

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:

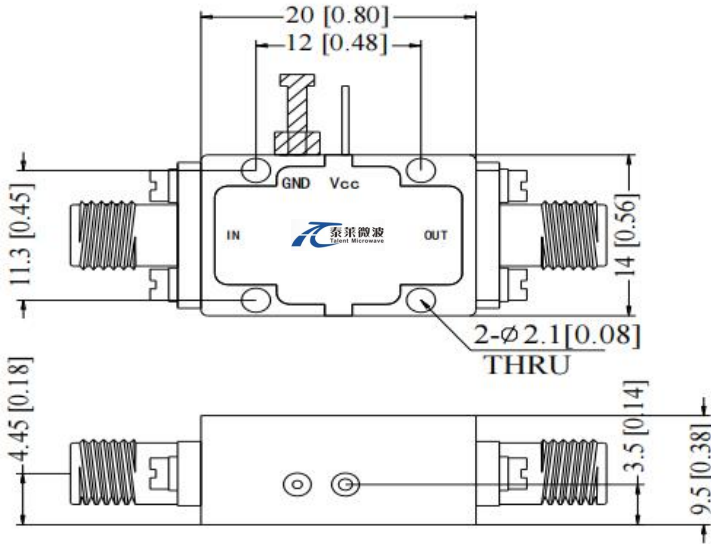
| 参数Parameter | 指标 Value | 单位Units |
|---------------------------------|-----------------------|---------|
| 输入/输出接口 Input /Output Connector | SMA Female/SMA Female | |
| 尺寸 Size | 20*14*9.5 | mm |
| 重量 Weight | / | g |

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: Inches



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 | | | |

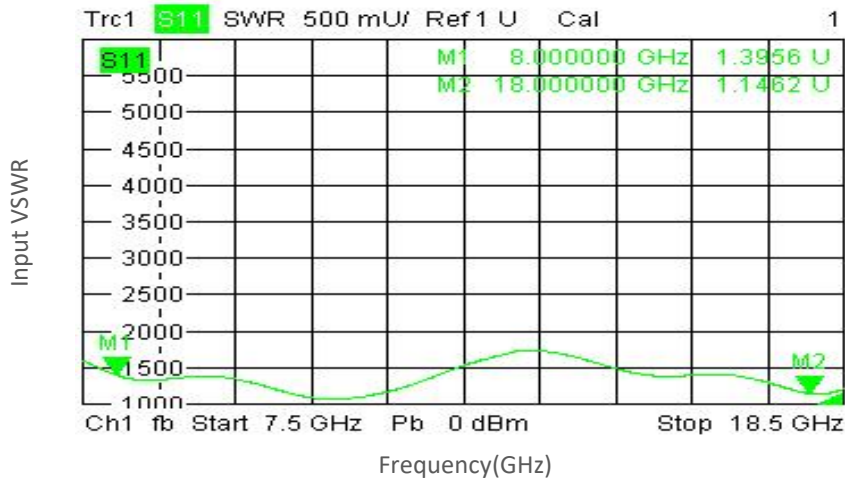
订货信息 Ordering Information:

| 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 |

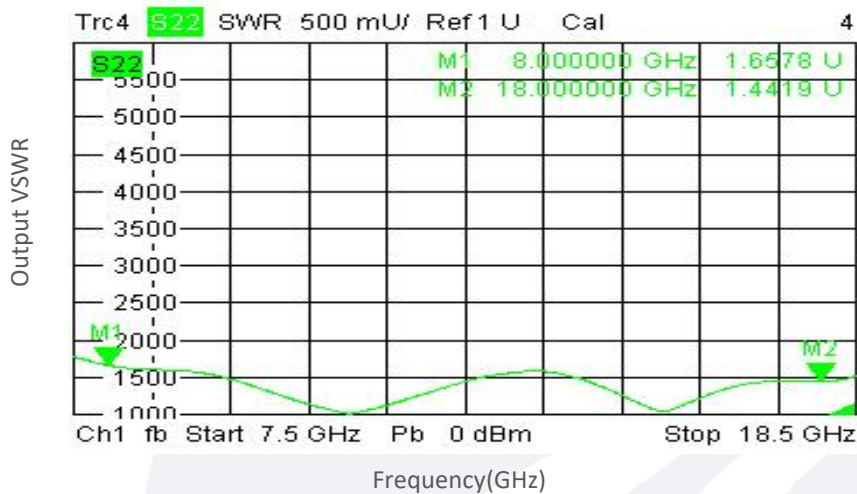
典型曲线 Typical Performance Data:

0V-0°:

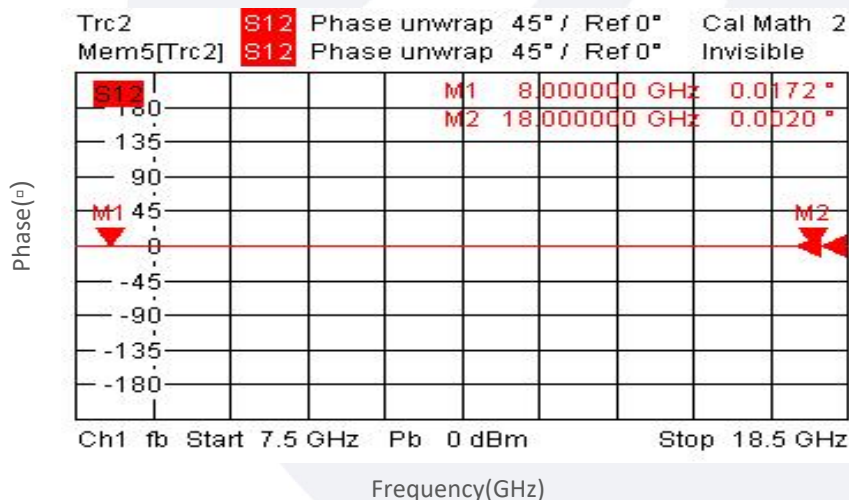
Input VSWR vs Frequency



Output VSWR vs Frequency



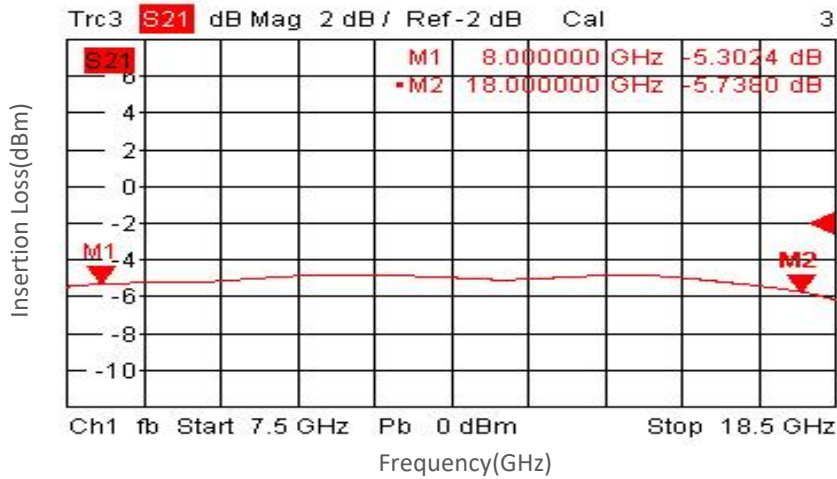
Phase vs Frequency



典型曲线 Typical Performance Data:

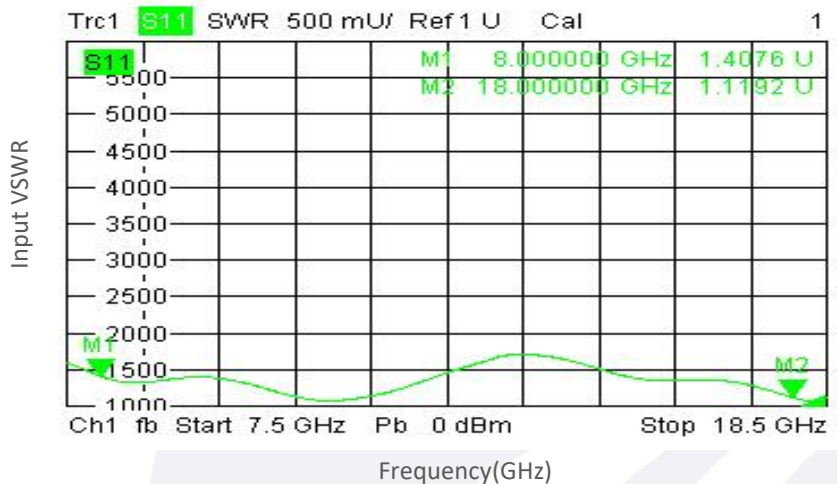
0V-0°:

Insertion Loss vs Frequency

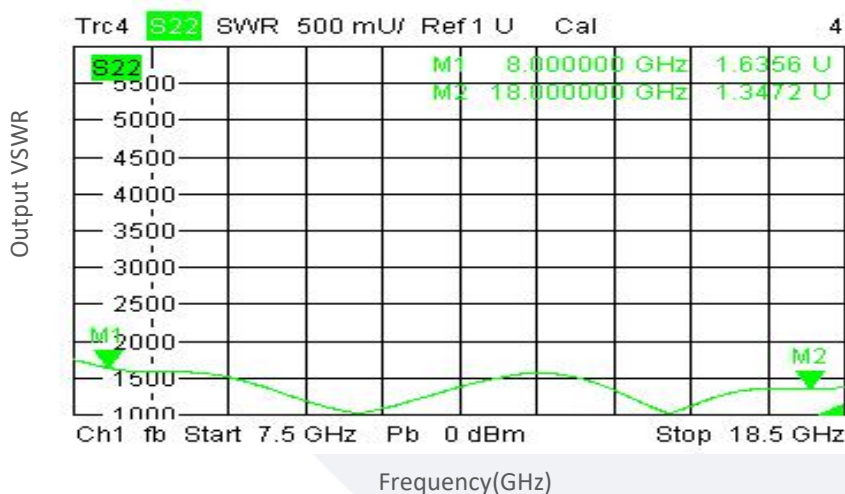


0.12V-12°:

Input VSWR vs Frequency



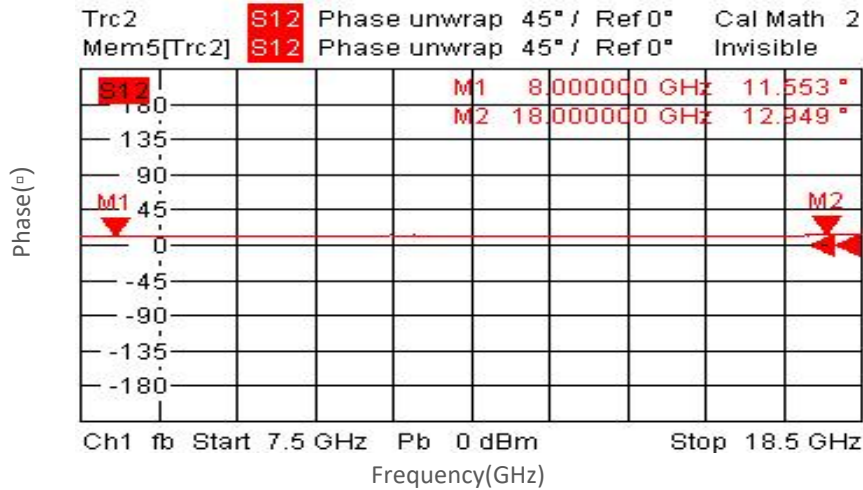
Output VSWR vs Frequency



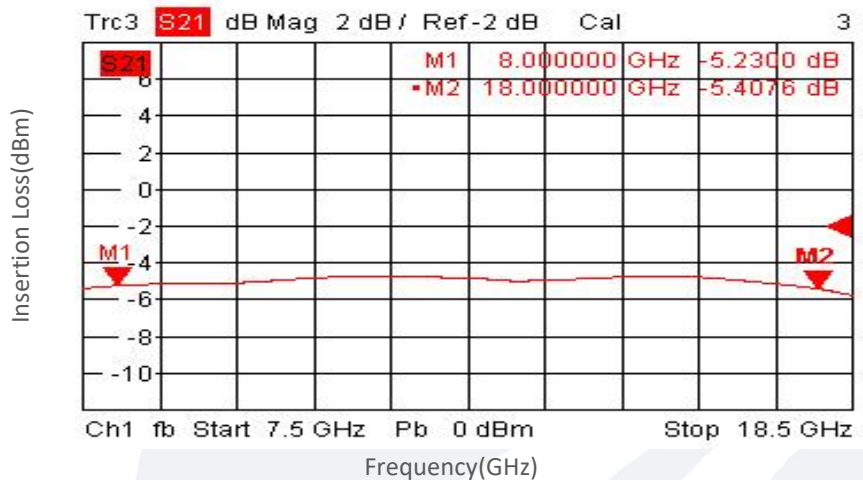
典型曲线 Typical Performance Data:

0.12V-12°:

Phase vs Frequency

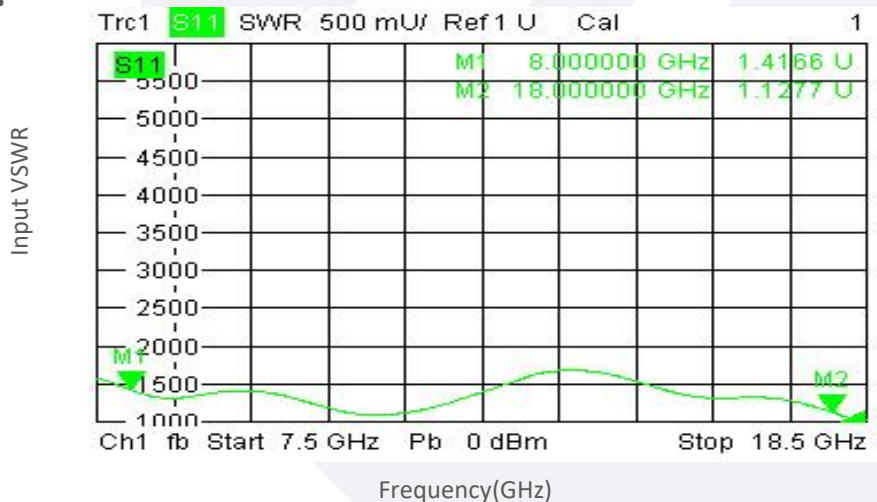


Insertion Loss vs Frequency



0.25V-24°:

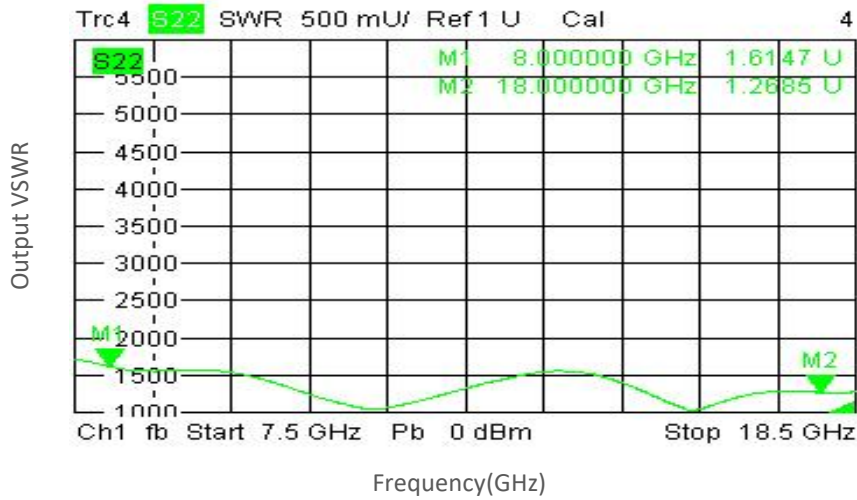
Input VSWR vs Frequency



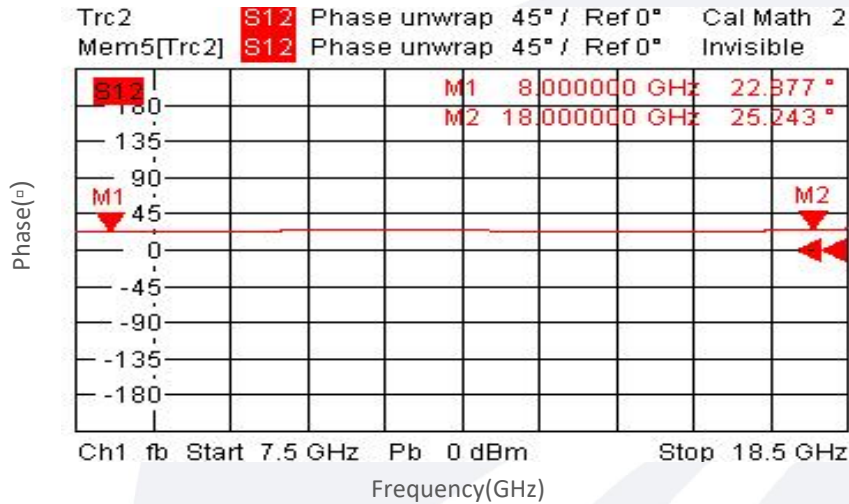
典型曲线 Typical Performance Data:

0.25V-24°:

Output VSWR vs Frequency



Phase vs Frequency



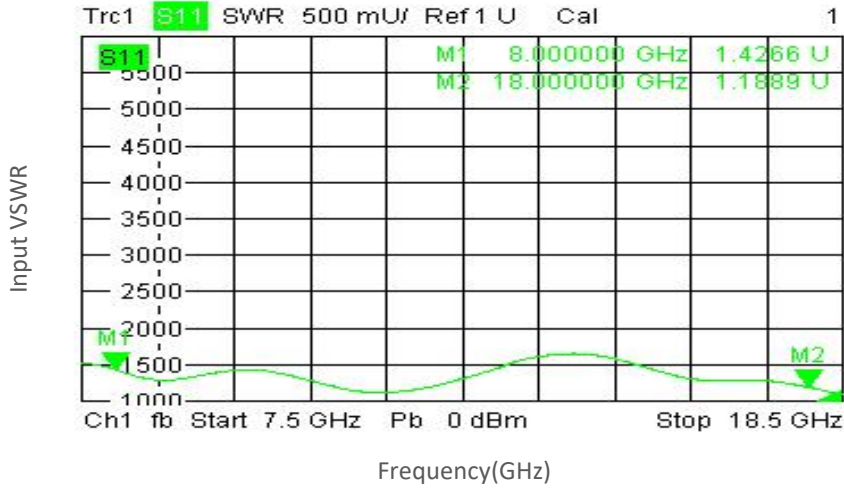
Insertion Loss vs Frequency



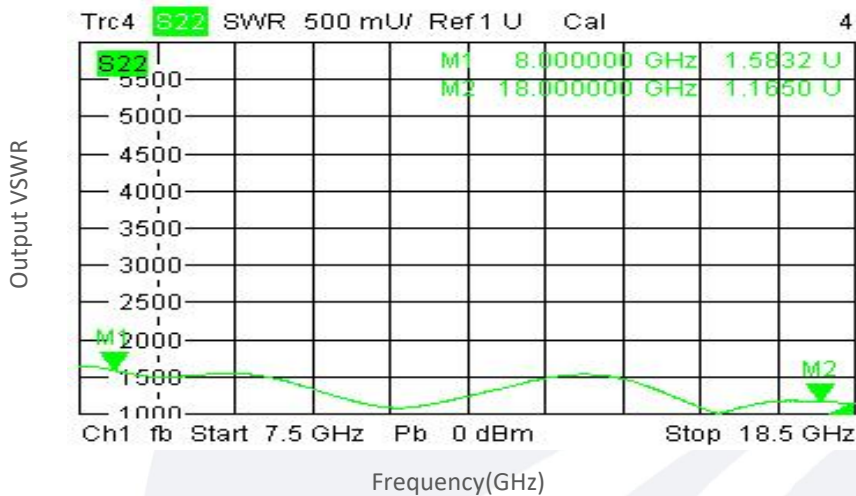
典型曲线 Typical Performance Data:

0.52V-45°:

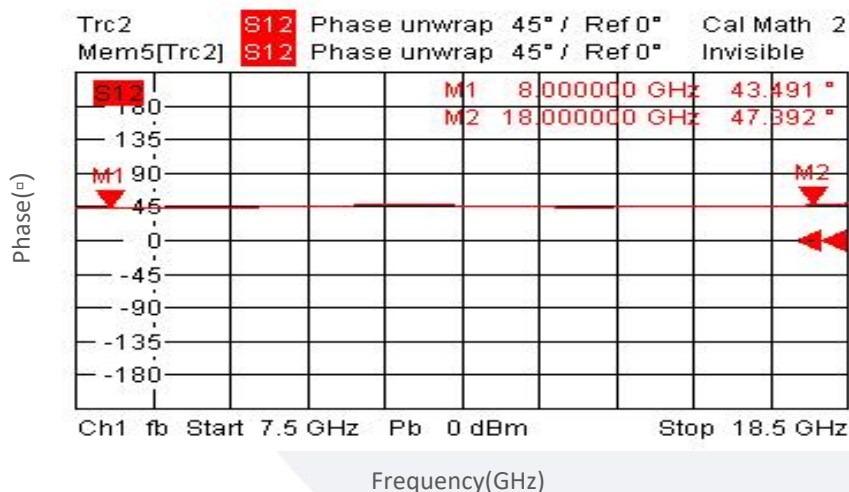
Input VSWR vs Frequency



Output VSWR vs Frequency



Phase vs Frequency



典型曲线 Typical Performance Data:

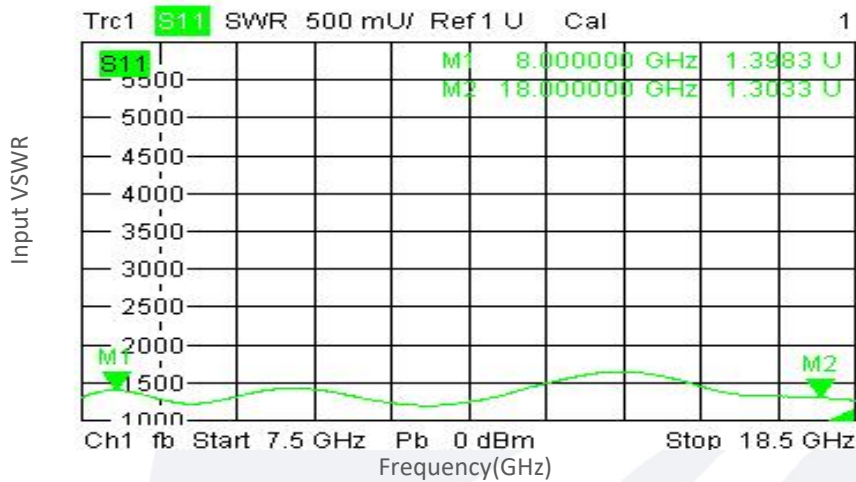
0.52V-45°:

Insertion Loss vs Frequency

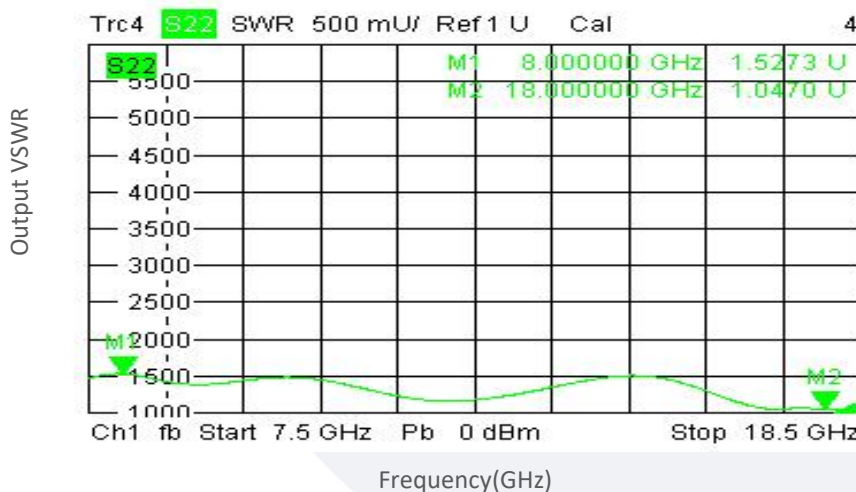


1.26V-90°:

Input VSWR vs Frequency



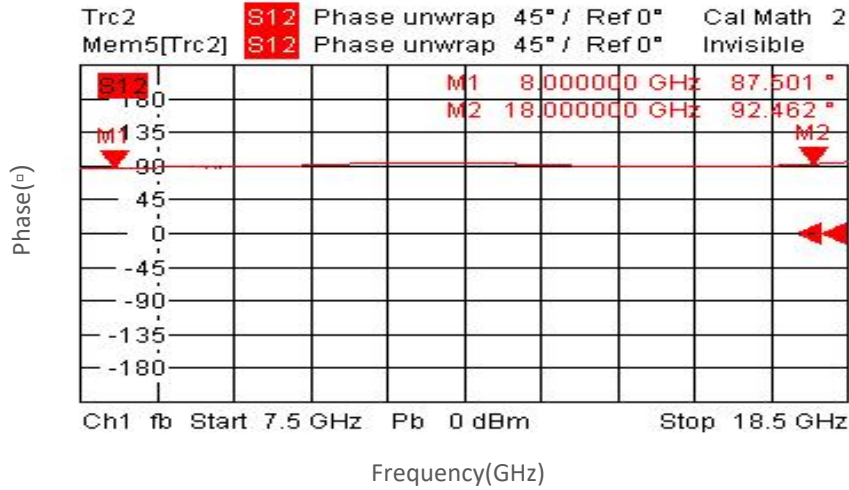
Output VSWR vs Frequency



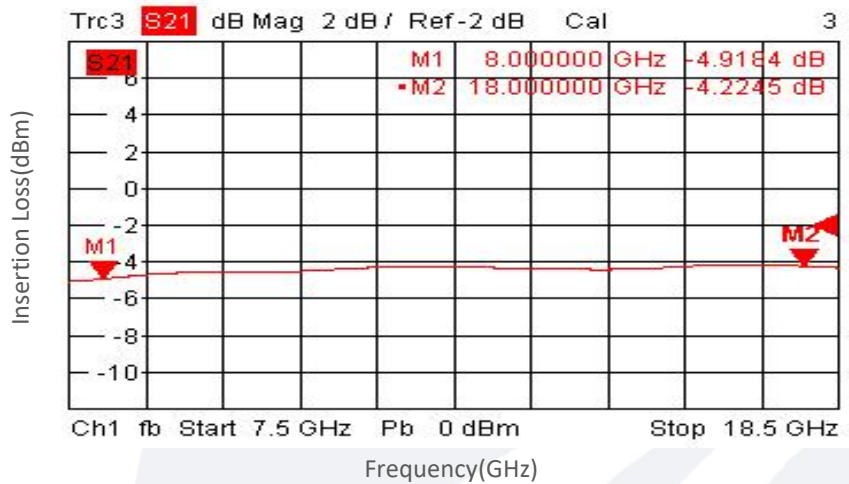
典型曲线 Typical Performance Data:

1.26V-90°:

Phase vs Frequency

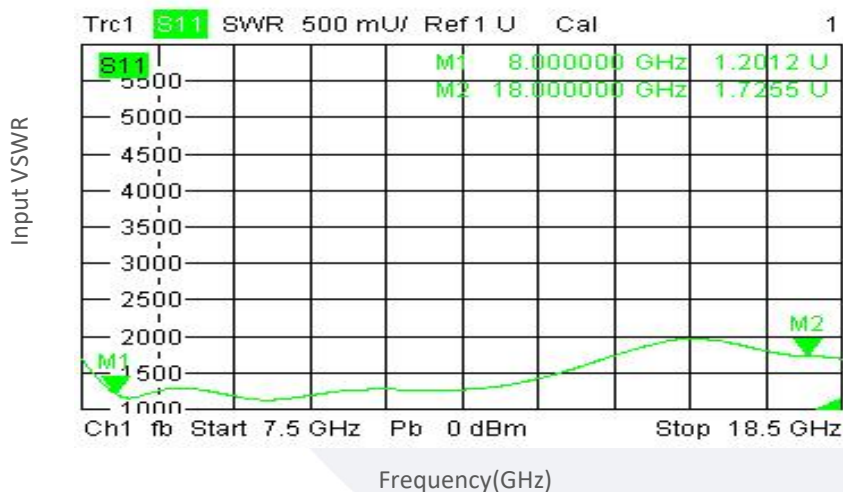


Insertion Loss vs Frequency



3.29V-180°:

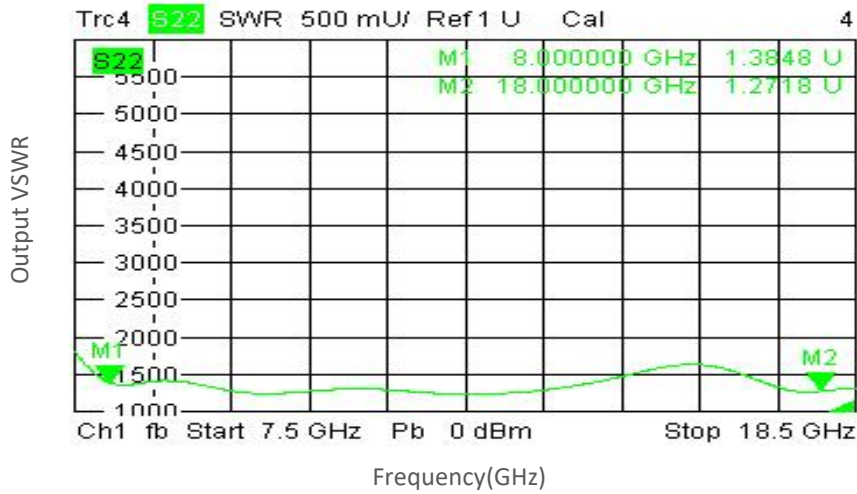
Input VSWR vs Frequency



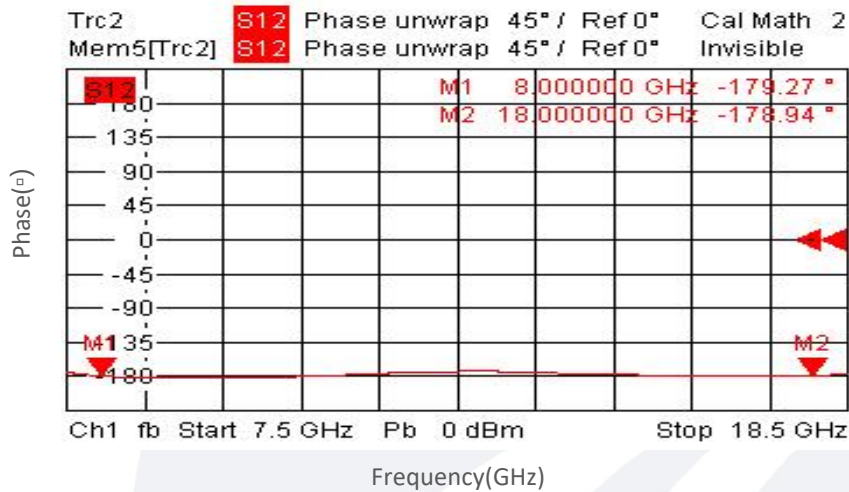
典型曲线 Typical Performance Data:

3.29V-180°:

Output VSWR vs Frequency



Phase vs Frequency



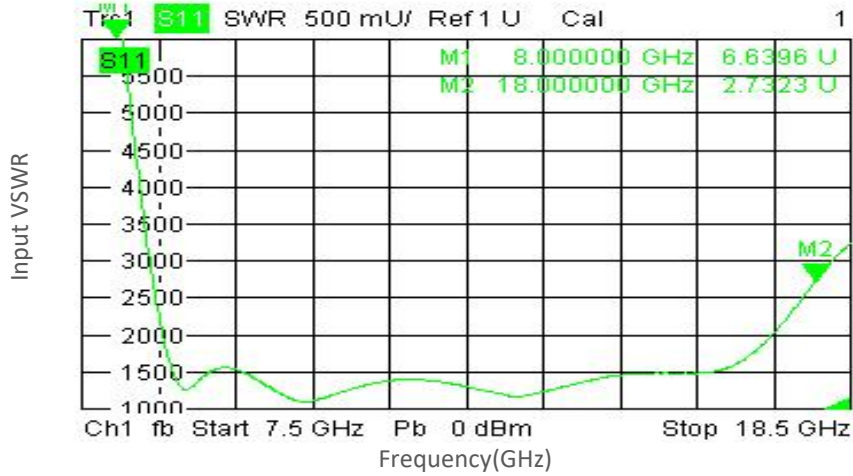
Insertion Loss vs Frequency



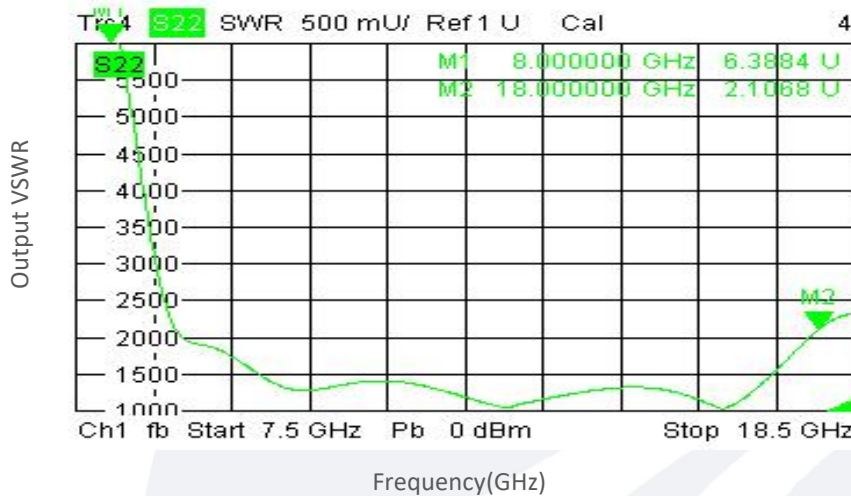
典型曲线 Typical Performance Data:

9.09V-360°:

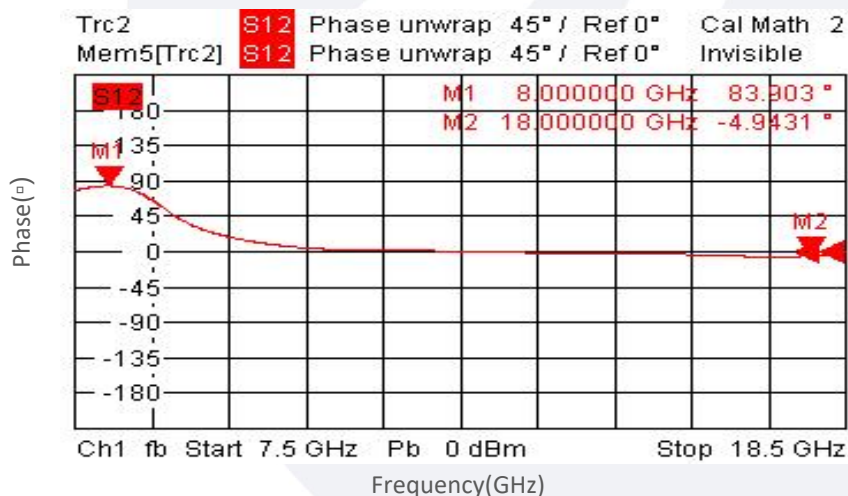
Input VSWR vs Frequency



Output VSWR vs Frequency



Phase vs Frequency



典型曲线 Typical Performance Data:

9.09V-360°:

Insertion Loss vs Frequency

