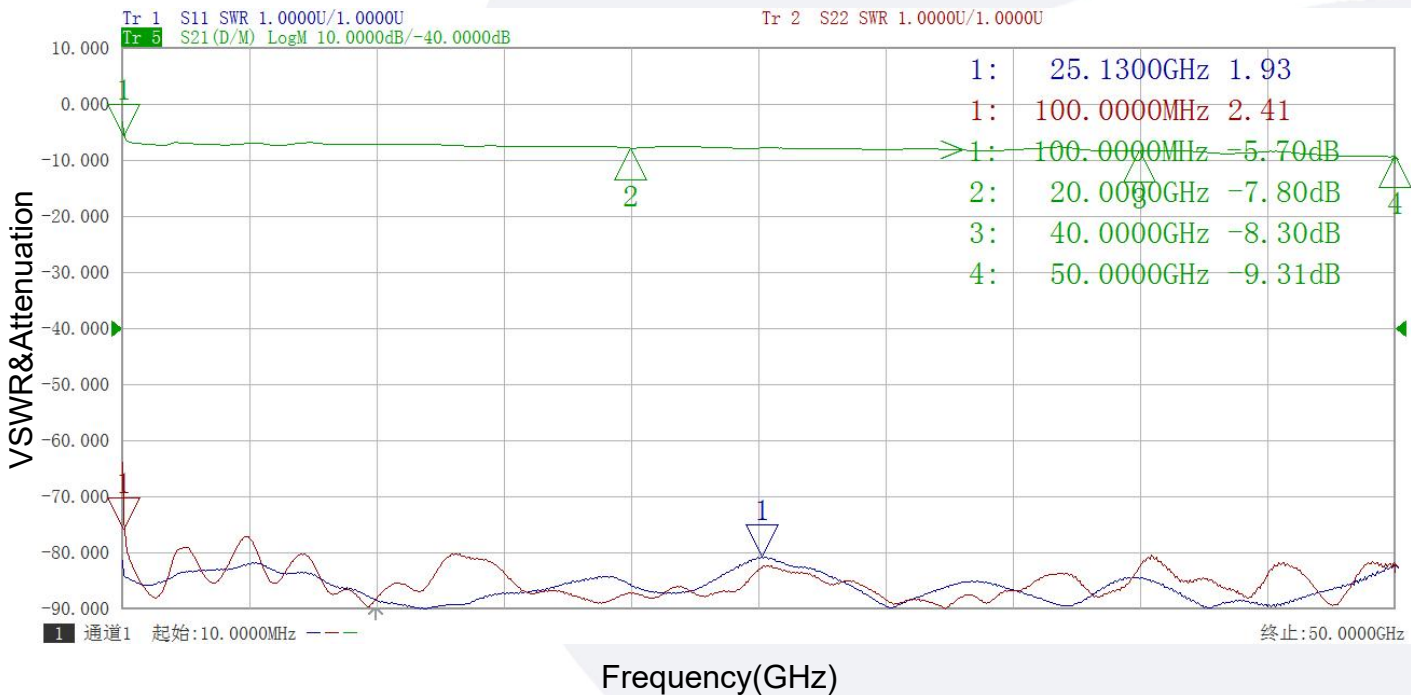
4dB

VSWR&Attenuation vs Frequency



8dB

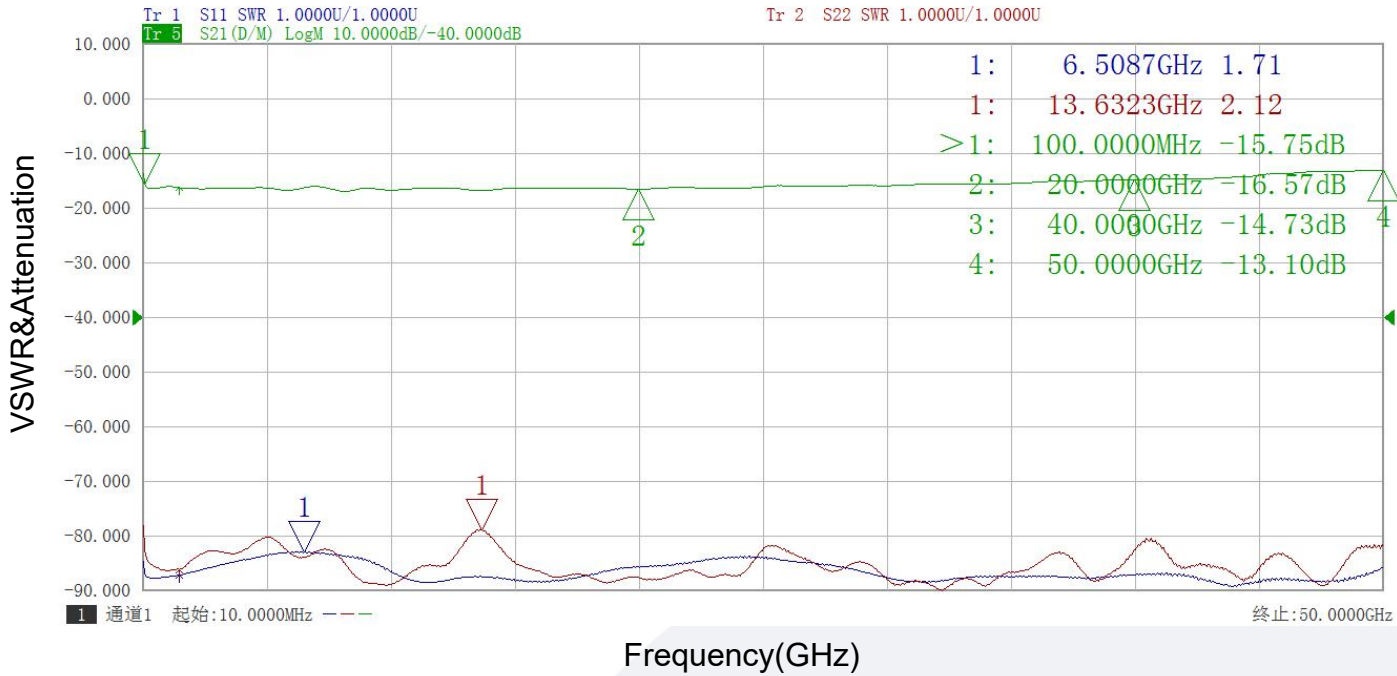
VSWSR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

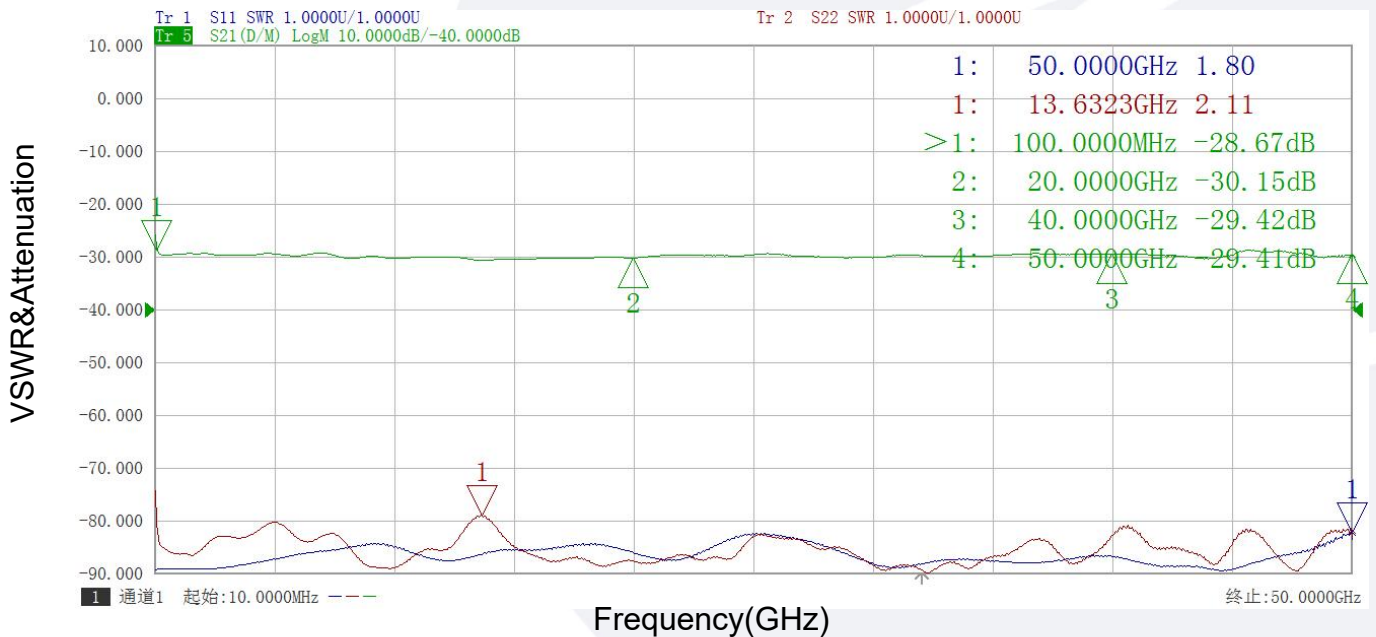
16dB

VSWR&Attenuation vs Frequency



31dB

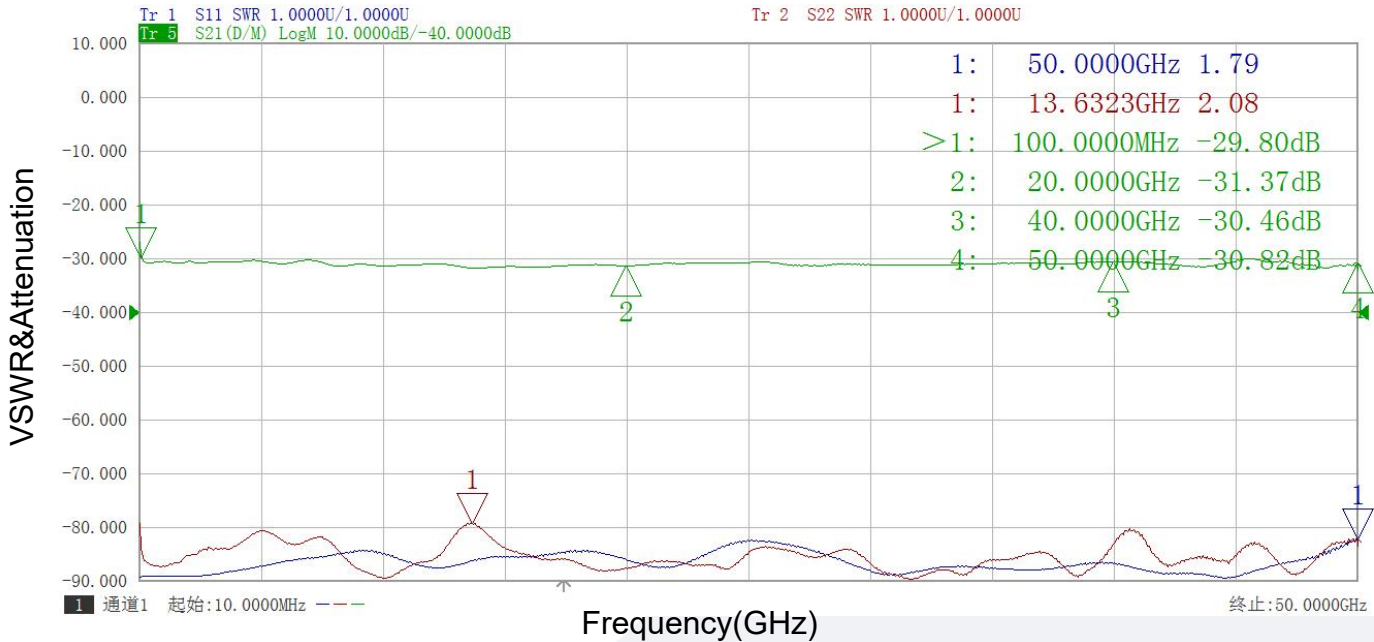
VSWSR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

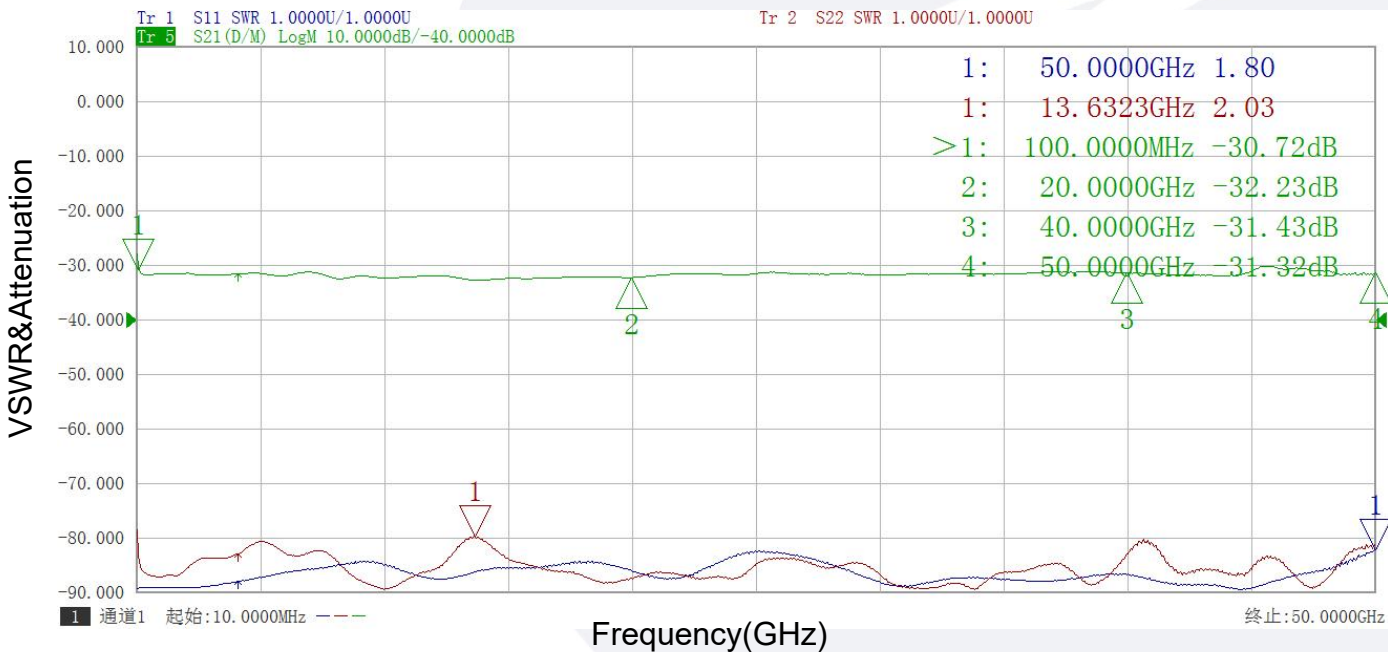
32dB

VSWR&Attenuation vs Frequency



33dB

VSWSR&Attenuation vs Frequency

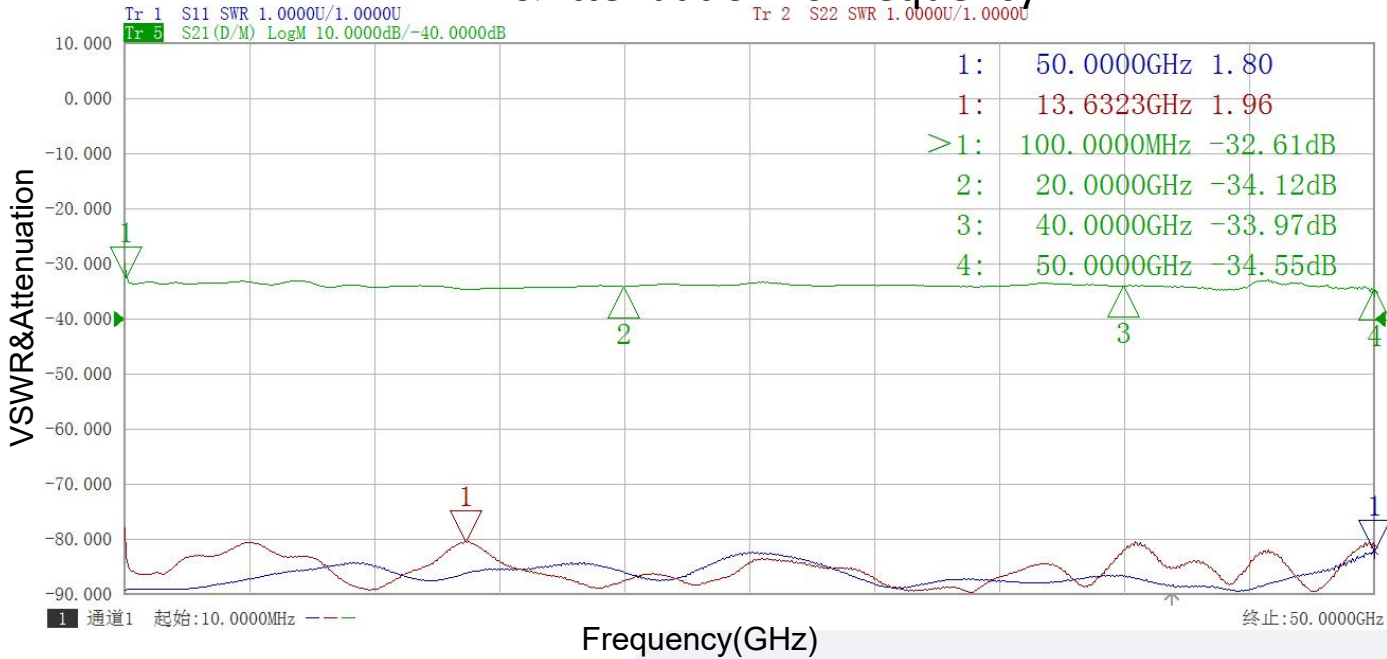




典型曲线 Typical Performance Data:

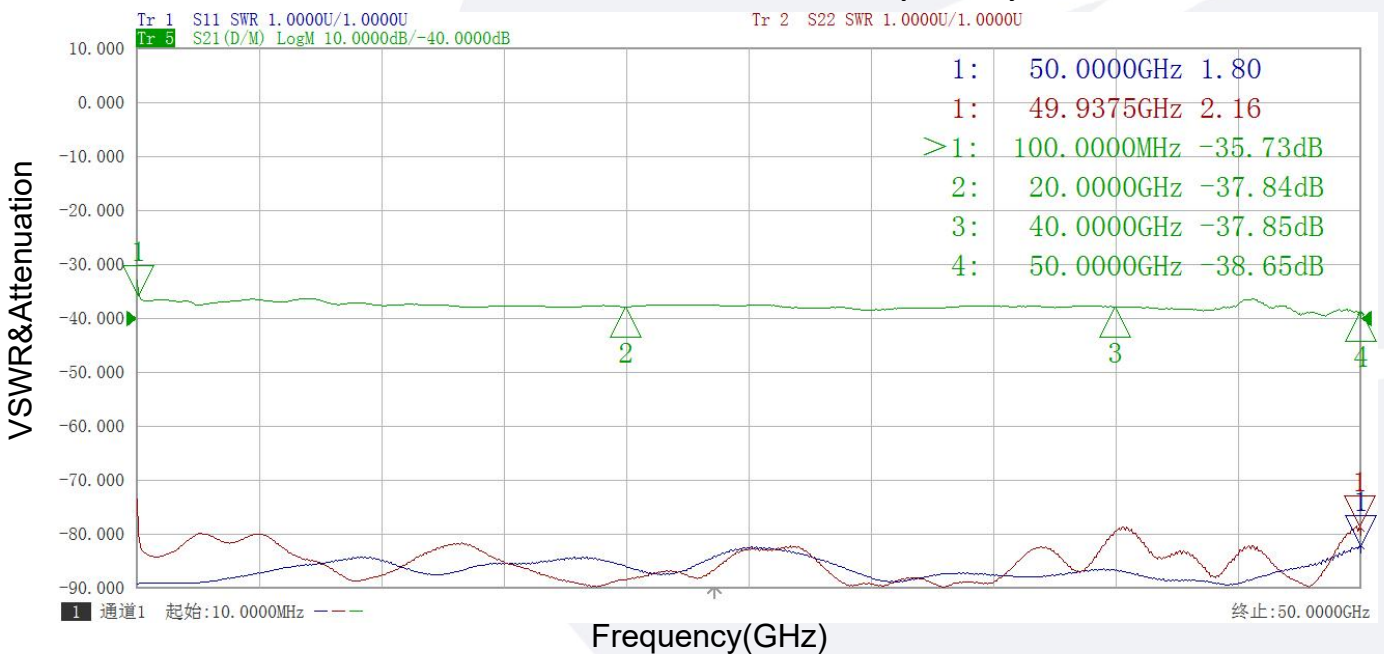
35dB

VSWR&Attenuation vs Frequency



39dB

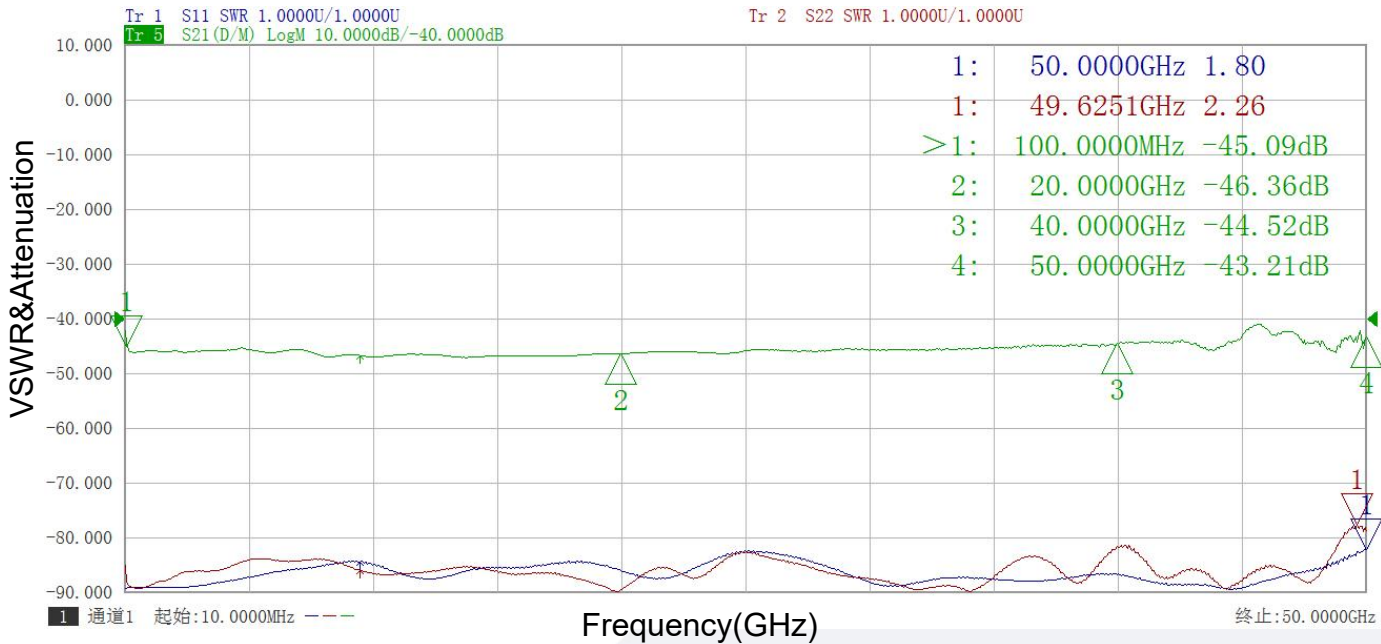
VSWSR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

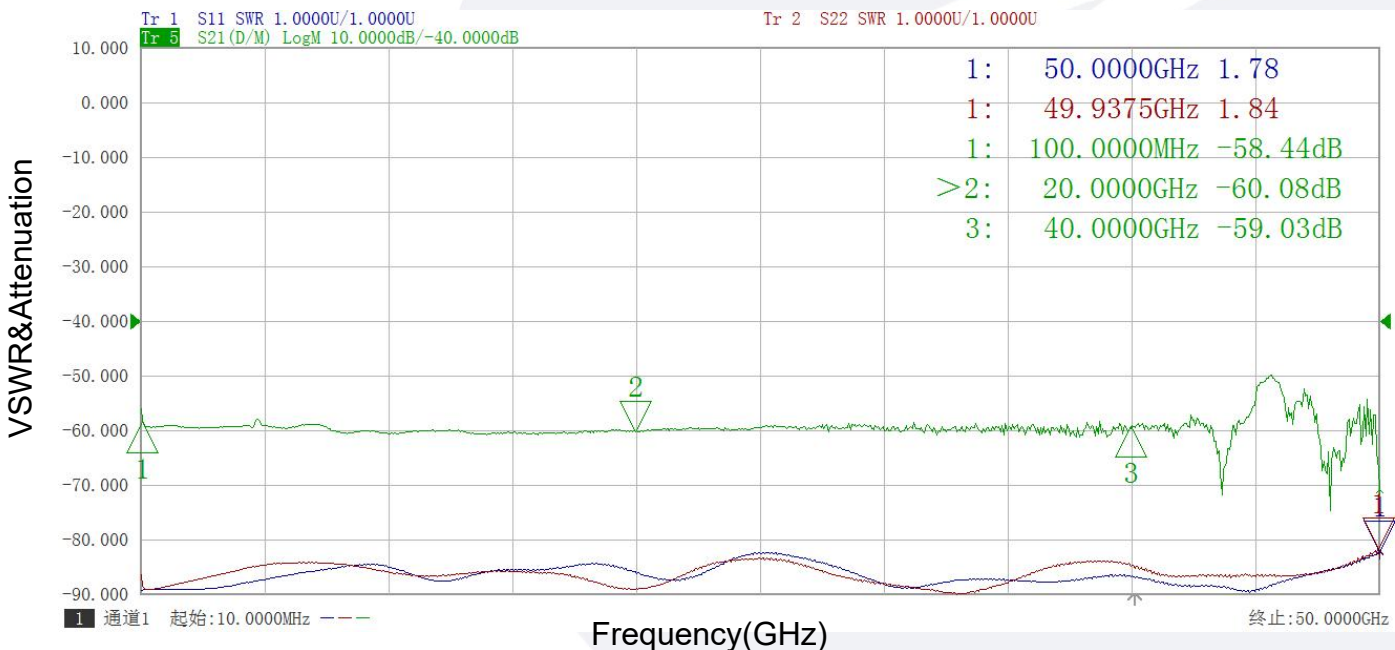
47dB

VSWR&Attenuation vs Frequency



62dB

VSWSR&Attenuation vs Frequency

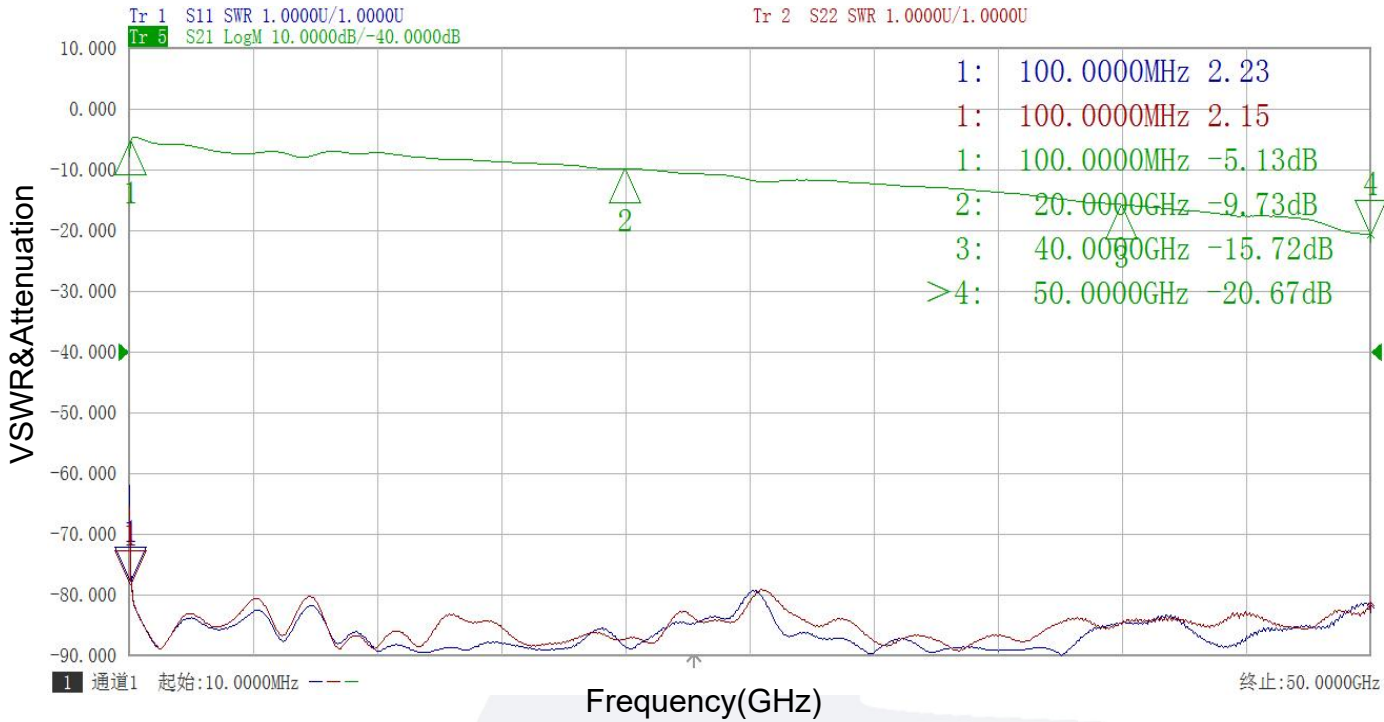


典型曲线 Typical Performance Data:

Channel 2

0dB

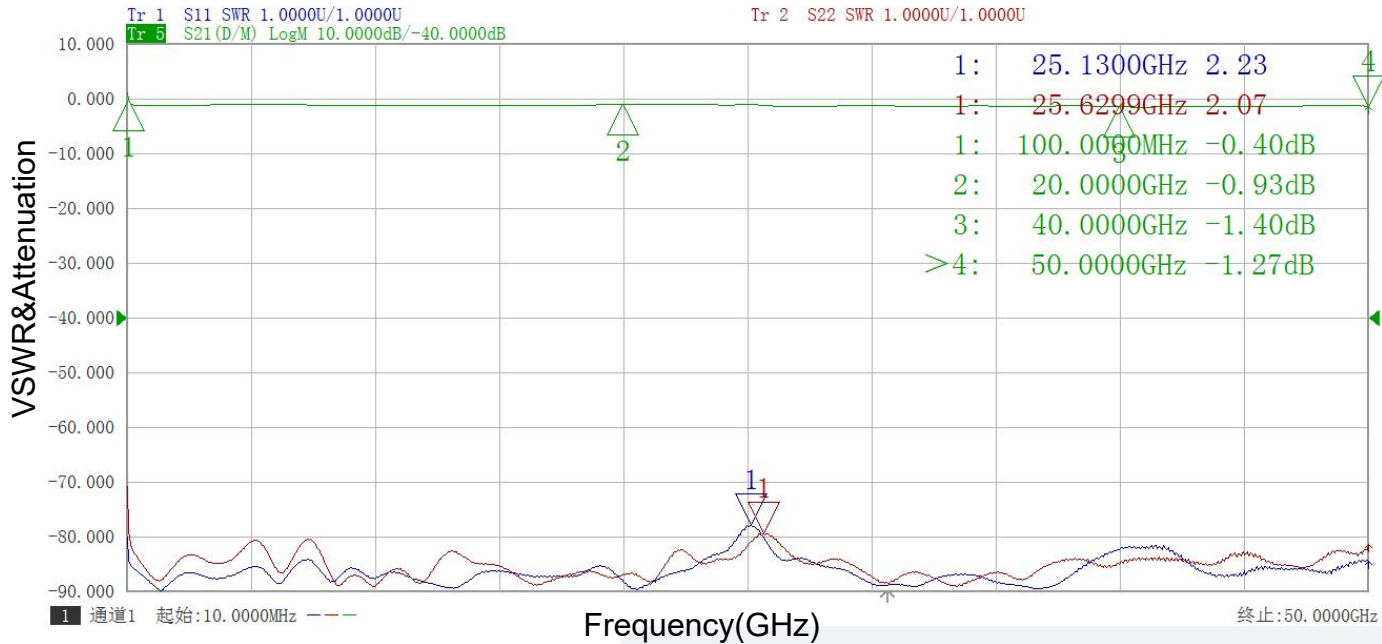
VSWR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

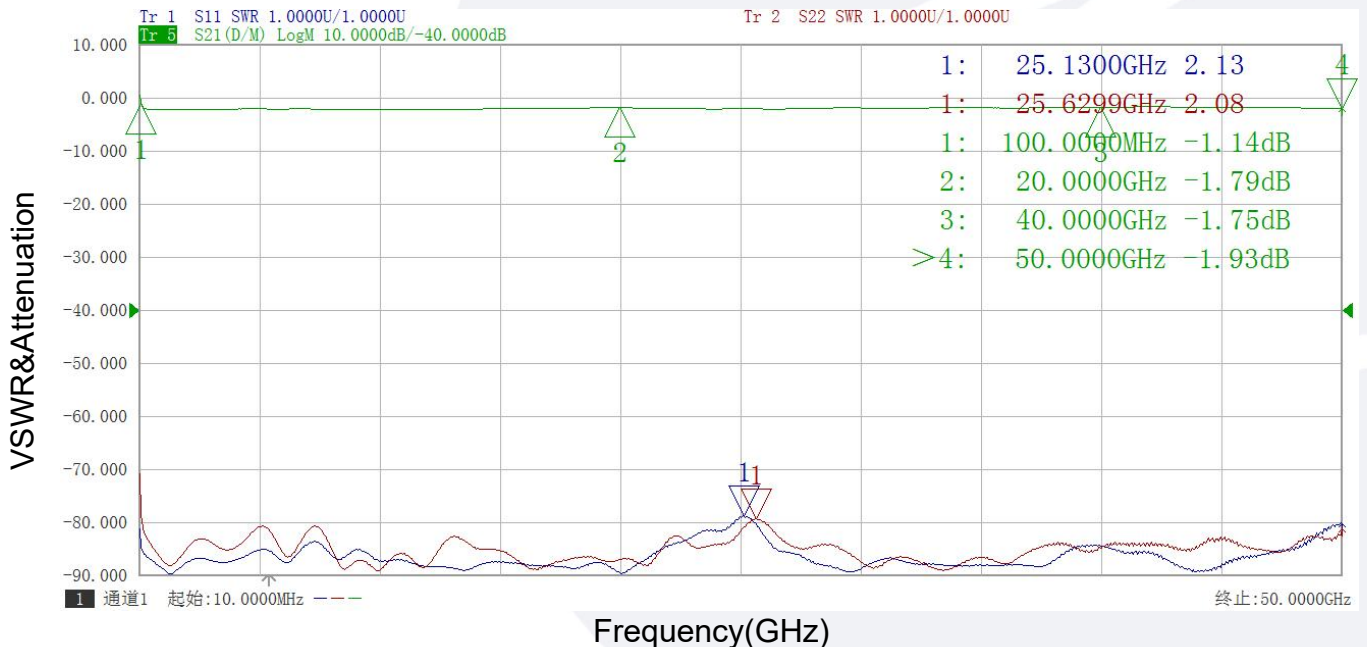
1dB

### VSWR&Attenuation vs Frequency



2dB

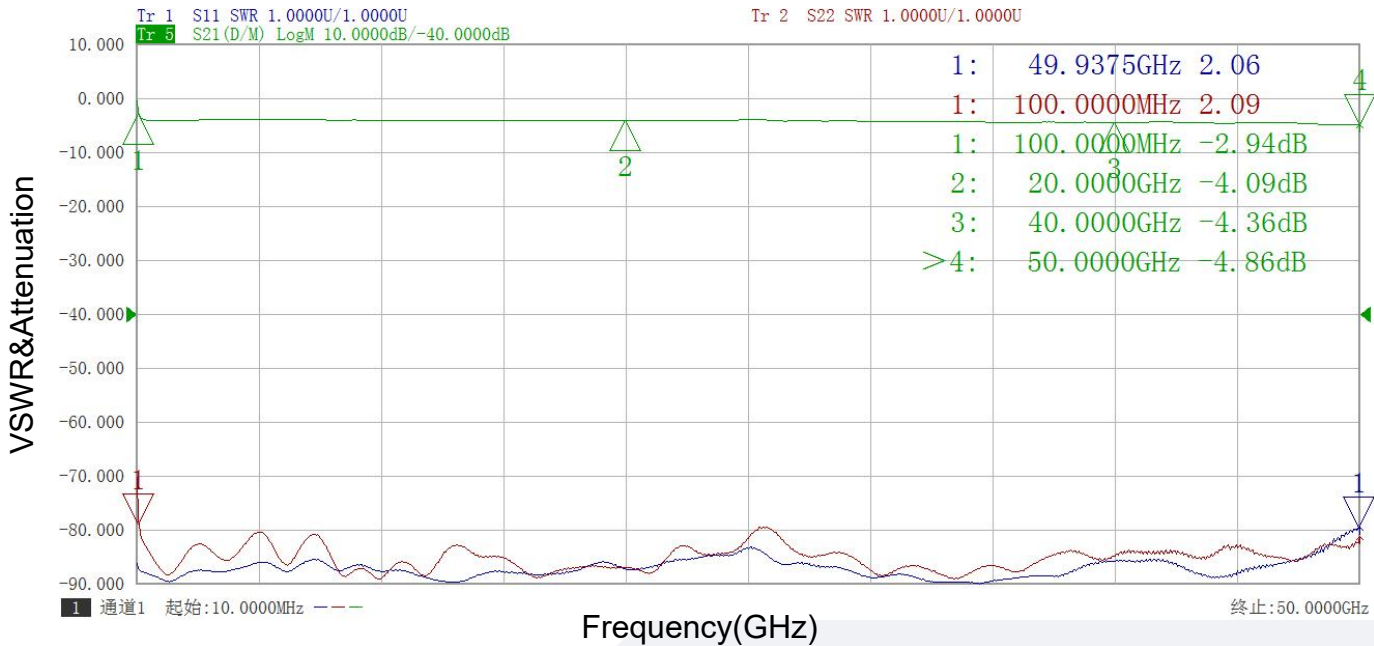
### VSWR&Attenuation vs Frequency



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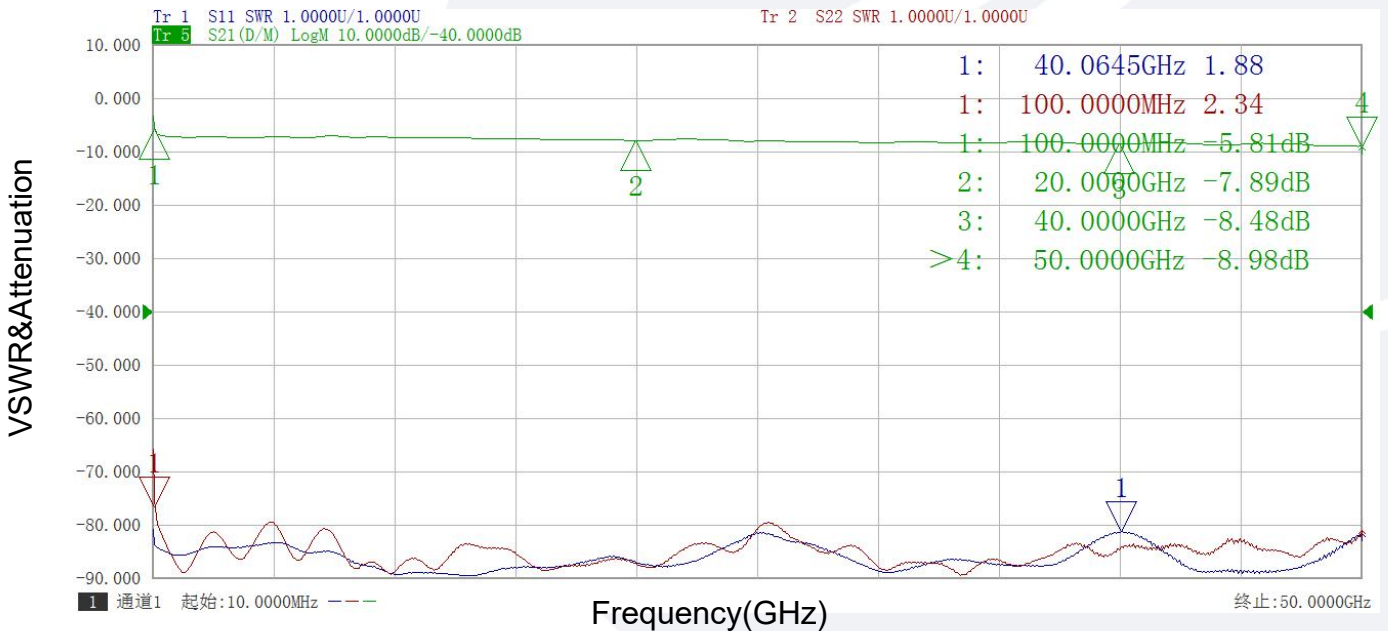
4dB

### VSWR&Attenuation vs Frequency



8dB

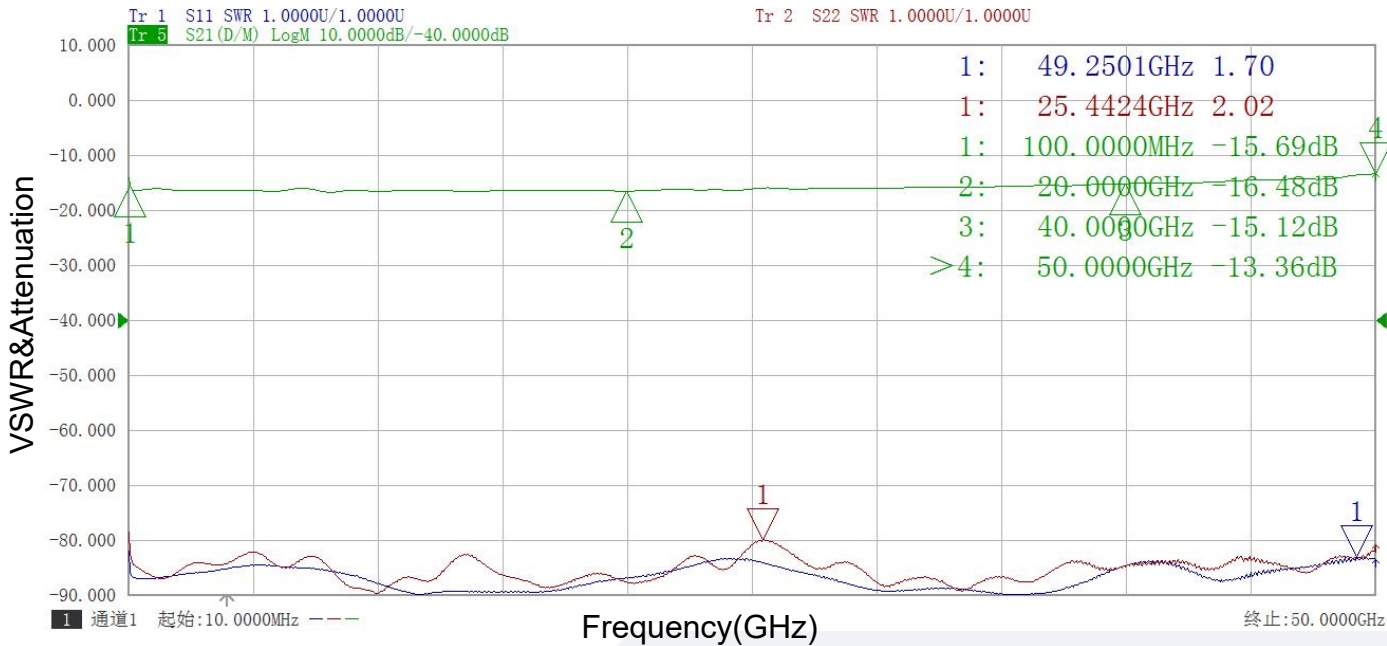
### VSWR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

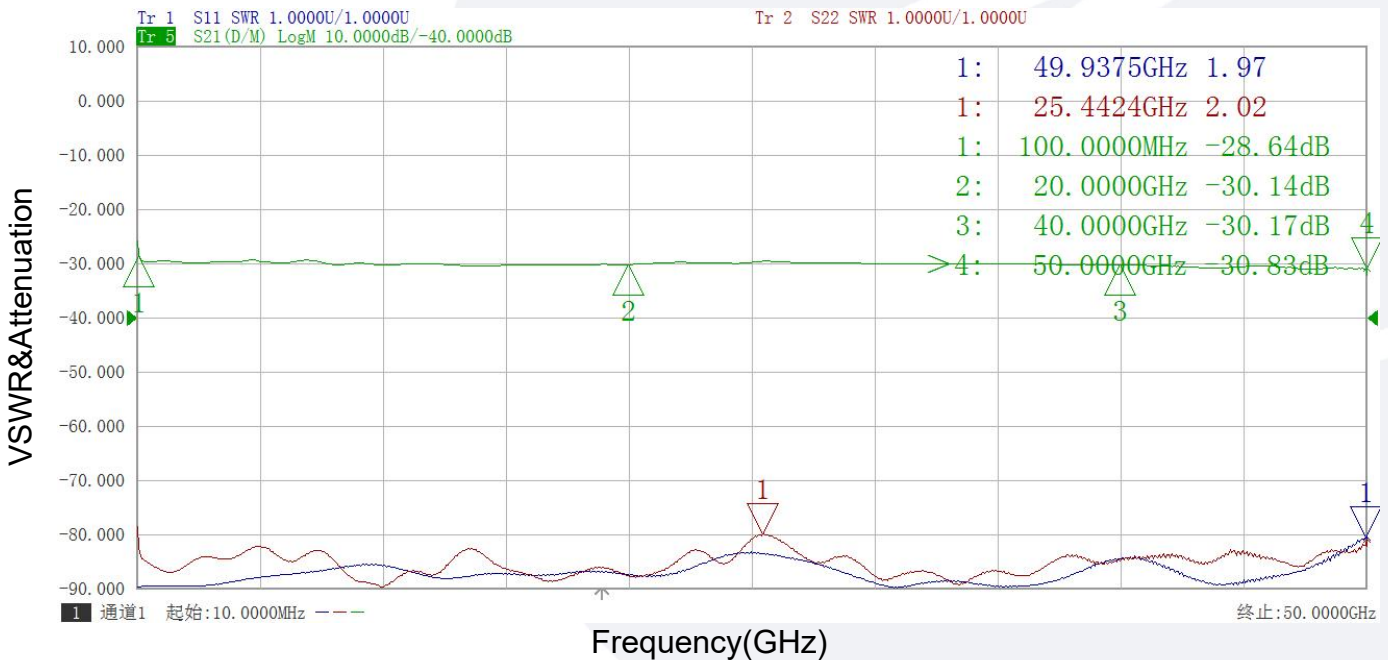
16dB

VSWR&Attenuation vs Frequency



31dB

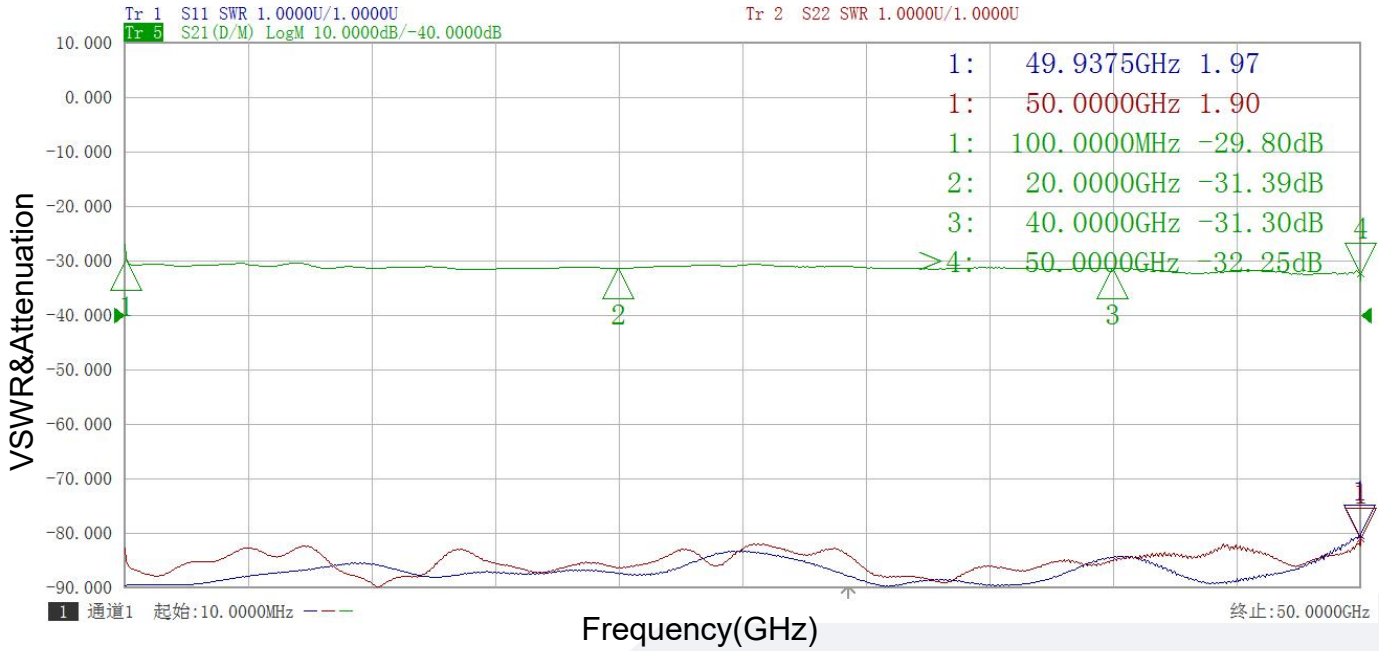
VSWSR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

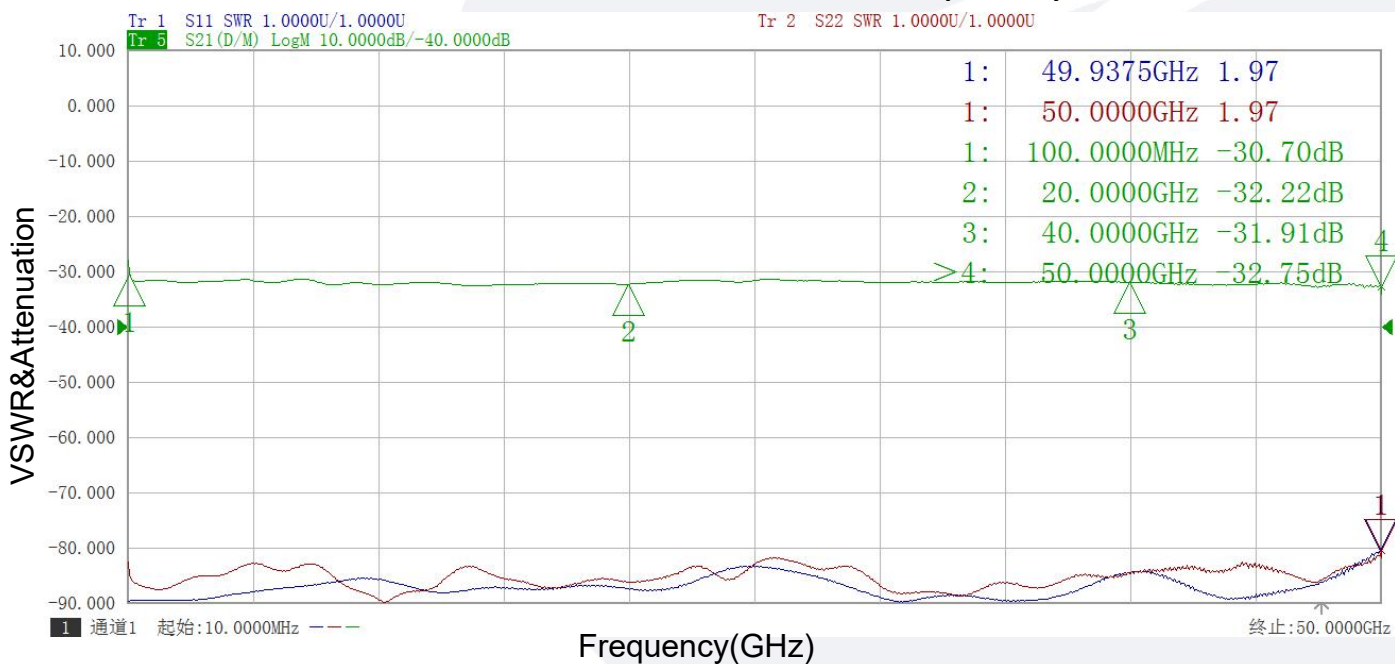
32dB

VSWR&Attenuation vs Frequency



33dB

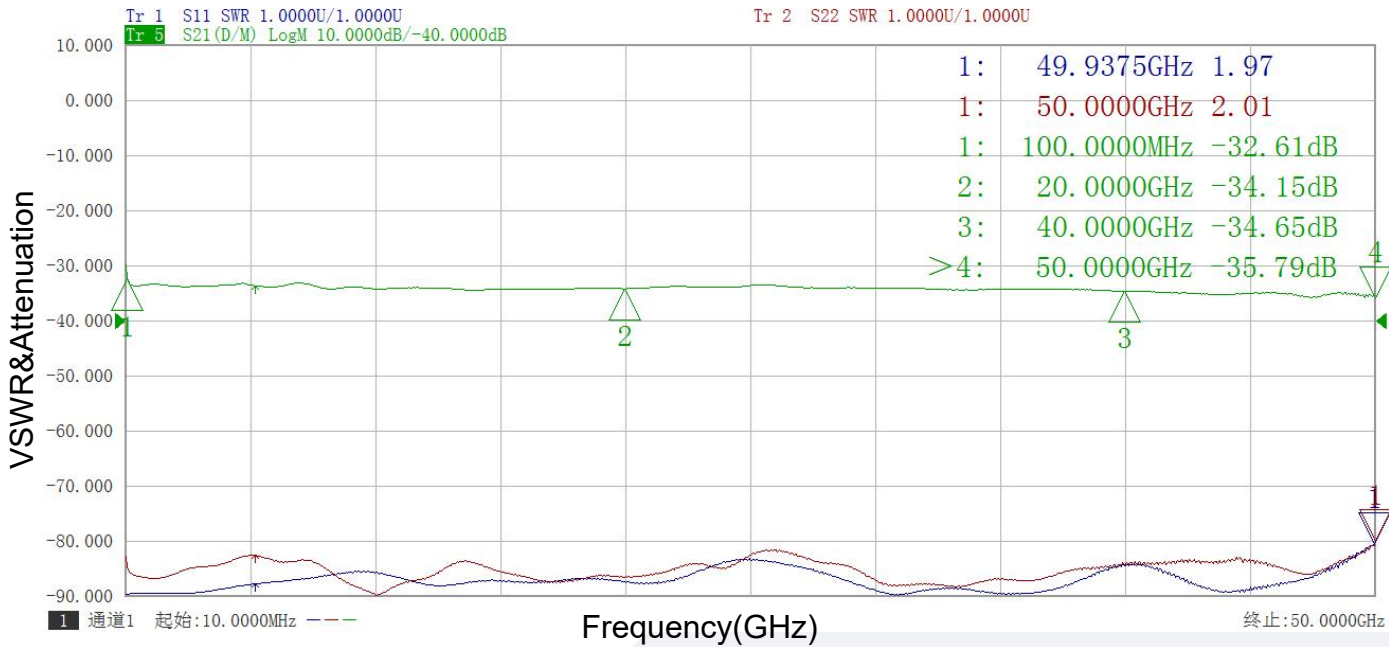
VSWSR&Attenuation vs Frequency



典型曲线 Typical Performance Data:

35dB

VSWR&Attenuation vs Frequency



39dB

VSWR&Attenuation vs Frequency

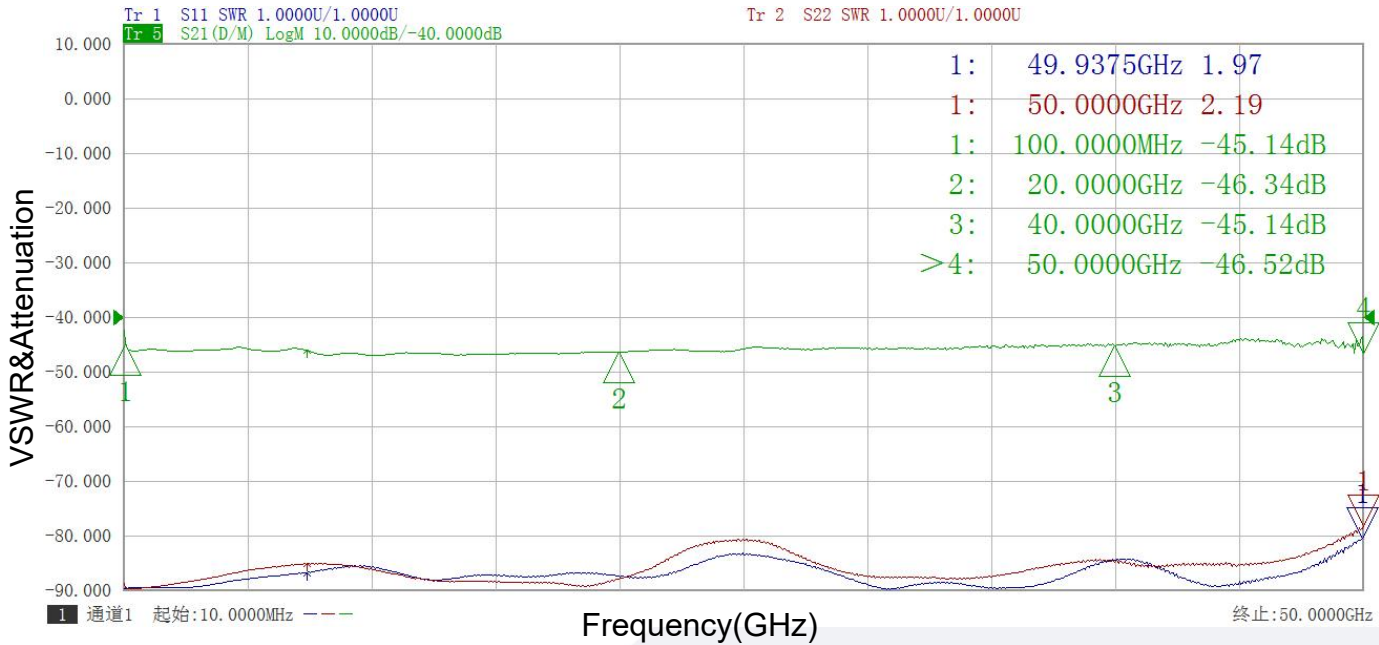




典型曲线 Typical Performance Data:

47dB

### VSWR&Attenuation vs Frequency



62dB

### VSWR&Attenuation vs Frequency

