

Model: TLVP8G18G-360
**Voltage Controlled Phase Shifter
 8-18GHz ,SMA Female**
Feature:

- Frequency Range: 8-18GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Single Positive Control Voltage

电气特性 Electrical Specifications:

参数Parameter	Min	Typ	Max	单位Units
频率范围 Frequency range	8-18			GHz
移相范围 Phase Range		360		°
插损 Insertion Loss		7	8	dB
插损温度系数 Insertion Loss Temperature Coefficient		0.003		dB/ °C
三阶交调 Output IM3		40		dBc
输入回损 Input Return Loss		10		dB
输出回损 Output Return Loss		10		dB
控制电压 Control Voltage Range	0	13		V
控制电流 Control Current		5		mA
相位平坦度 Phase Flatness		±15		°
输入功率0.1dB压缩 Input Power for 0.1 dB Compression		20		dBm
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

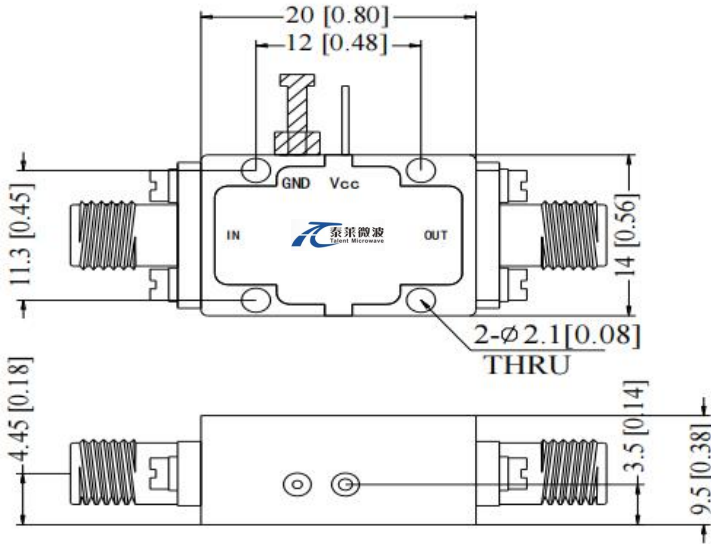
参数Parameter	指标 Value	单位Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
尺寸 Size	20*14*9.5	mm
重量 Weight	/	g

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
控制电压 Control Voltage Range	+15V
耐受功率 RF Input Power No damage	+20dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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	30,000			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			

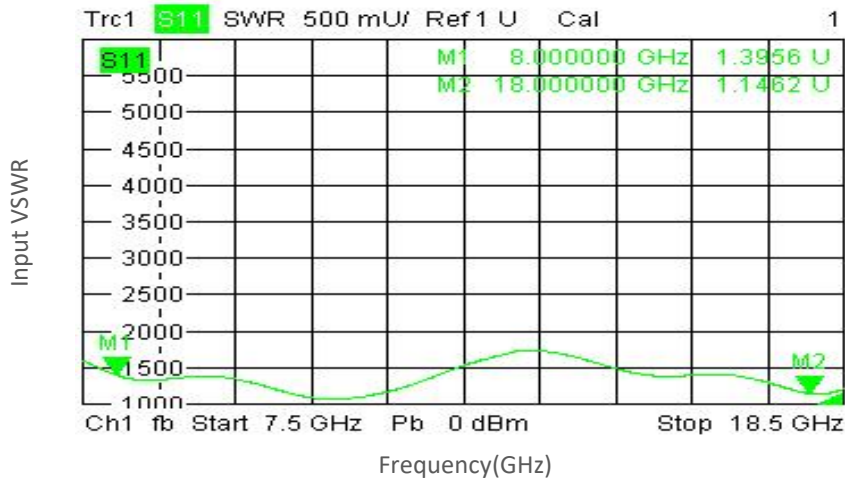
订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号Revision
TLVP8G18G-360	Voltage Controlled Phase Shifter ,8-18GHz,SMA Female	Rev.1.1

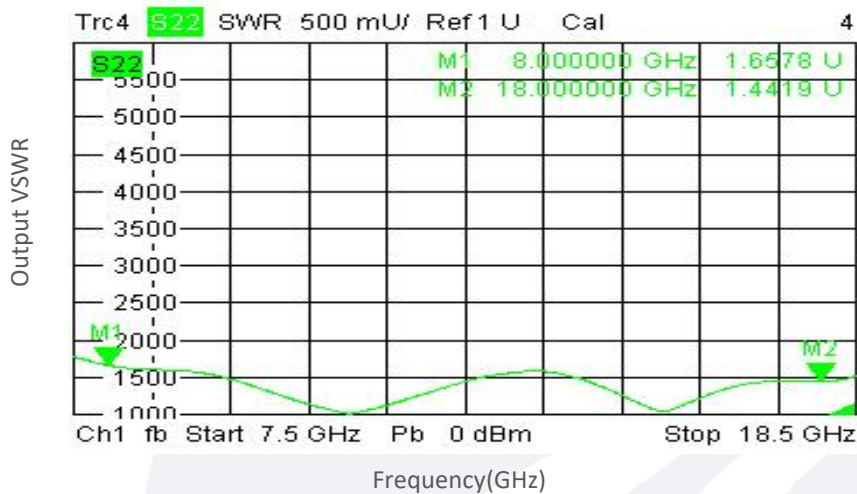
典型曲线 Typical Performance Data:

0V-0°:

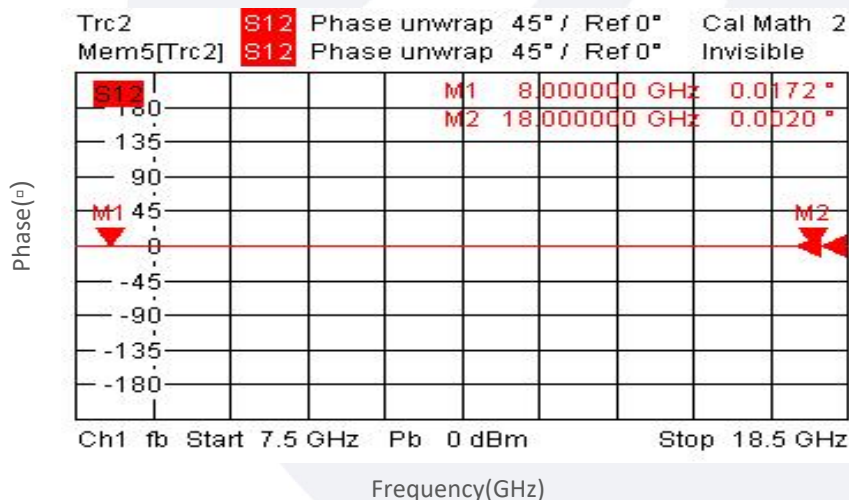
Input VSWR vs Frequency



Output VSWR vs Frequency



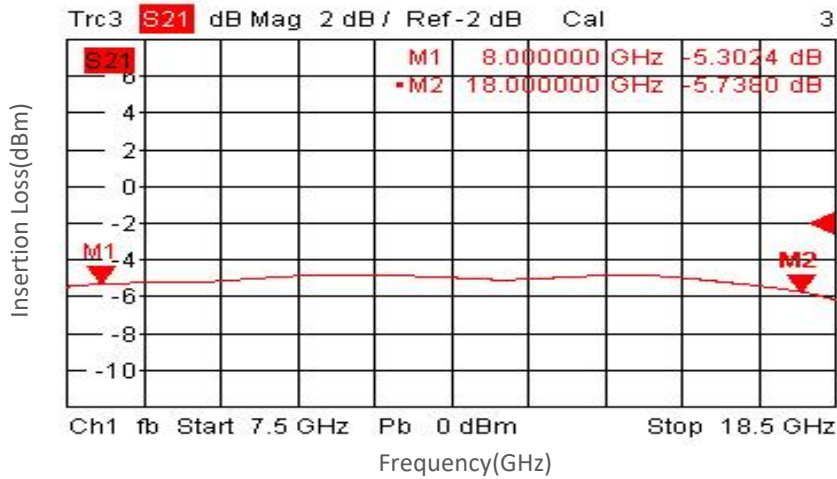
Phase vs Frequency



典型曲线 Typical Performance Data:

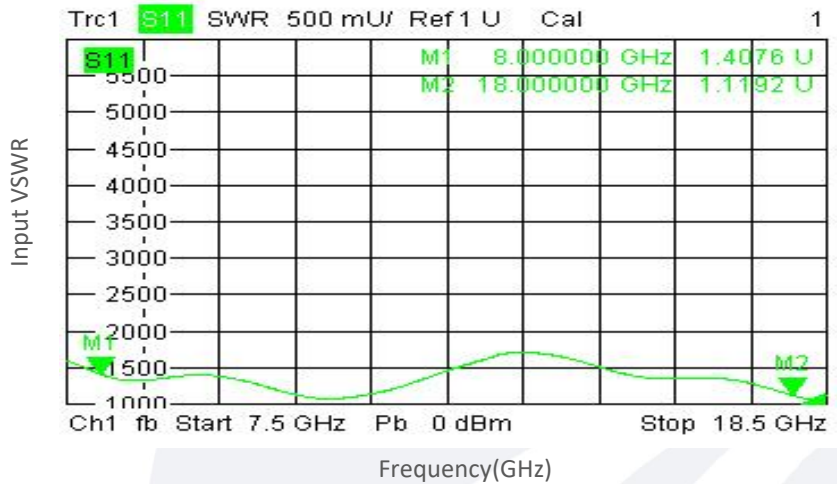
0V-0°:

Insertion Loss vs Frequency

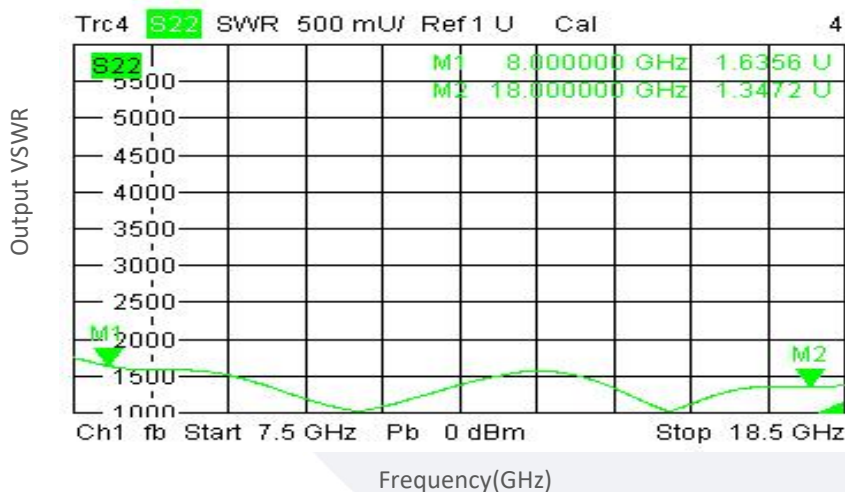


0.12V-12°:

Input VSWR vs Frequency



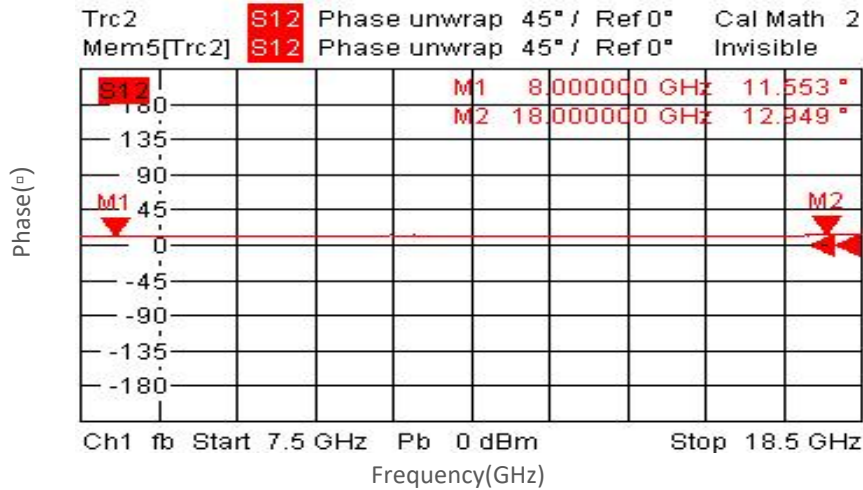
Output VSWR vs Frequency



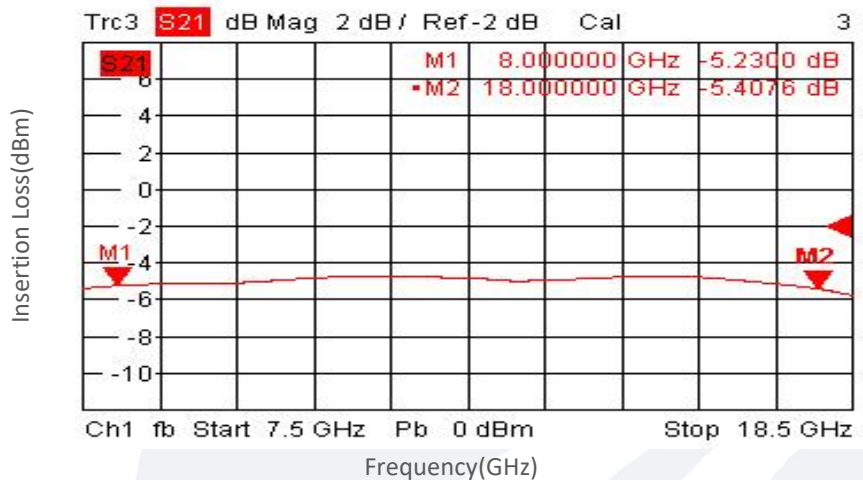
典型曲线 Typical Performance Data:

0.12V-12°:

Phase vs Frequency

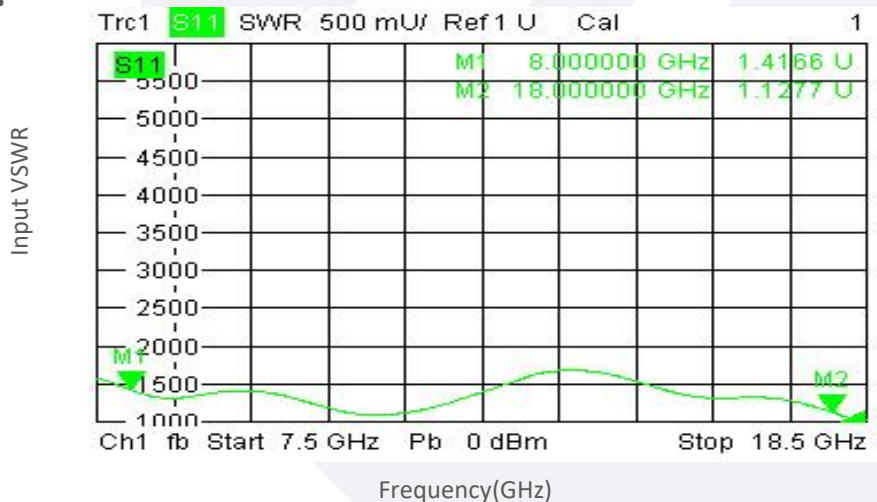


Insertion Loss vs Frequency



0.25V-24°:

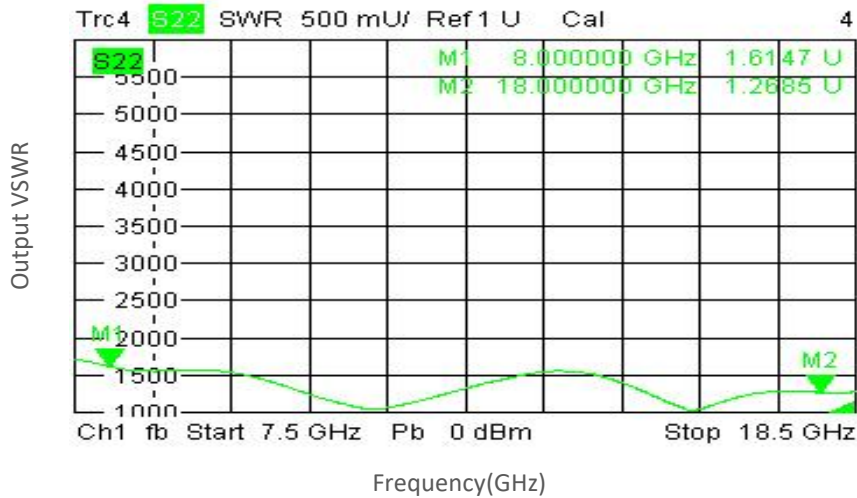
Input VSWR vs Frequency



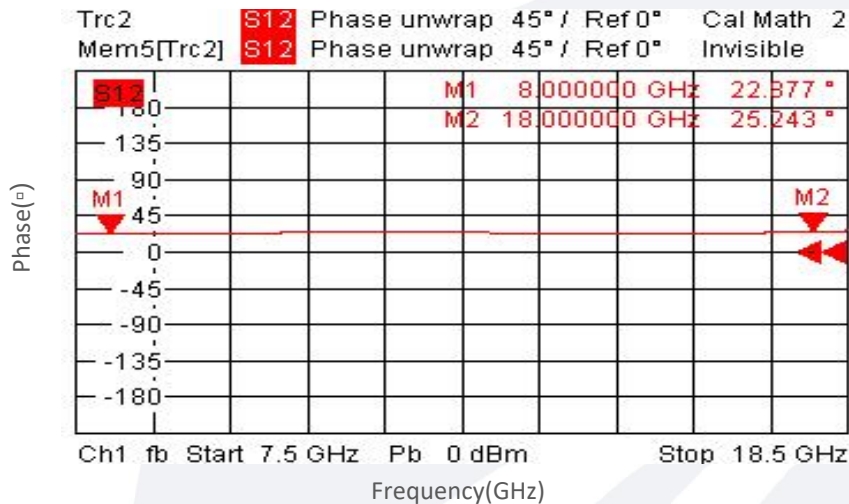
典型曲线 Typical Performance Data:

0.25V-24°:

Output VSWR vs Frequency



Phase vs Frequency



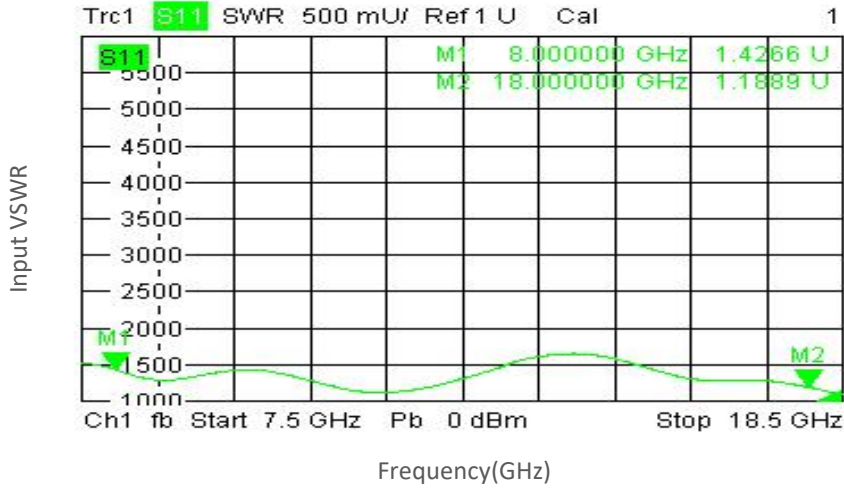
Insertion Loss vs Frequency



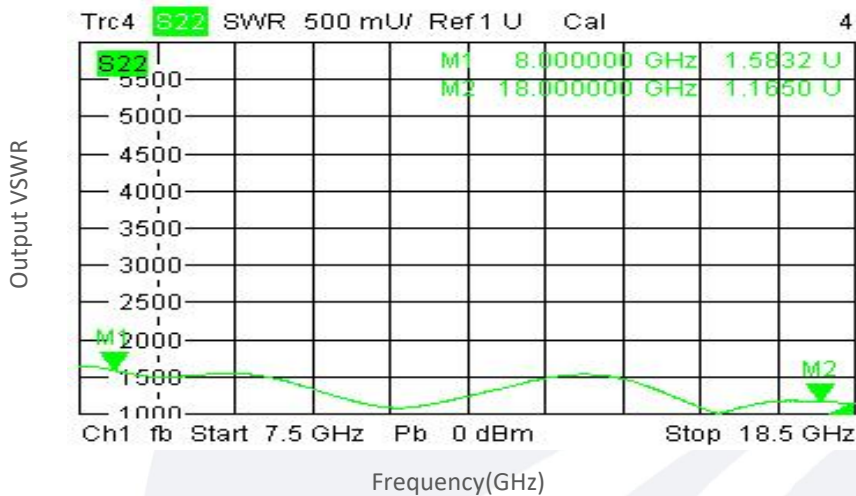
典型曲线 Typical Performance Data:

0.52V-45°:

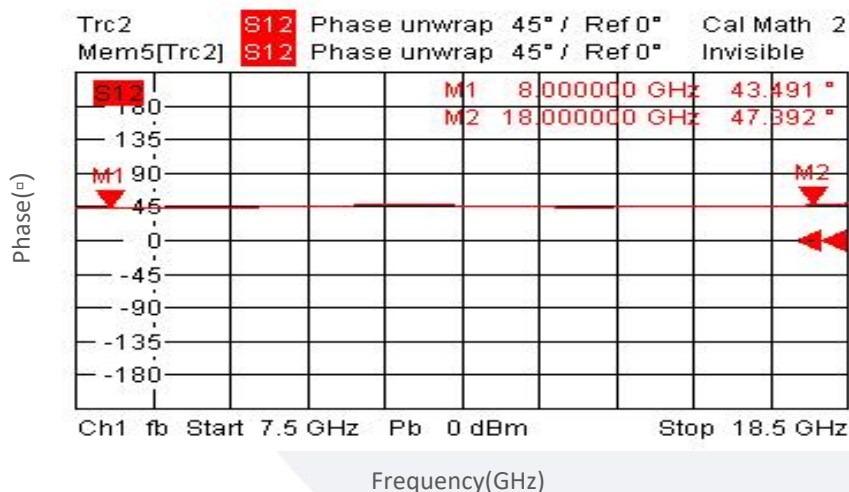
Input VSWR vs Frequency



Output VSWR vs Frequency



Phase vs Frequency



典型曲线 Typical Performance Data:

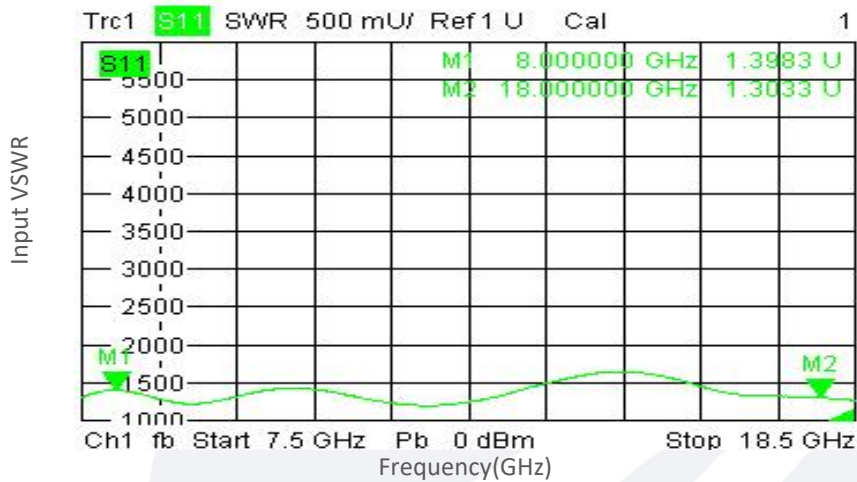
0.52V-45°:

Insertion Loss vs Frequency

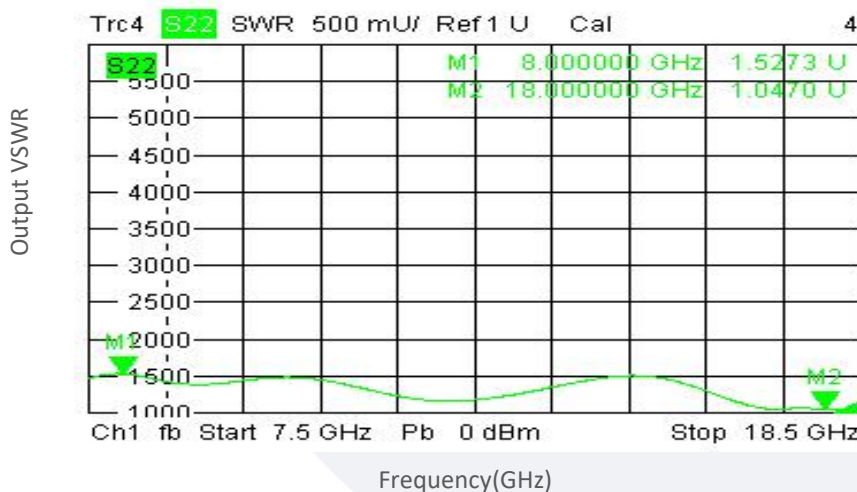


1.26V-90°:

Input VSWR vs Frequency



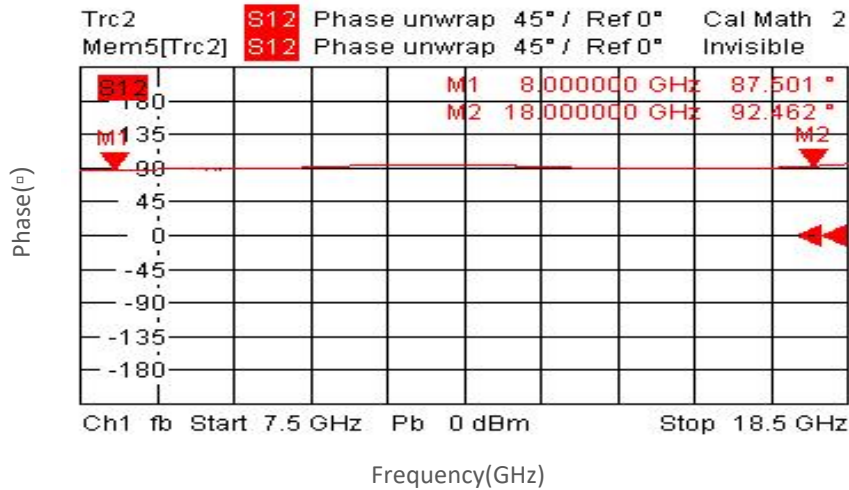
Output VSWR vs Frequency



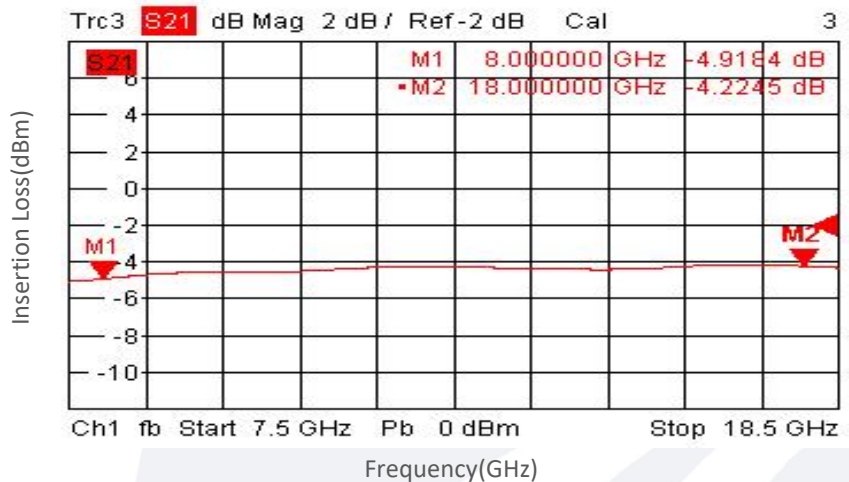
典型曲线 Typical Performance Data:

1.26V-90°:

Phase vs Frequency

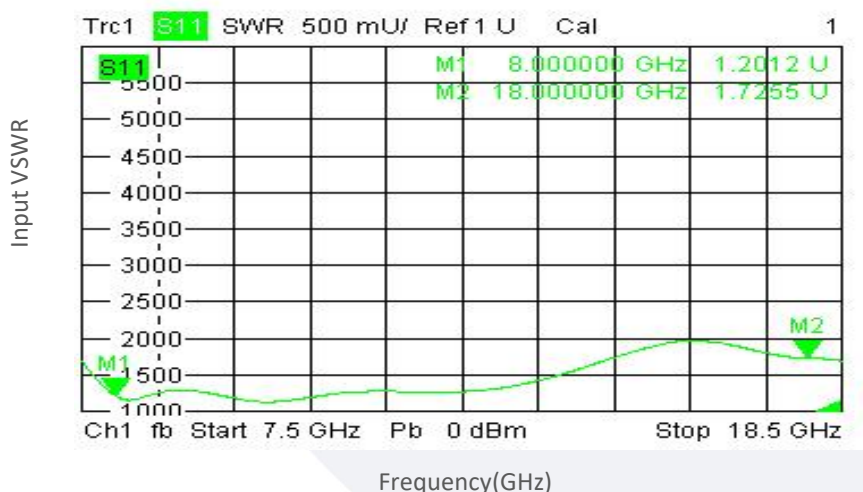


Insertion Loss vs Frequency



3.29V-180°:

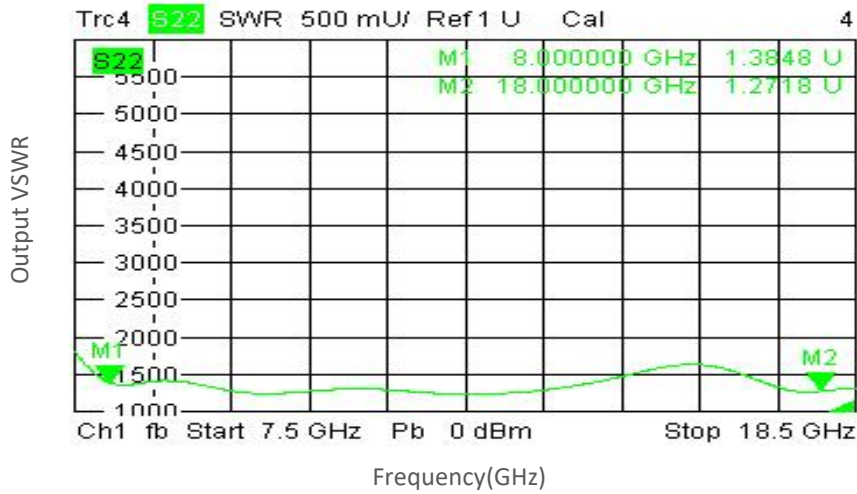
Input VSWR vs Frequency



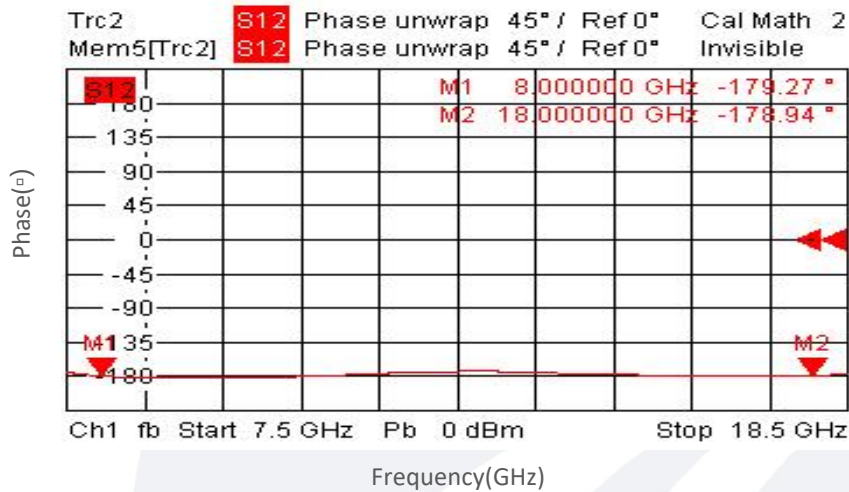
典型曲线 Typical Performance Data:

3.29V-180°:

Output VSWR vs Frequency



Phase vs Frequency



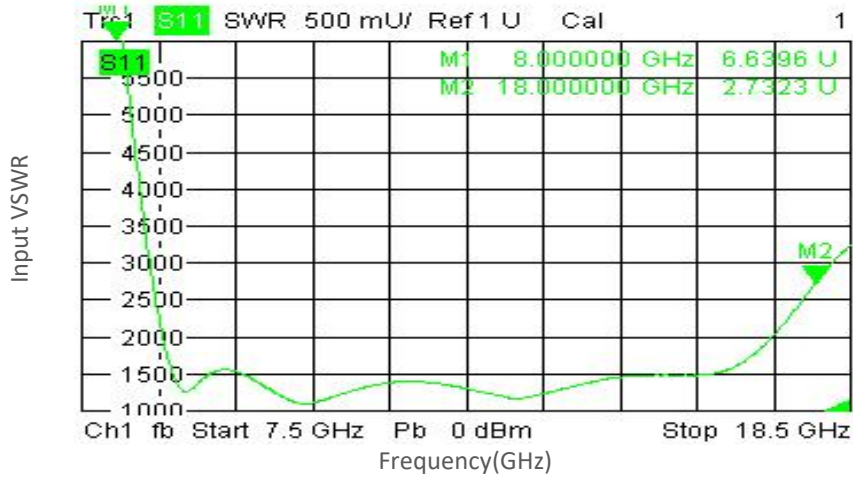
Insertion Loss vs Frequency



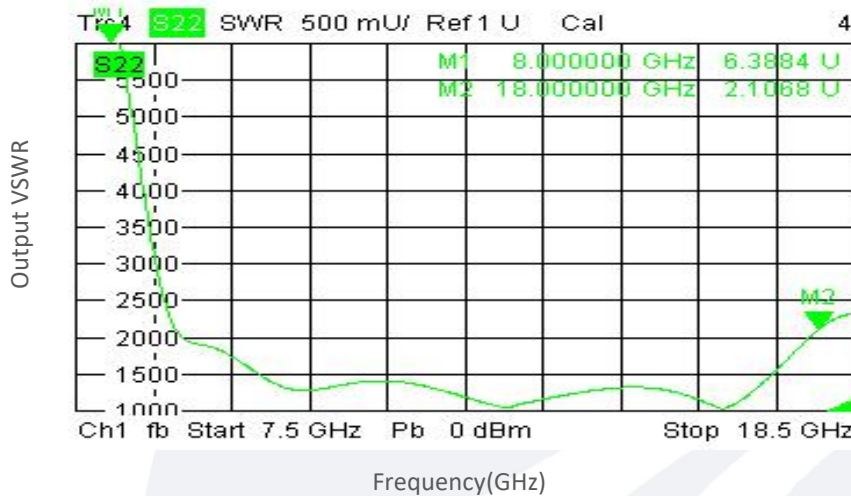
典型曲线 Typical Performance Data:

9.09V-360°:

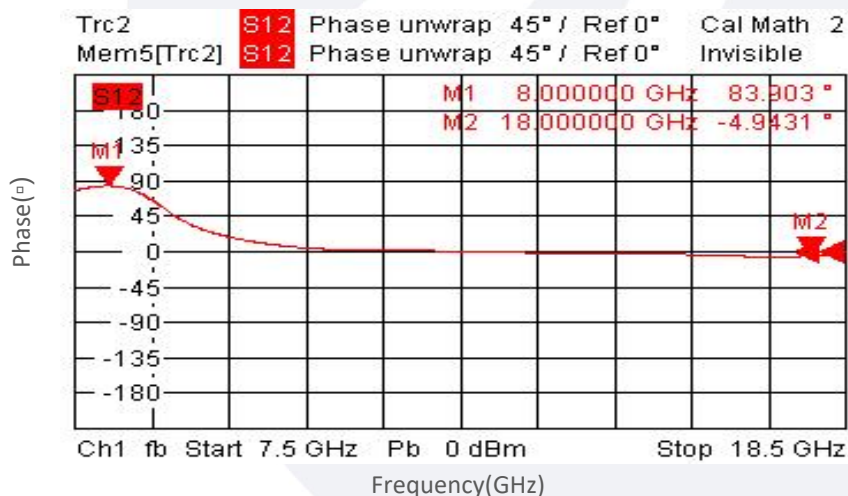
Input VSWR vs Frequency



Output VSWR vs Frequency



Phase vs Frequency



典型曲线 Typical Performance Data:

9.09V-360°:

Insertion Loss vs Frequency

