泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sale@talentmw.com
www.talentmw.com

Model:TLDP6G18G-360-6

6-Bit Digital Phase Shifter 6-18GHz

Feature:

- Ultra Wide Band: 6-18GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

电气特性 Electrical:

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range		6-18		GHz
插损 Insertion Loss		10		dB
输入驻波 Input VSWR		1.8		:1
输出驻波 Output VSWR		1.8		:1
移相范围 Phase Shift Range		360		°
相位精度 Phase accuracy		±4		°
耐功率 Power Handing			27	dBm
幅度平衡 Amplitude Balance			±0.5	dB
切换速度 Switching speed		100		ns
直流电压 DC Voltage		+5		V DC
直流电流 DC Supply Current		30		mA
控制位数 Number of Bits		6		Bit

机械特性 Mechanical :

参数Parameter	指标 Value	单位Units
输入输出接口Input /Output Connector	SMA Female	
DC和控制接口DC and control interface	J30J-9ZKP	
尺寸 Size	28*20*15	mm
重量 Weight	55	g

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+5V (±5%)
输入功率 RF Input Power	27 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

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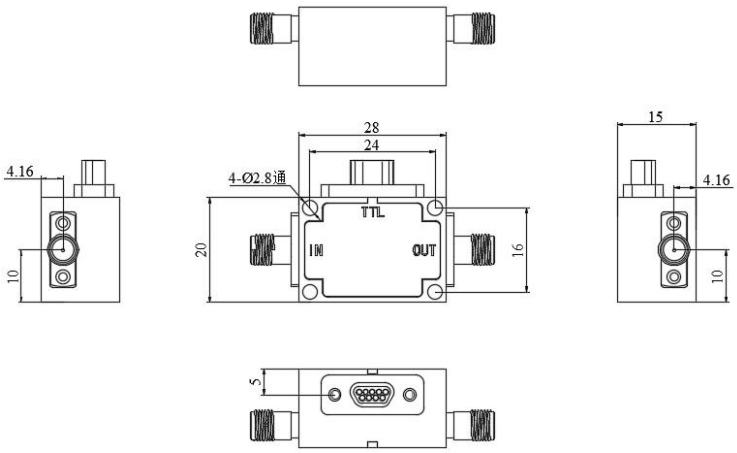
外形尺寸Outline Drawing:

Unit: mm(Inches)



真值表Truth Table						
TTL Control Input						Signal Path State
Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	
0	0	0	0	0	0	Reference
1	0	0	0	0	0	5.625
0	1	0	0	0	0	11.25
0	0	1	0	0	0	22.5
0	0	0	1	0	0	45
0	0	0	0	1	0	90
0	0	0	0	0	1	180
1	1	1	1	1	1	354.375

针PIN	1-6	7	8	9
功能Function	Bit1-Bit6	+5V	NC	GND

温度环境 Environmental Conditions:

参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	℃
存储温度 Non-operating Temperature	-55		+125	℃
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
TLDP6G18G-360-6	6-Bit Digital Phase Shifter,6-18GHz,SMA	Rev.1.1

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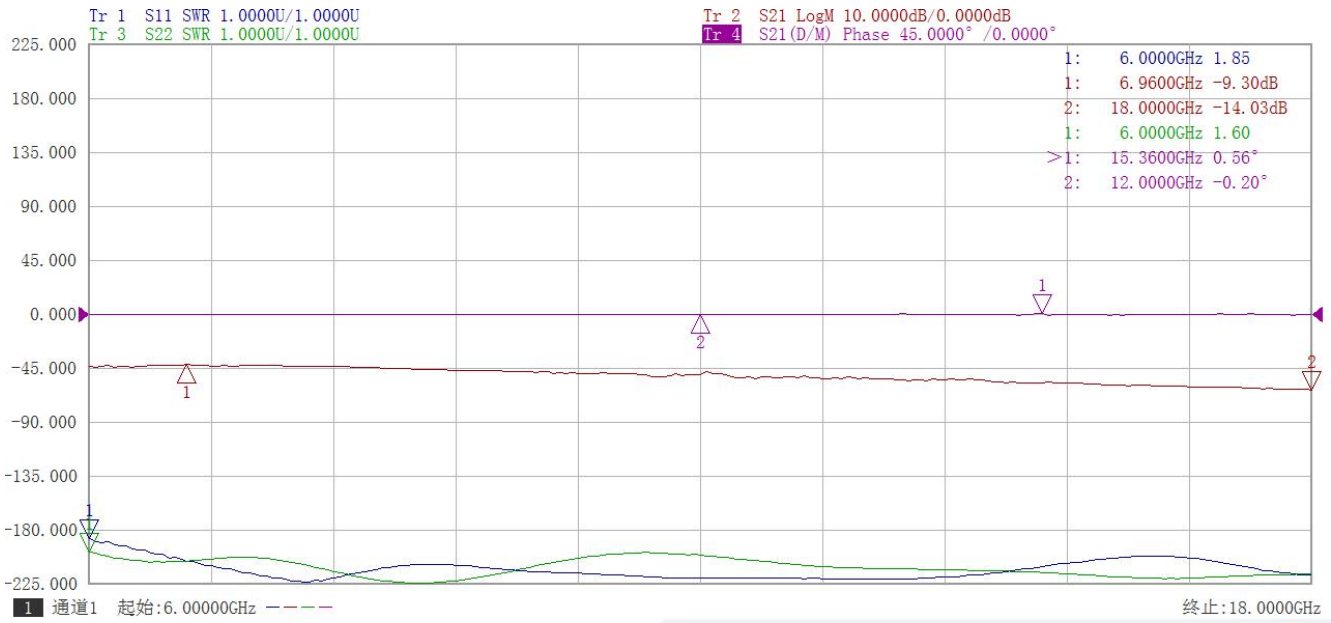
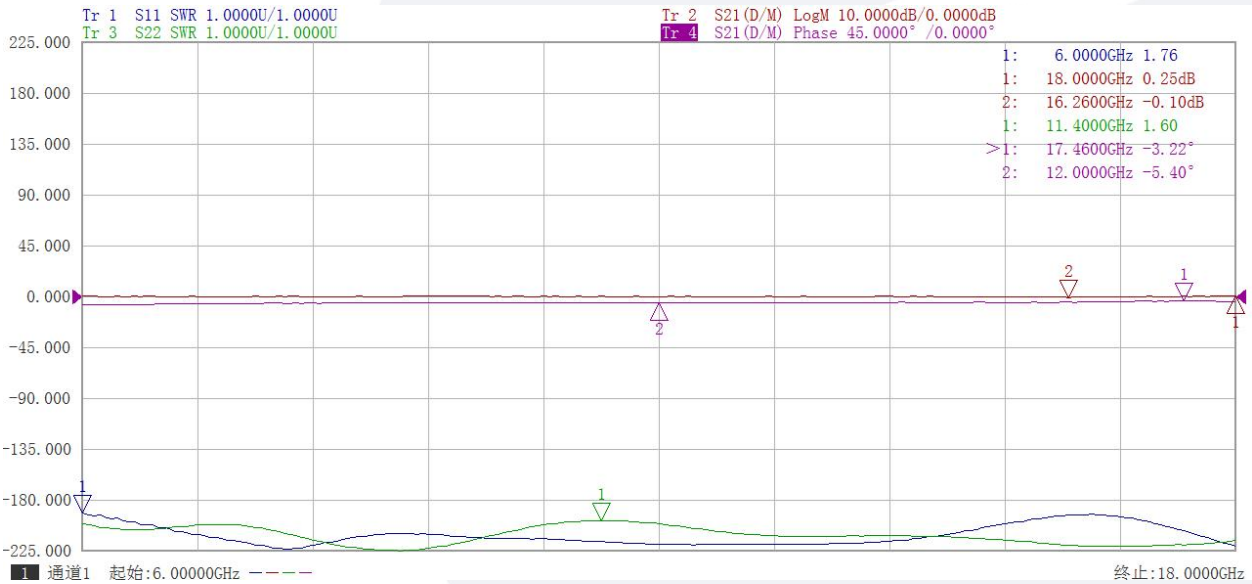
典型曲线 Typical Performance Data:

1） Reference



Tr1、Tr3：驻波 Tr2：插损（幅度平衡）Tr4：相位精度

2） 5.625°



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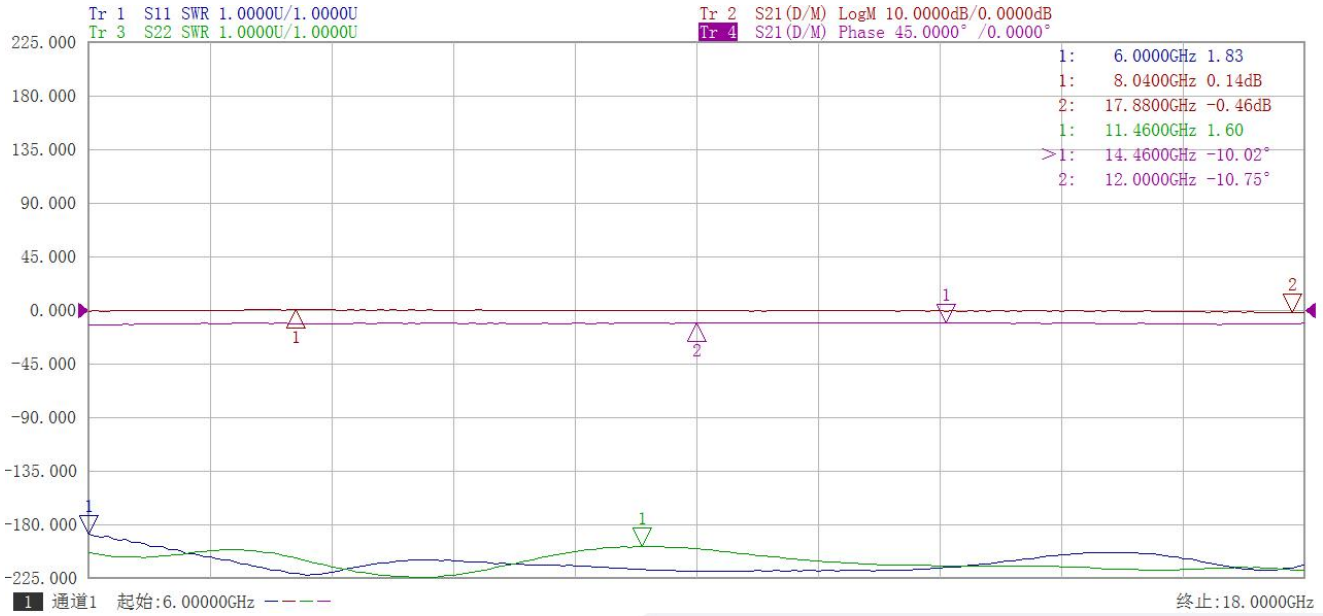
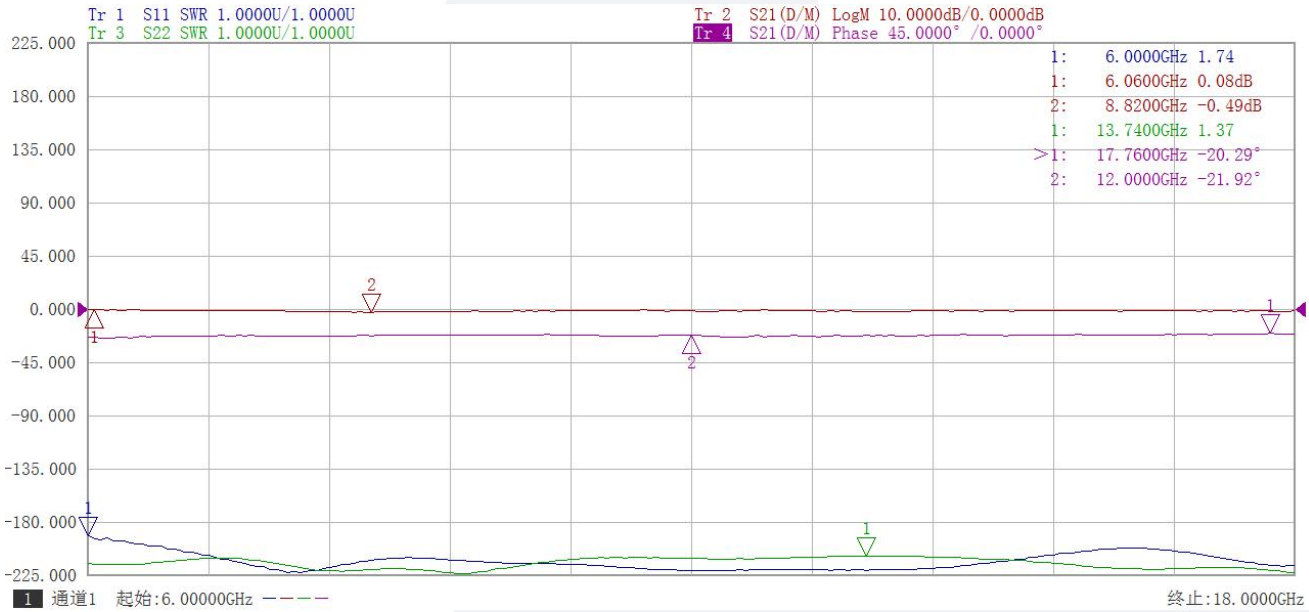
典型曲线 Typical Performance Data:

3）11.25°



4）22.5°



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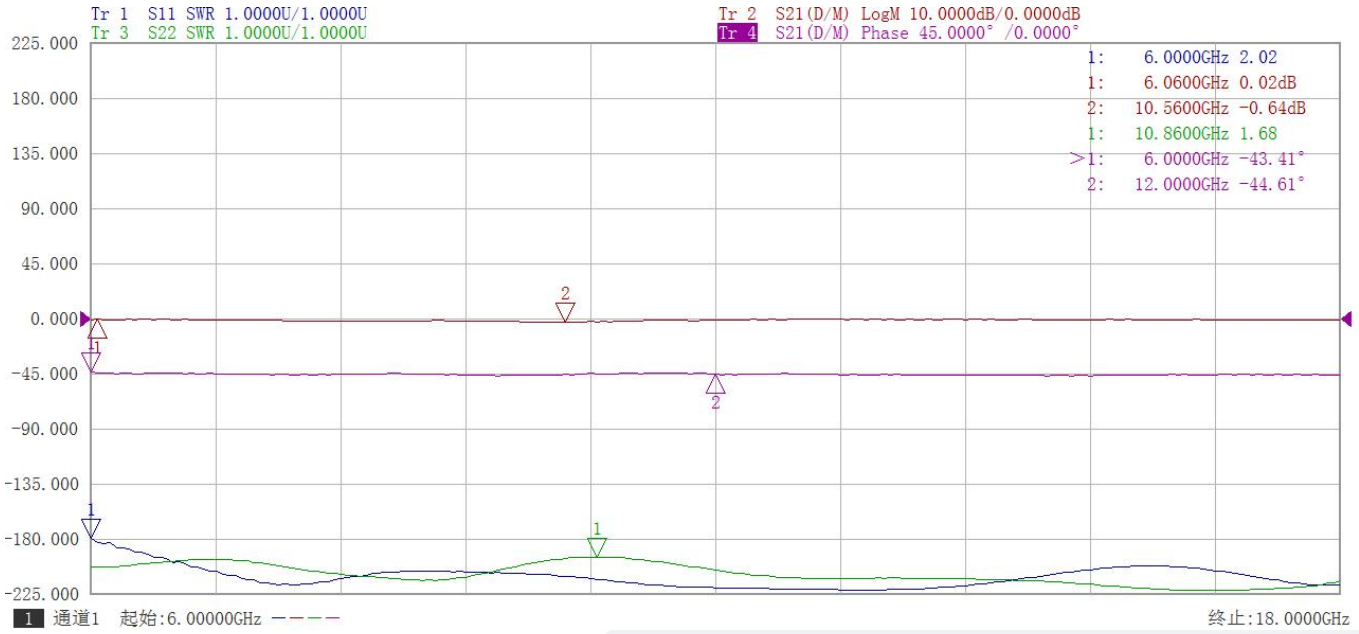
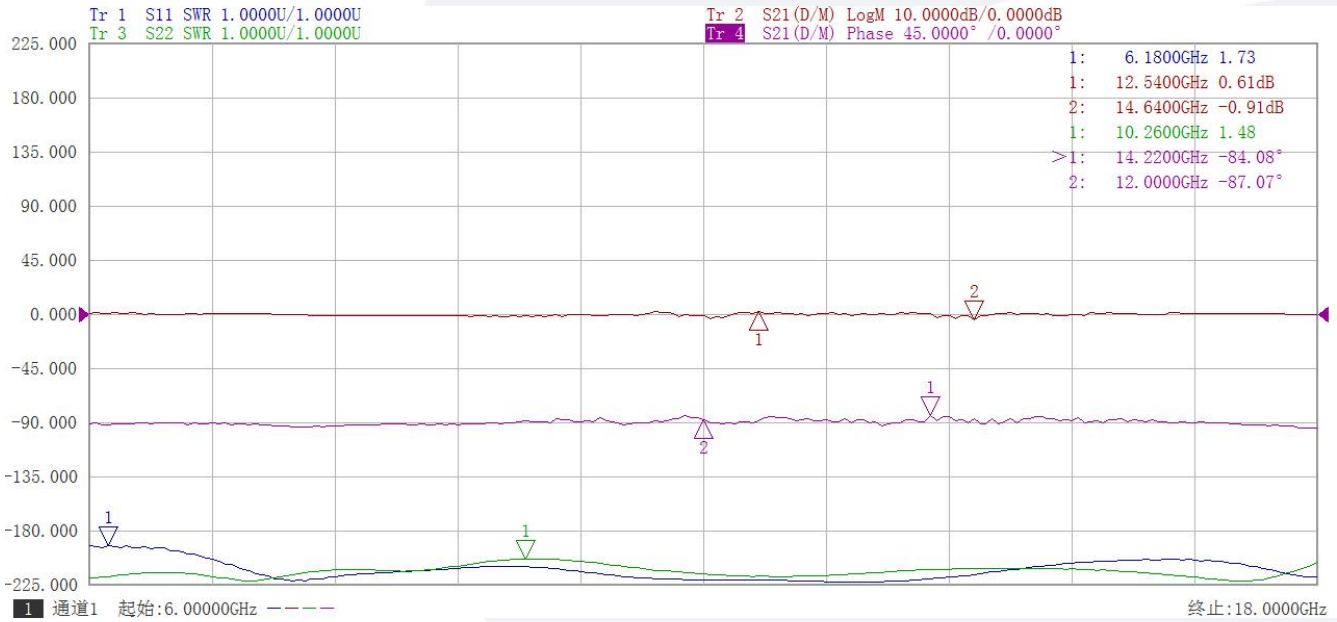
典型曲线 Typical Performance Data:

5）45°



6）90°



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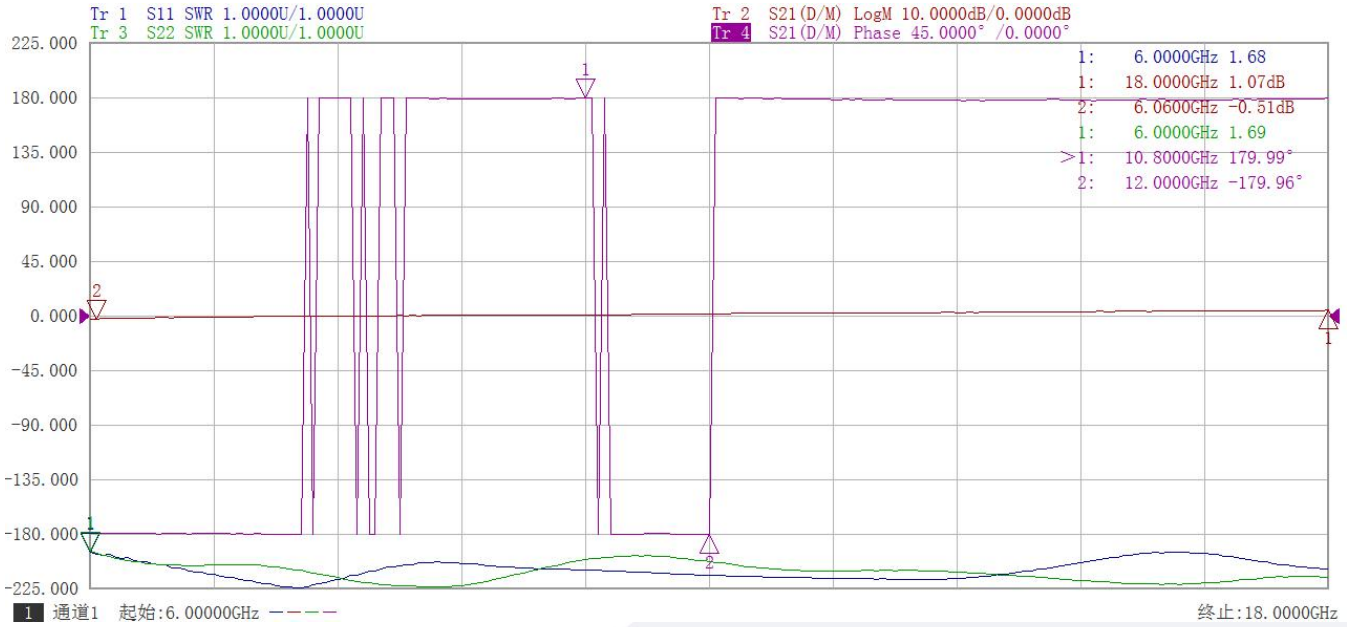
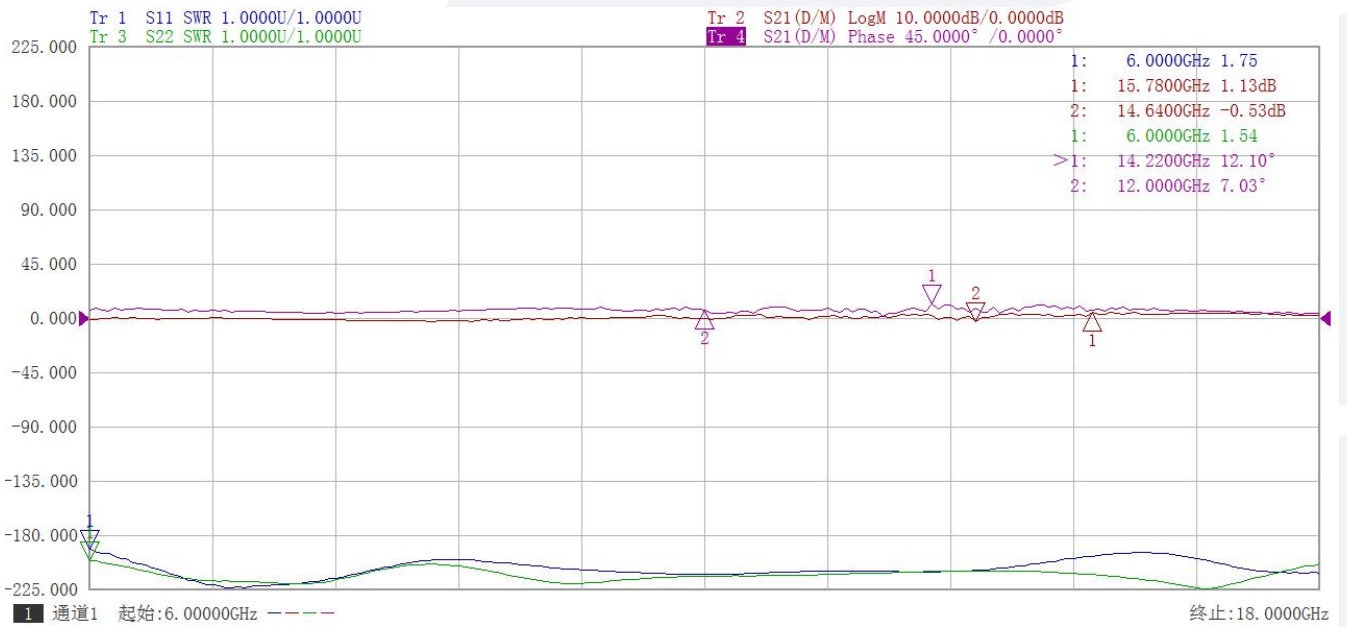
典型曲线 Typical Performance Data:

7）180°



8）354.375°