

Model: TLVP4G8G-360
**Voltage Controlled Phase Shifter
 4-8GHz ,SMA Female**
Feature:

- Frequency Range: 4-8GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Single Positive Control Voltage

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	4-8			GHz
Phase Range	0		360	°
Insertion Loss			6	dB
Input VSWR			2.5	:1
Output VSWR			2.5	:1
Control Voltage Range	0		10	V
Control Current		5		mA
Phase Flatness			12	°
Input Power			27	dBm
Impedance	50			Ohms

Mechanical Specifications:

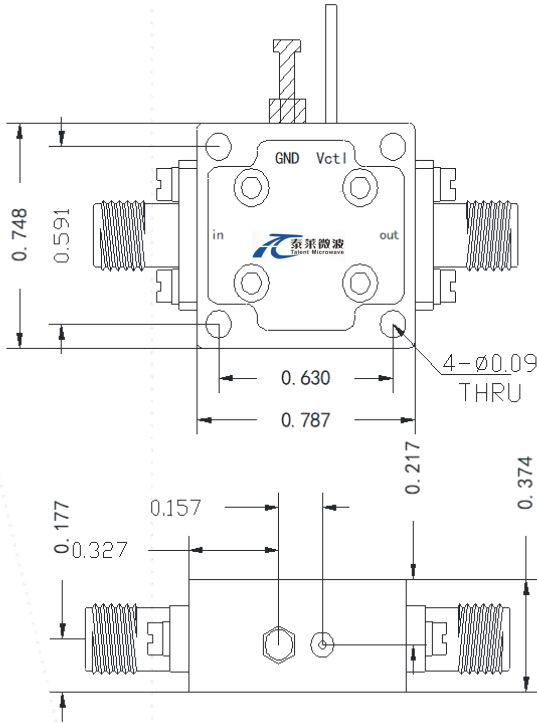
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
Size	0.787*0.748*0.374	Inch
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Control Voltage Range	+15V
RF Input Power No damage	+27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: Inches



Environmental Conditions:



Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20g for 11msc half sin wave,3 axis both directions			

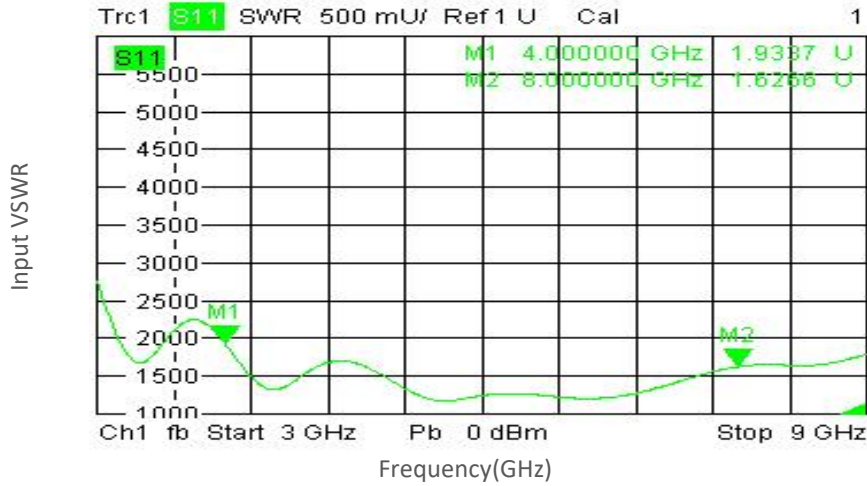
Ordering Information:

Part Number	Description	Revision
TLVP4G8G-360	Voltage Controlled Phase Shifter ,4-8GHz,SMA Female	Rev.1.1

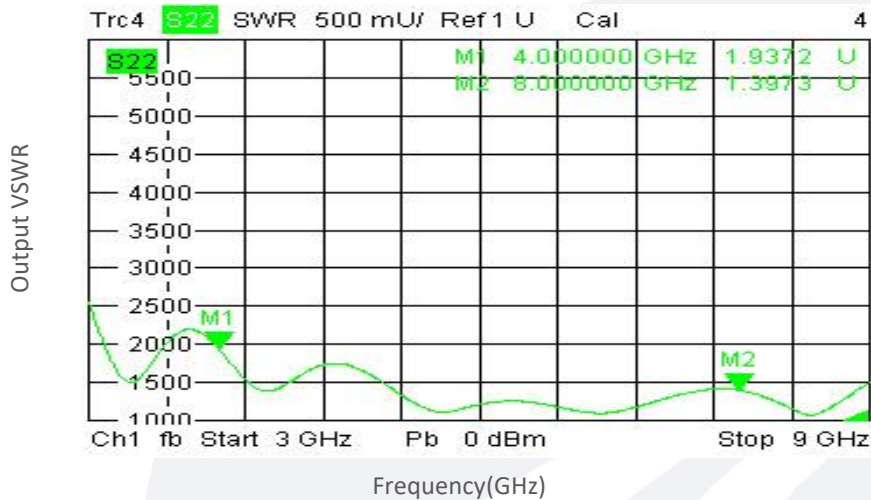
Typical Performance Data:

0V-0°:

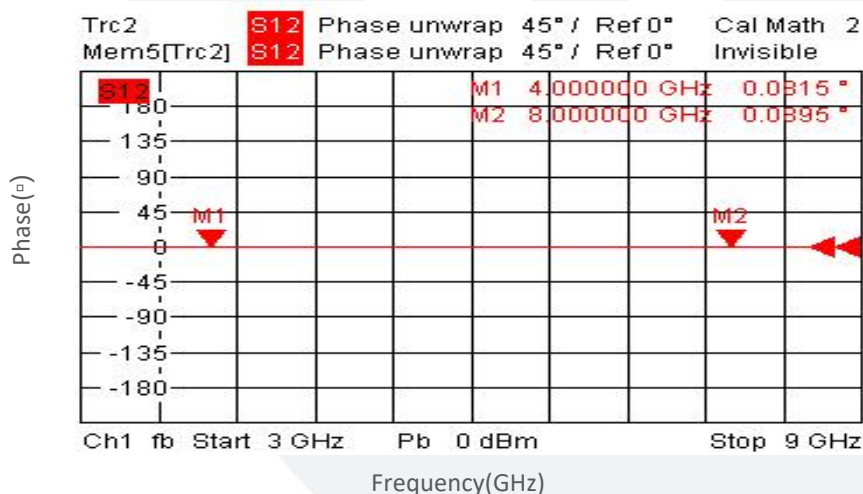
Input VSWR vs Frequency



Output VSWR vs Frequency



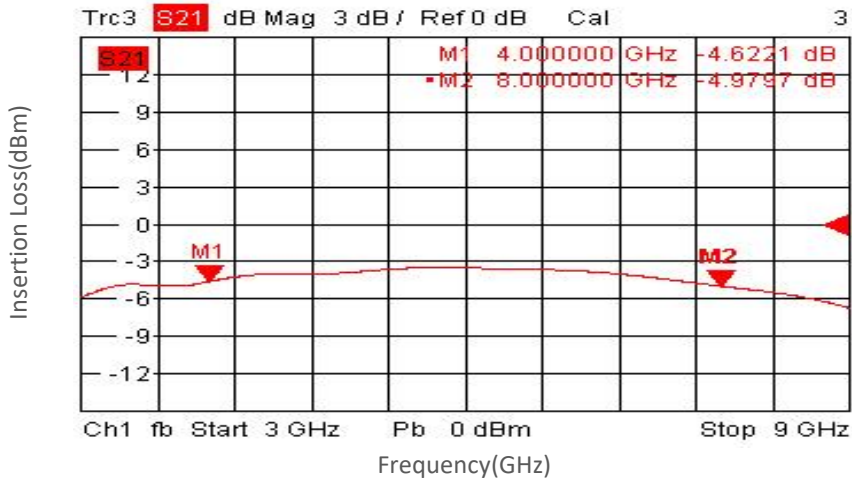
Phase vs Frequency



Typical Performance Data:

0V-0°:

Insertion Loss vs Frequency

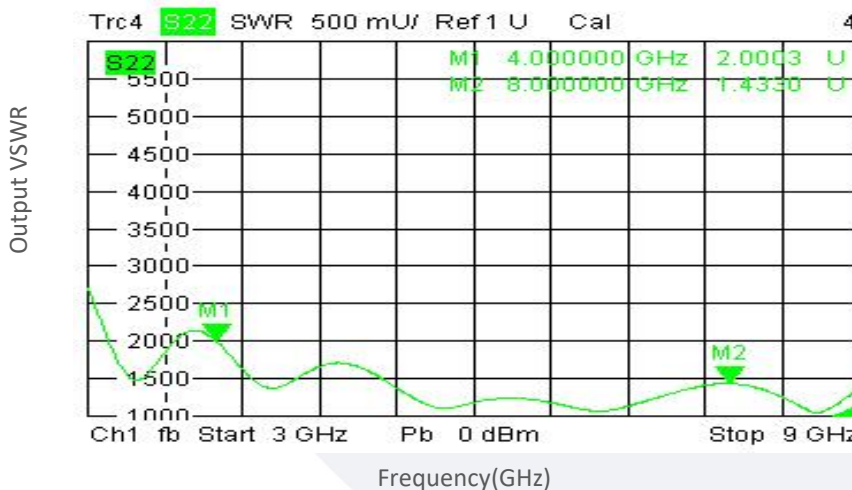


0.1V-12°:

Input VSWR vs Frequency



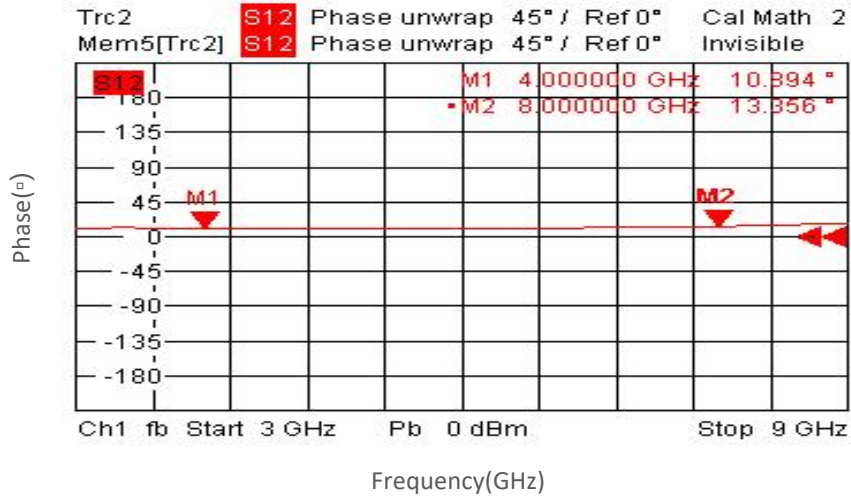
Output VSWR vs Frequency



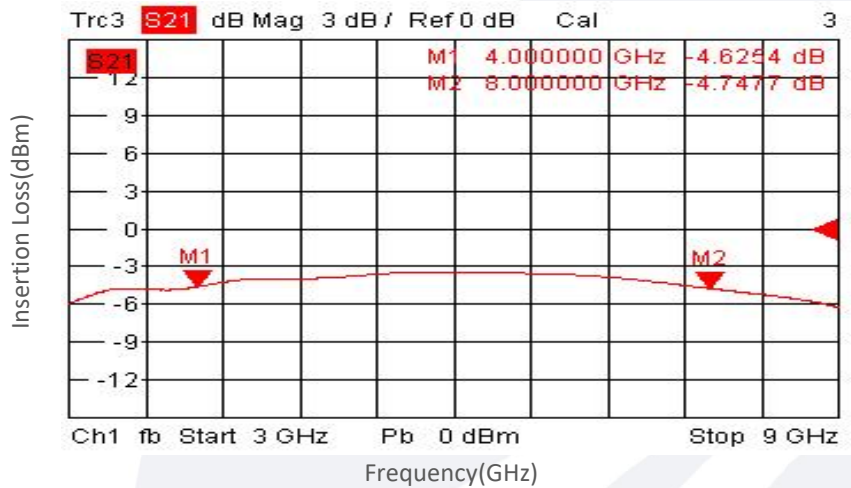
Typical Performance Data:

0.1V-12°:

Phase vs Frequency

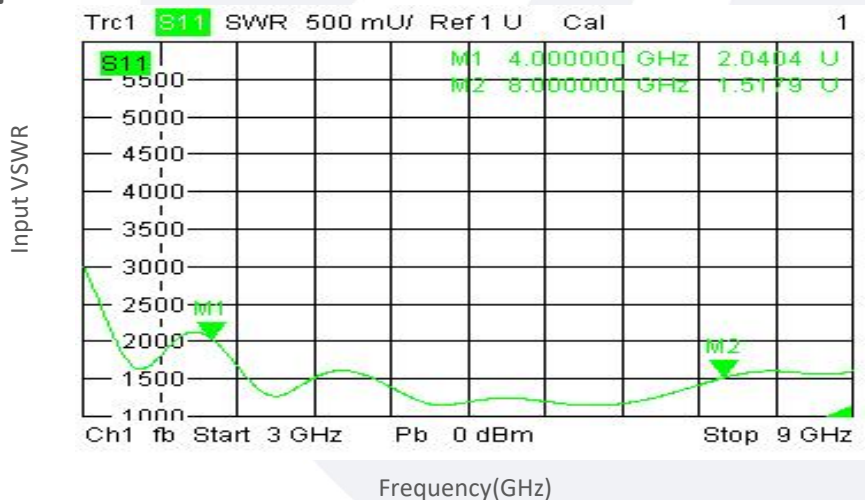


Insertion Loss vs Frequency



0.27V-24°:

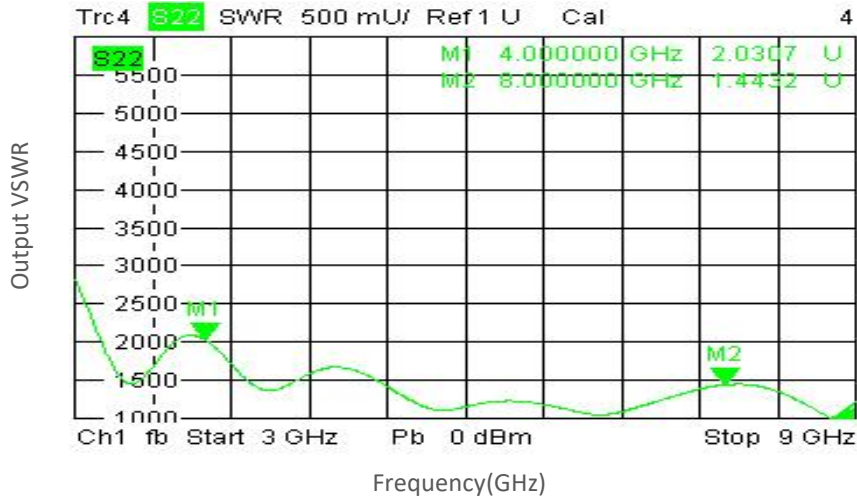
Input VSWR vs Frequency



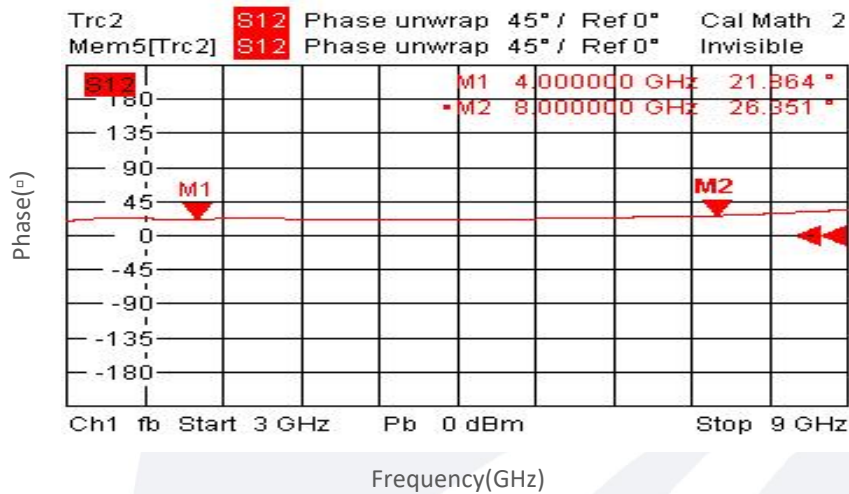
Typical Performance Data:

0.27V-24°:

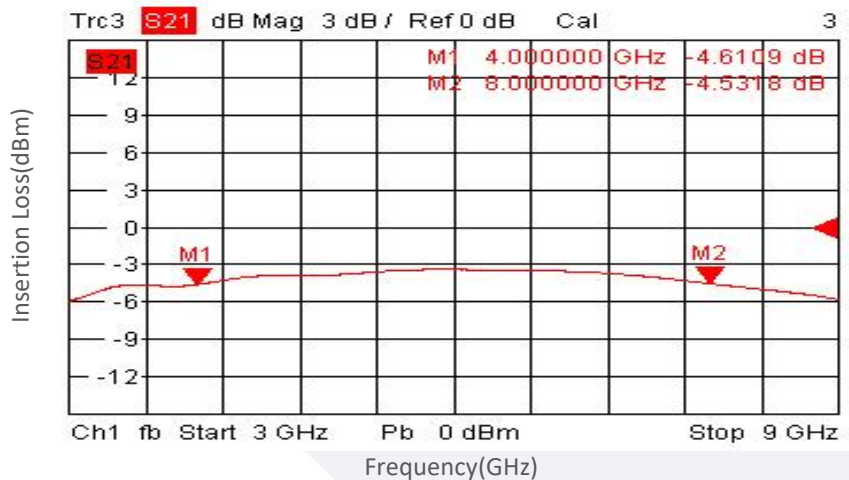
Output VSWR vs Frequency



Phase vs Frequency



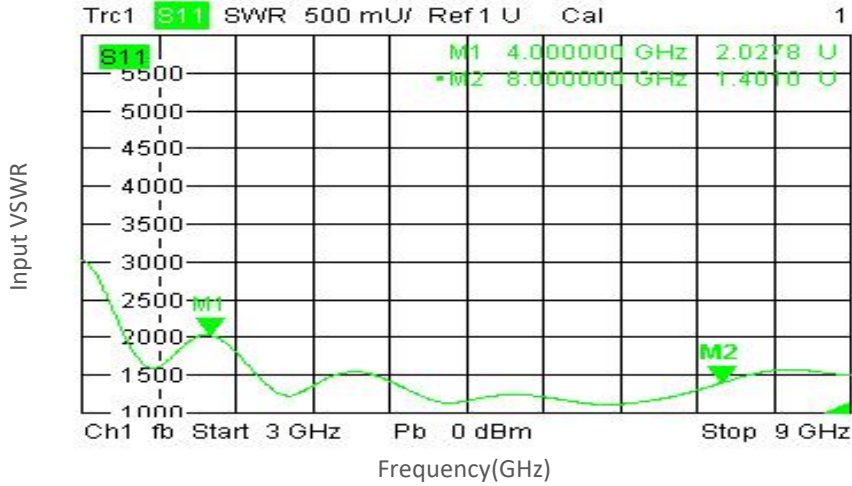
Insertion Loss vs Frequency



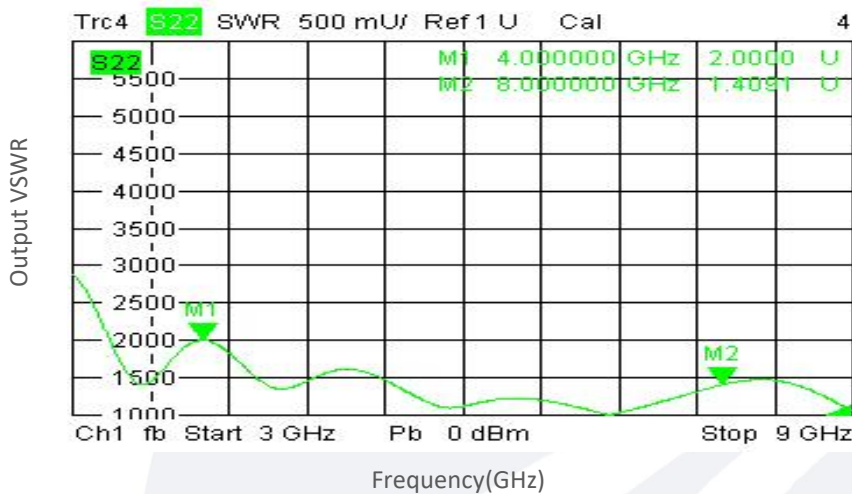
Typical Performance Data:

0.47V-45°:

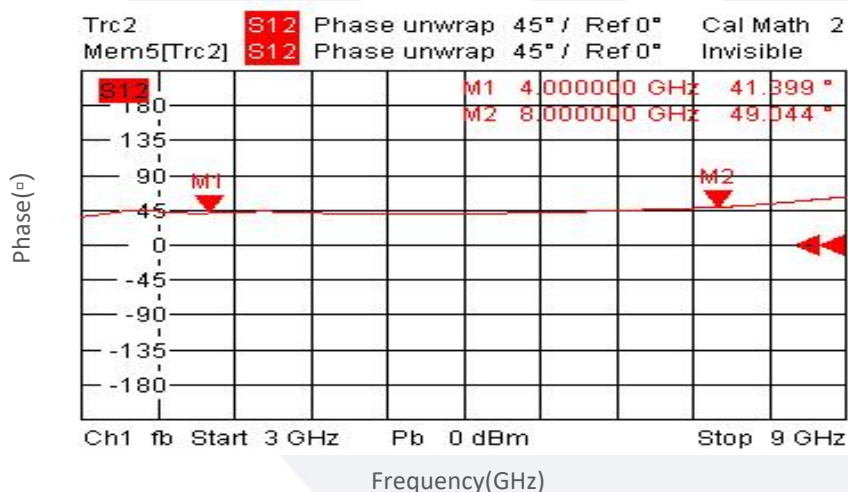
Input VSWR vs Frequency



Output VSWR vs Frequency



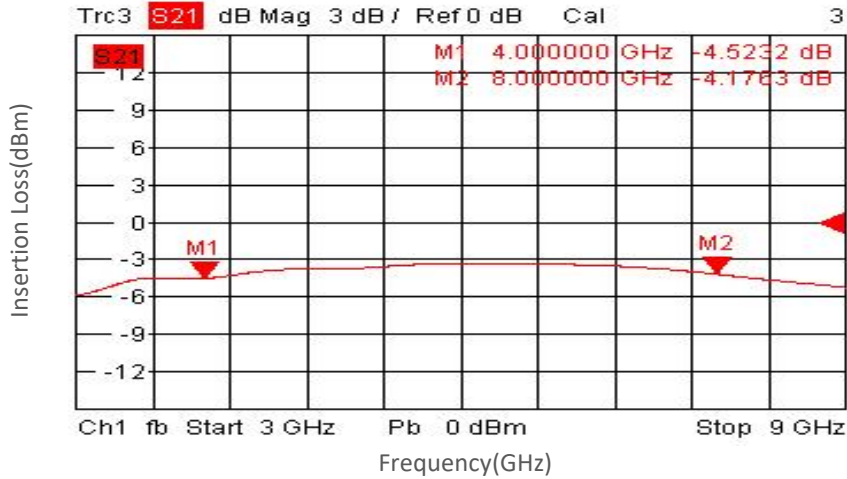
Phase vs Frequency



Typical Performance Data:

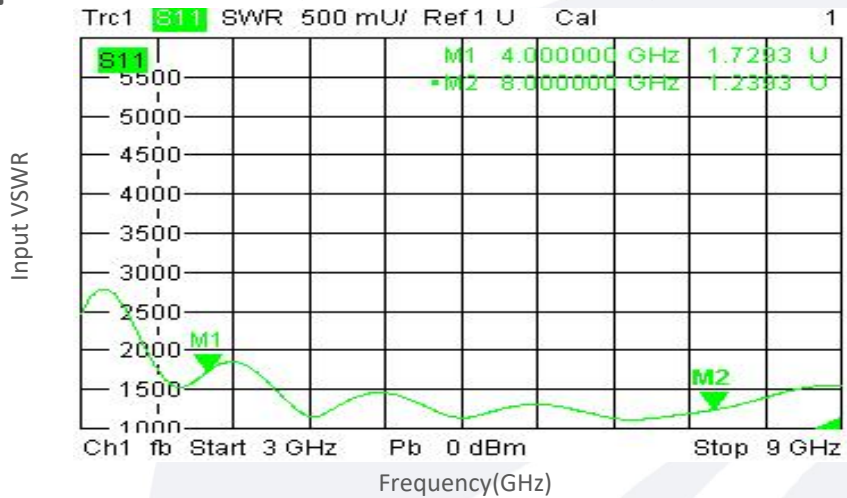
0.47V-45°:

Insertion Loss vs Frequency

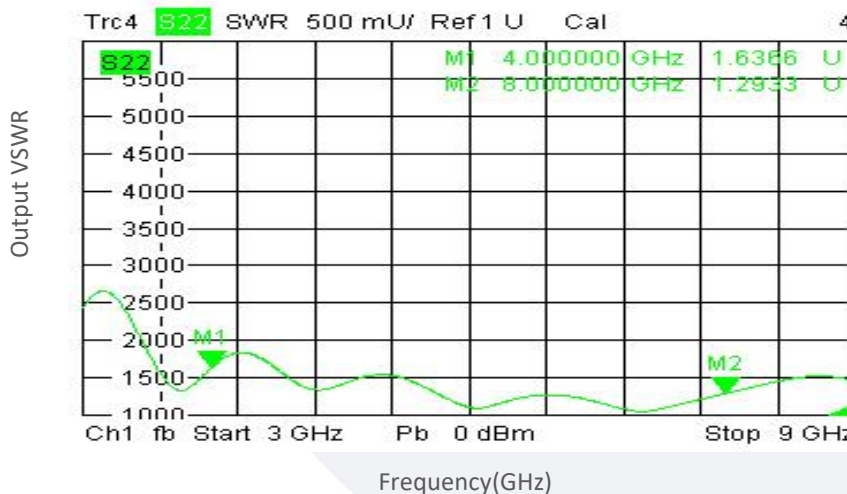


1.13V-90°:

Input VSWR vs Frequency



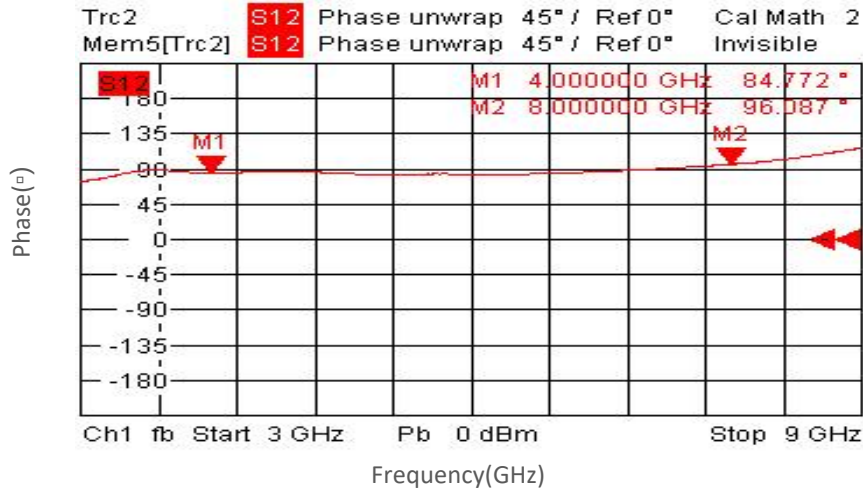
Output VSWR vs Frequency



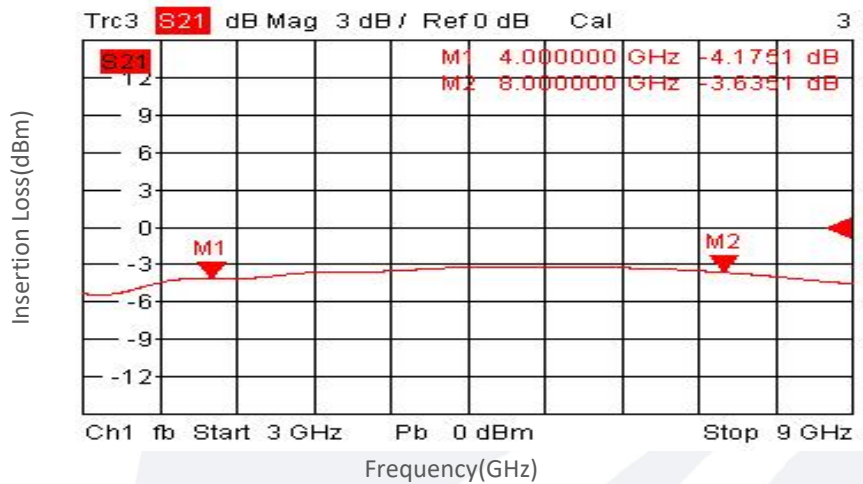
Typical Performance Data:

1.13V-90°:

Phase vs Frequency

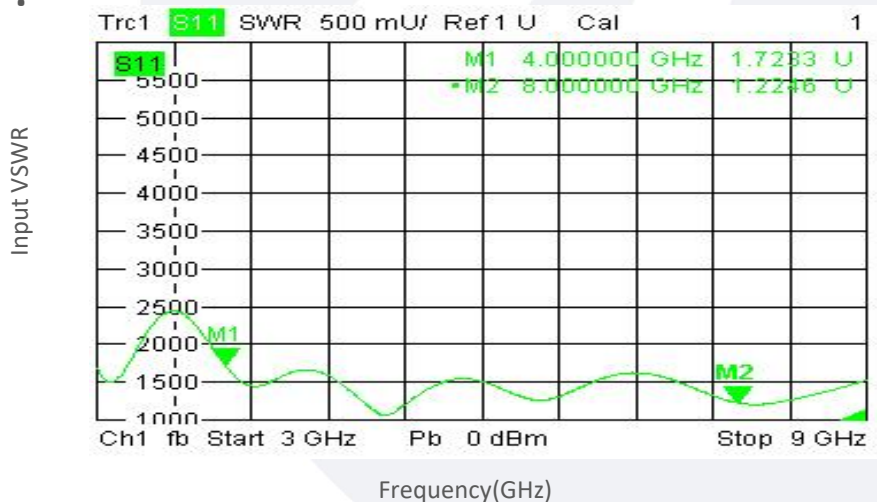


Insertion Loss vs Frequency



2.93V-180°:

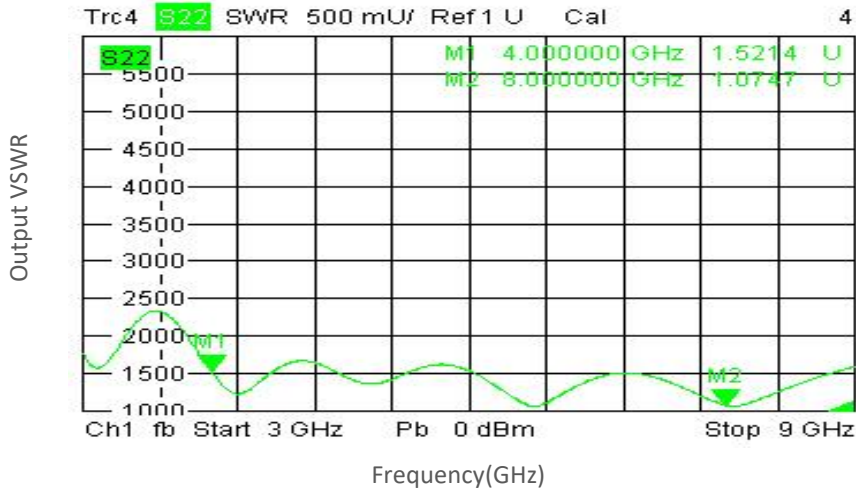
Input VSWR vs Frequency



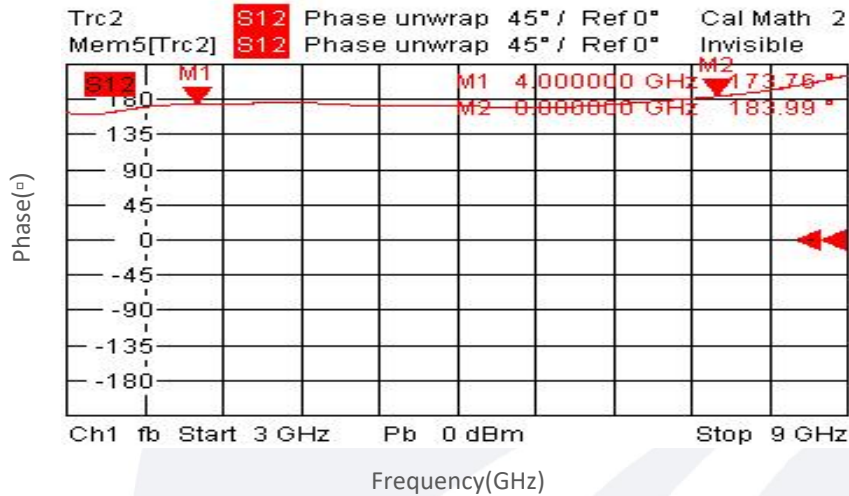
Typical Performance Data:

2.93V-180°:

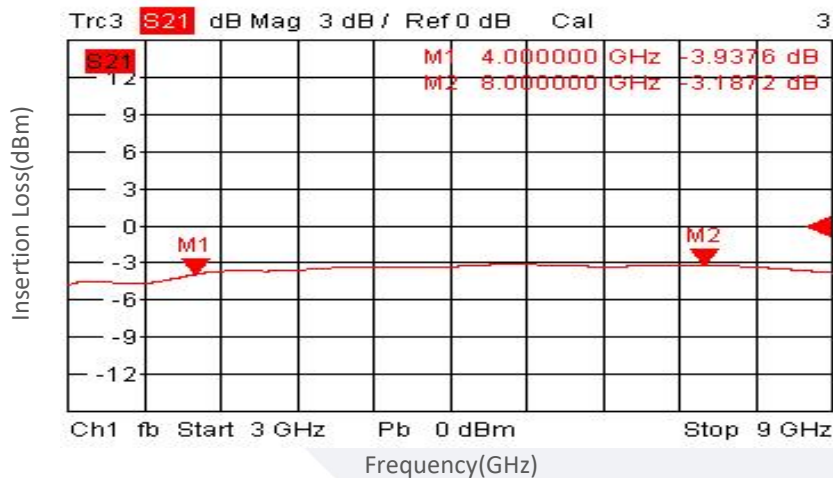
Output VSWR vs Frequency



Phase vs Frequency



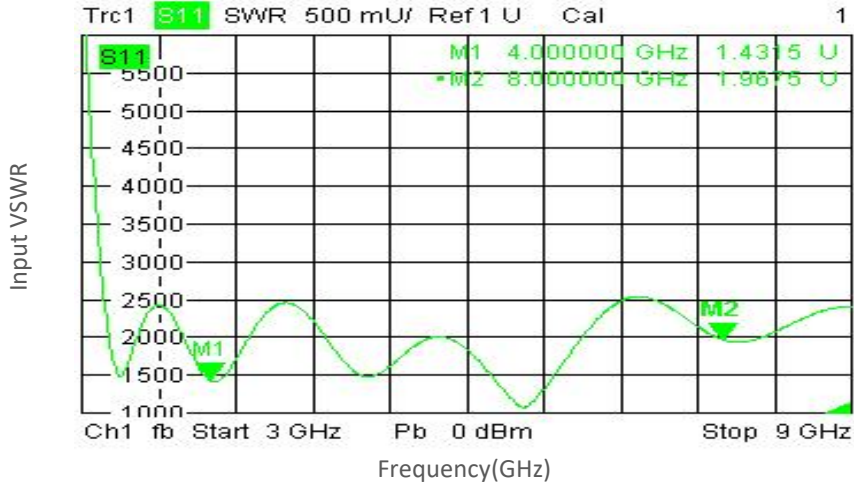
Insertion Loss vs Frequency



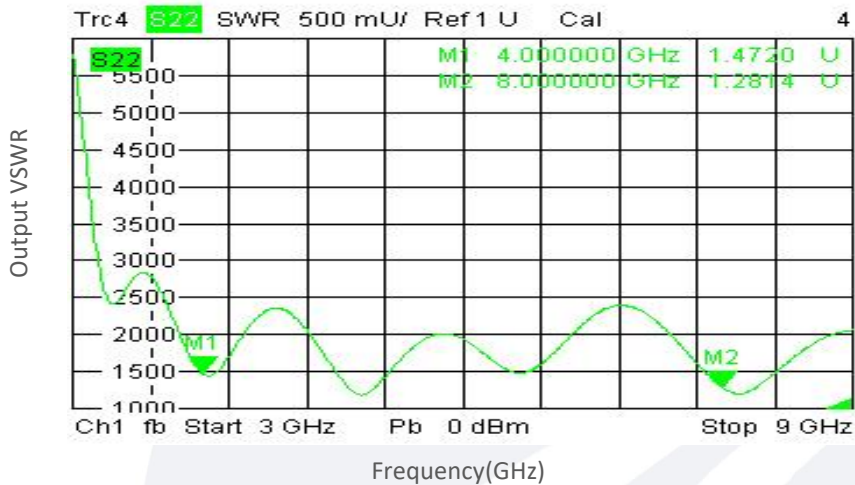
Typical Performance Data:

8.23V-360°:

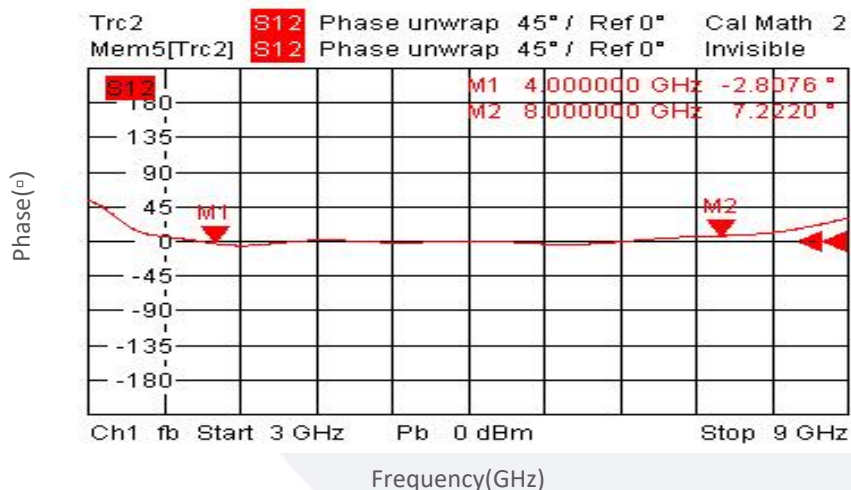
Input VSWR vs Frequency



Output VSWR vs Frequency



Phase vs Frequency



Typical Performance Data:

8.23V-360°:

Insertion Loss vs Frequency

