

Model: TLVP1G2G-360-12
**Voltage Controlled Phase Shifter
1-2GHz**
Feature:

- Frequency Range: 1-2GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Single Positive Control Voltage

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-2			GHz
Phase Range	360			°
Insertion Loss		4.6	5.0	dB
IP3 Input IP3		25		dBm
Input VSWR		2.1	2.5	:1
Output VSWR		2.1	2.5	:1
Control Voltage Range	0	12		V
Control Current		20		mA
Phase Flatness			±15	°
Input Power			25	dBm
Impedance	50			Ohms

Mechanical Specifications:

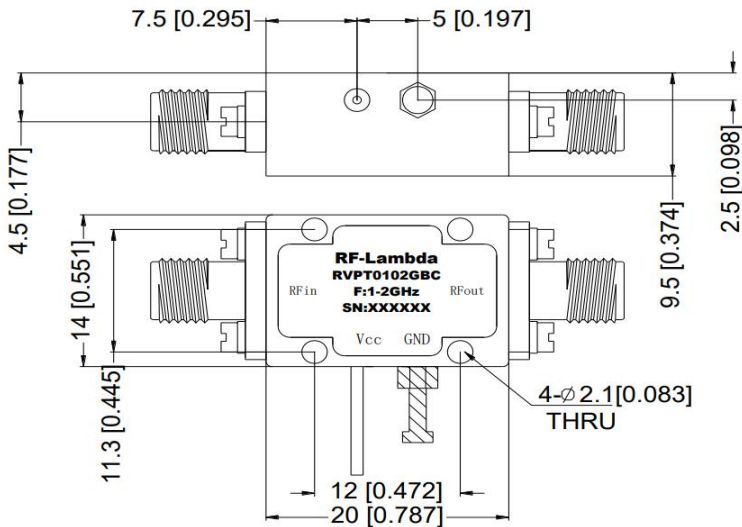
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
Size	20*14*9.5	mm
Weight	20	g

Absolute Maximum Ratings:

Parameter	Value
Control Voltage Range	+15V
RF Input Power No damage	+25 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-50		+105	°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			

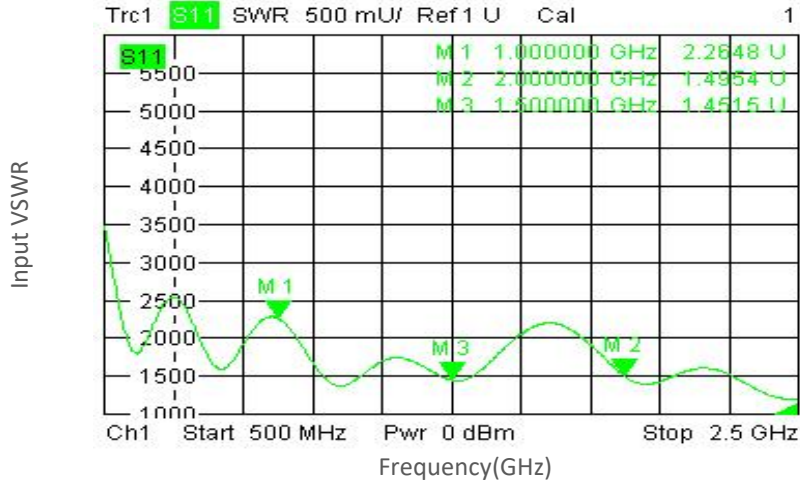
Ordering Information:

Part Number	Description	Revision
TLVP1G2G-360-12	Voltage Controlled Phase Shifter ,1-2GHz,SMA	Rev.1.1

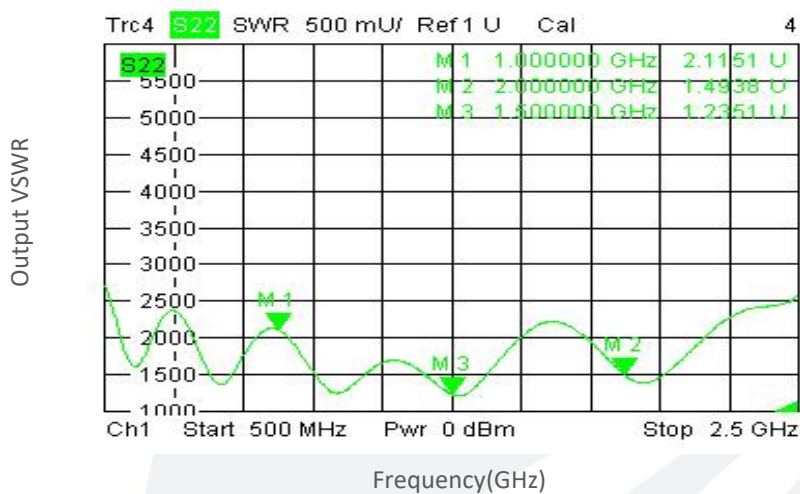
Typical Performance Data:

0V:

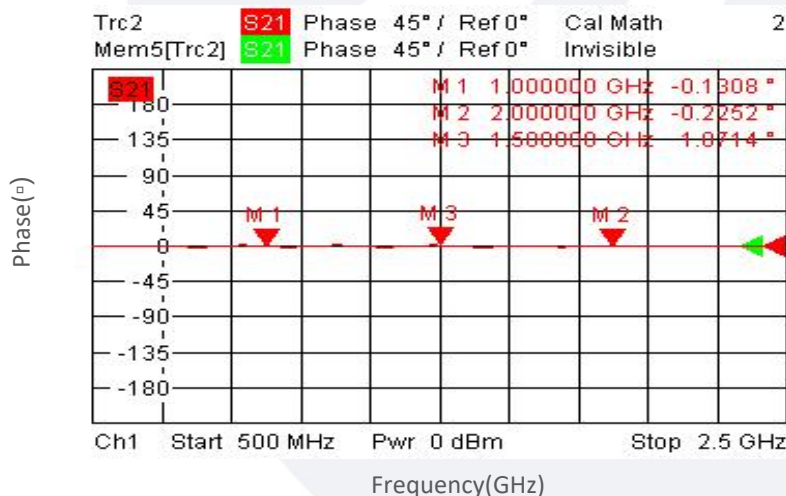
Input VSWR vs Frequency



Output VSWR vs Frequency



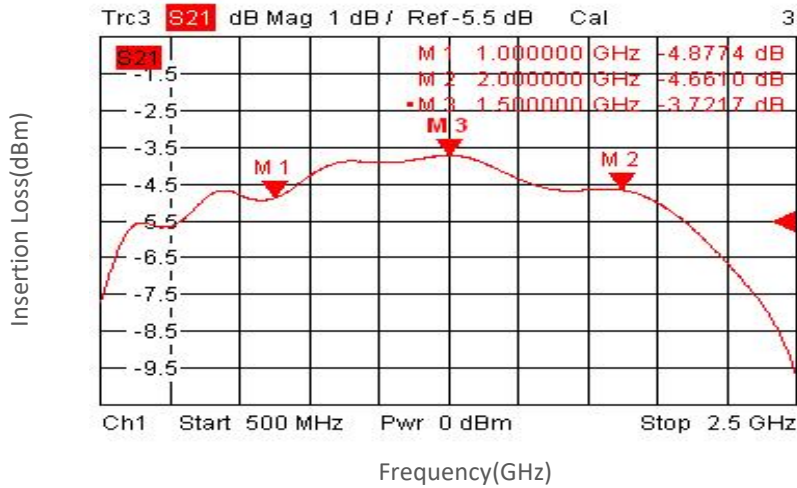
Phase vs Frequency



典型曲线 Typical Performance Data:

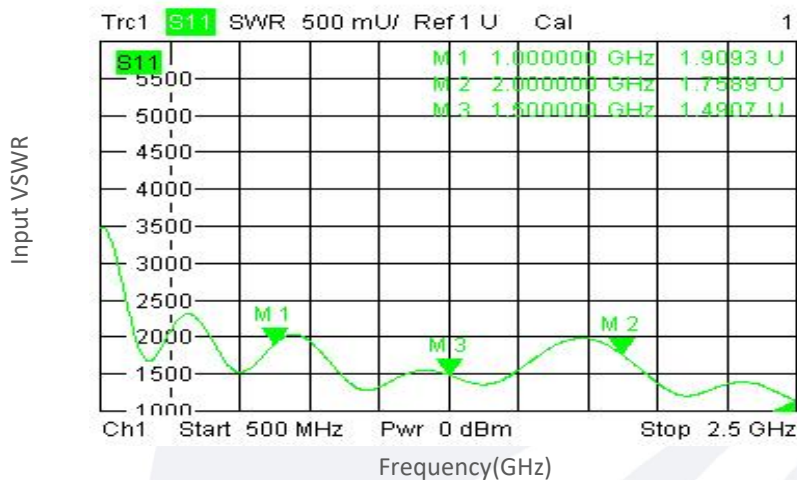
0V:

Insertion Loss vs Frequency

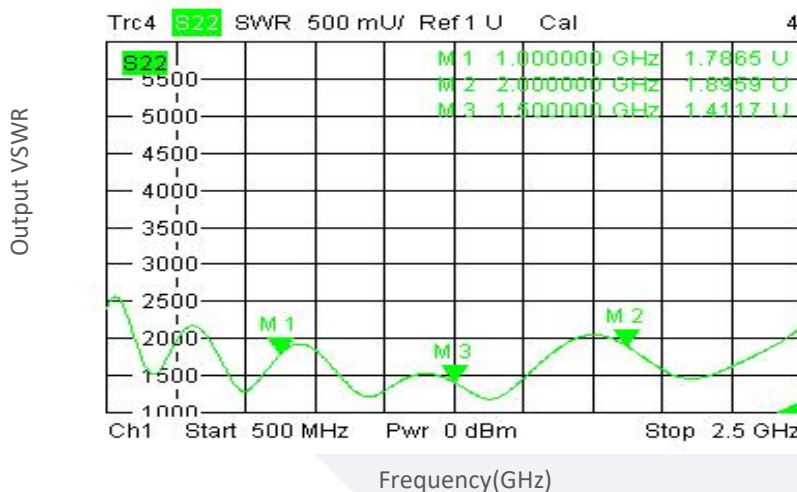


0.5V:

Input VSWR vs Frequency



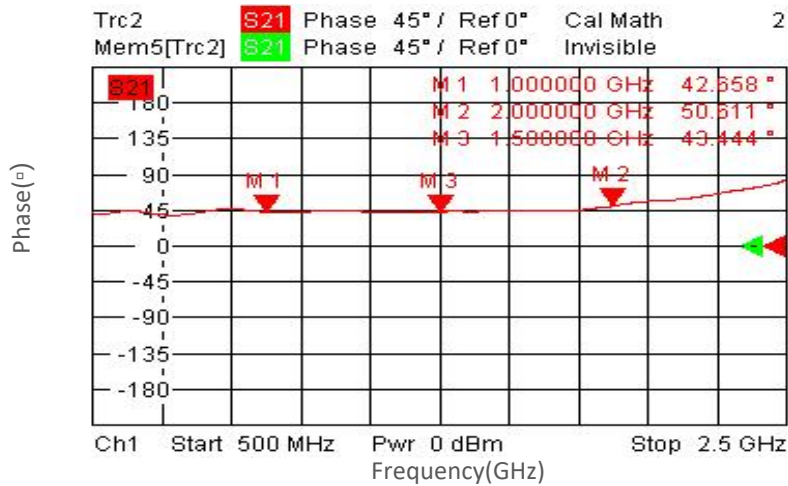
Output VSWR vs Frequency



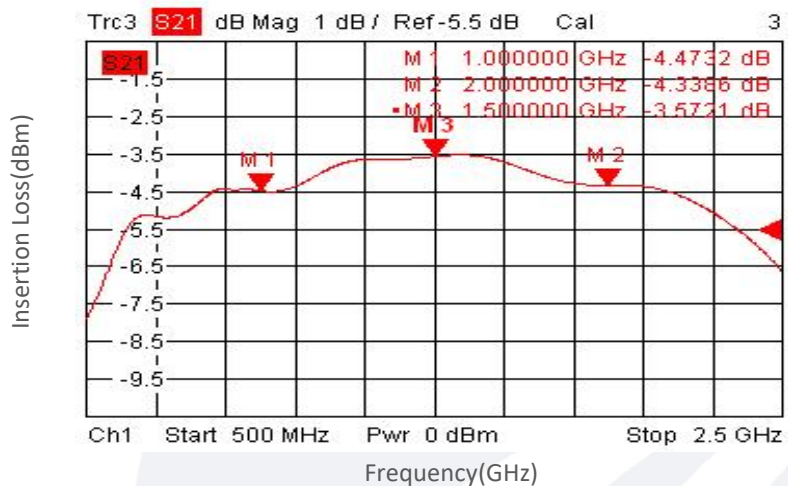
Typical Performance Data:

0.5V:

Phase vs Frequency

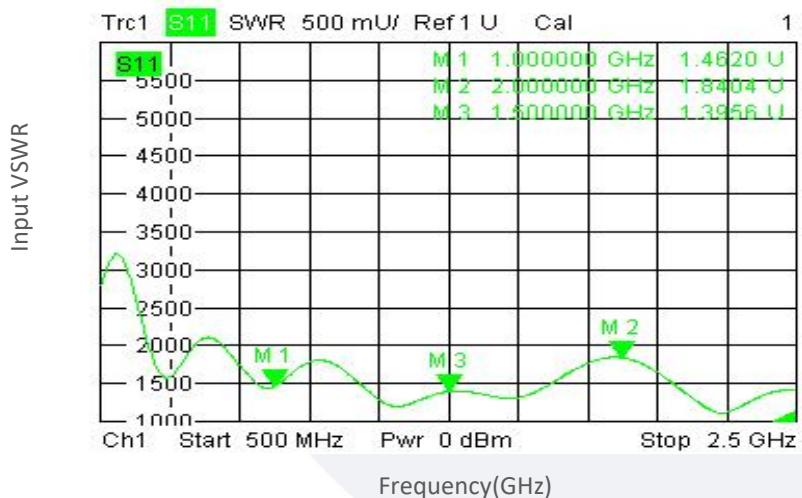


Insertion Loss vs Frequency



1.2V:

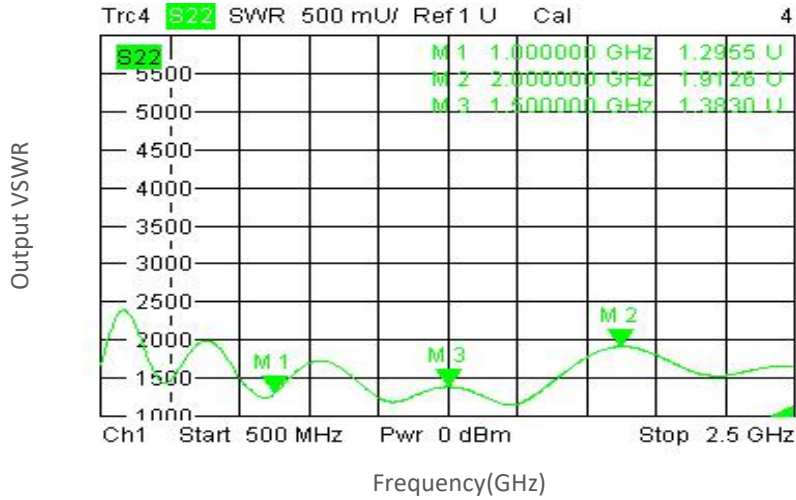
Input VSWR vs Frequency



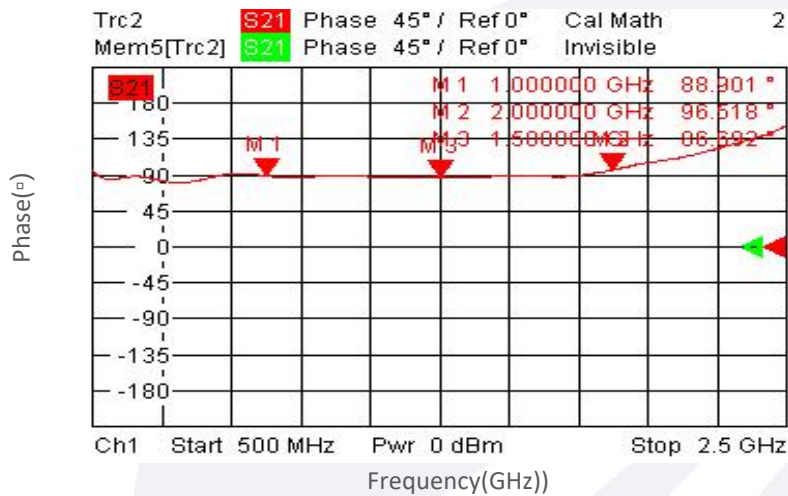
Typical Performance Data:

1.2V:

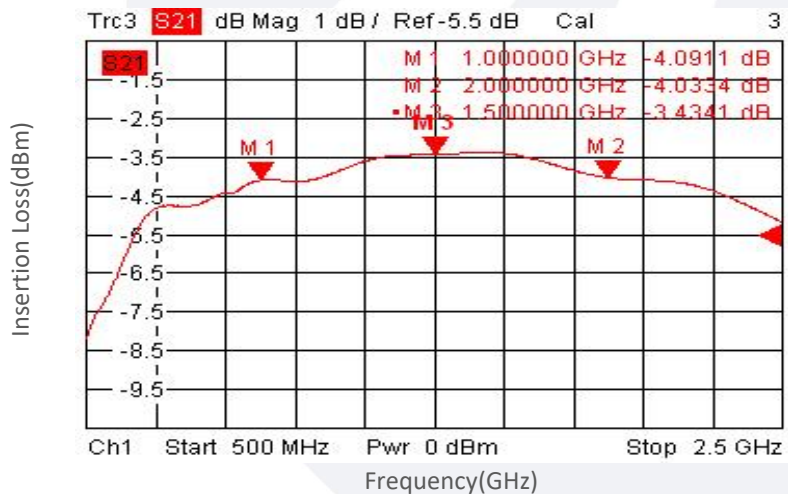
Output VSWR vs Frequency



Phase vs Frequency



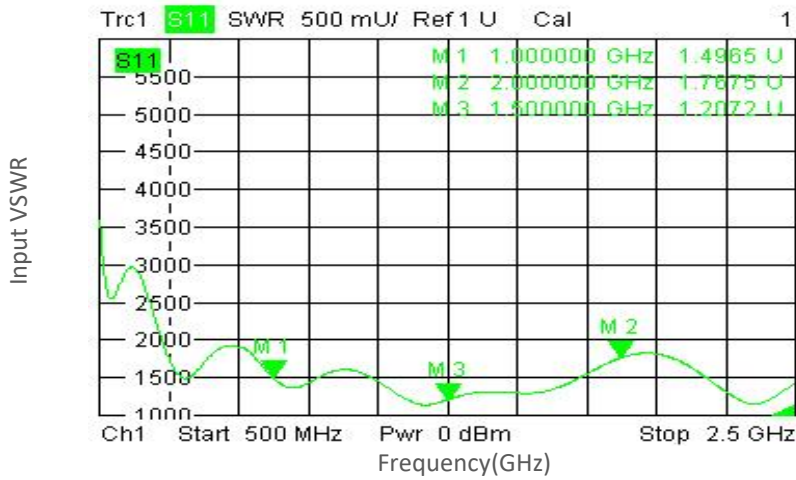
Insertion Loss vs Frequency



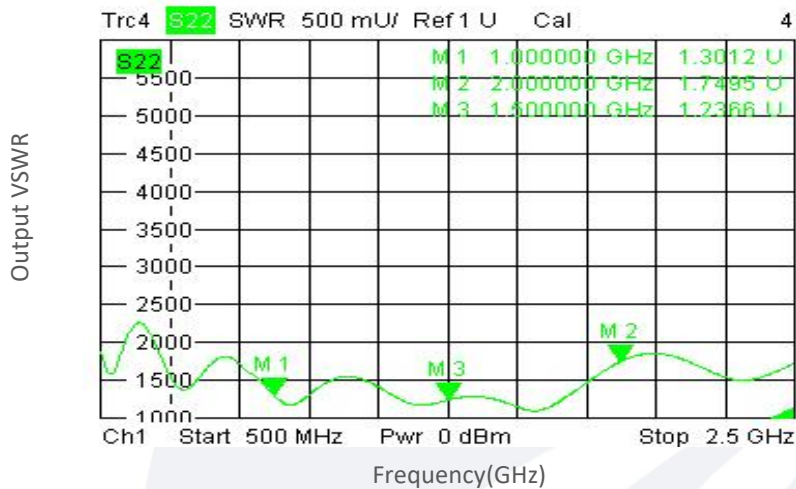
Typical Performance Data:

2.2V:

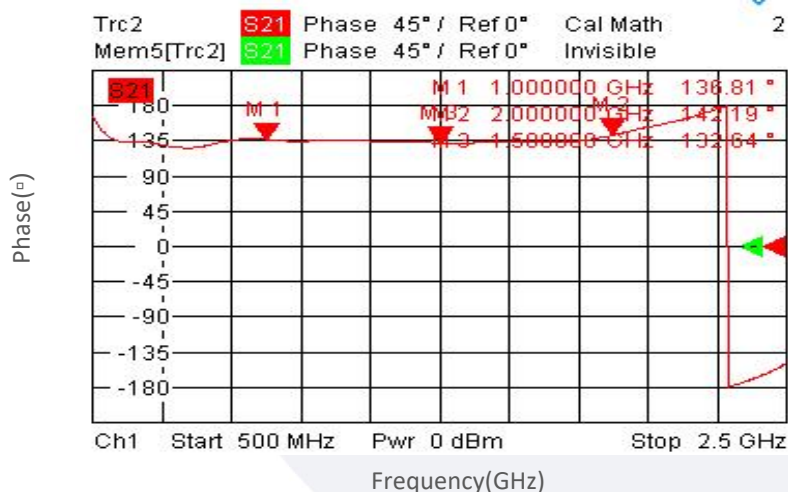
Input VSWR vs Frequency



Output VSWR vs Frequency



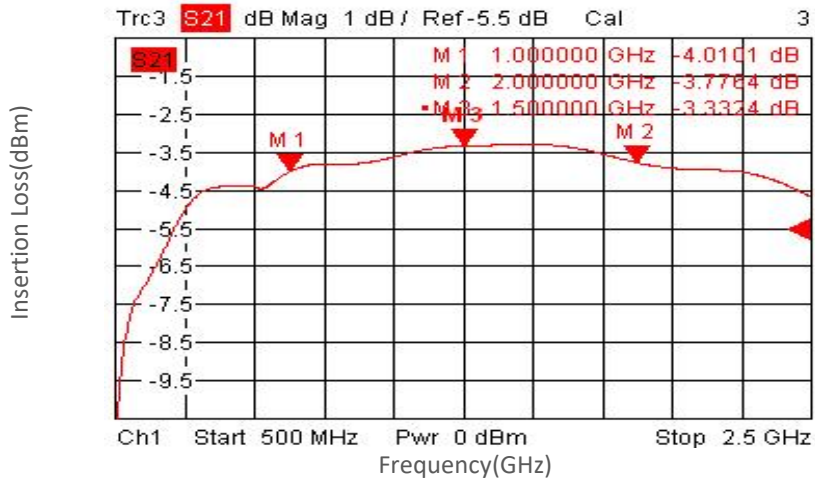
Phase vs Frequency



Typical Performance Data:

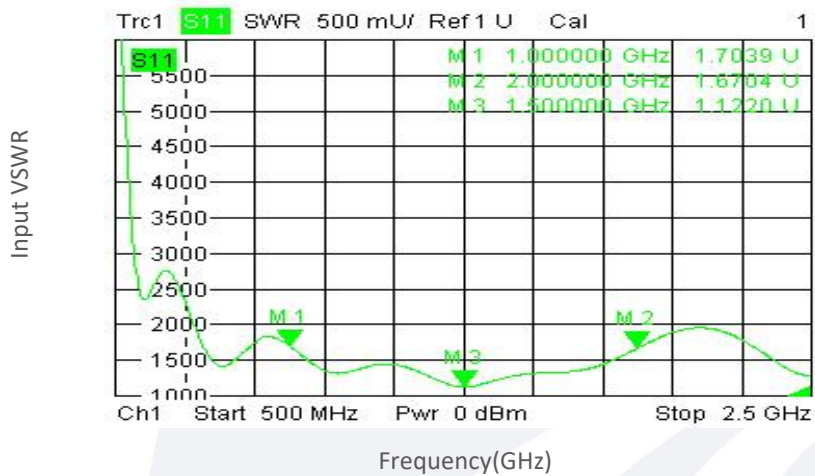
2.2V:

Insertion Loss vs Frequency

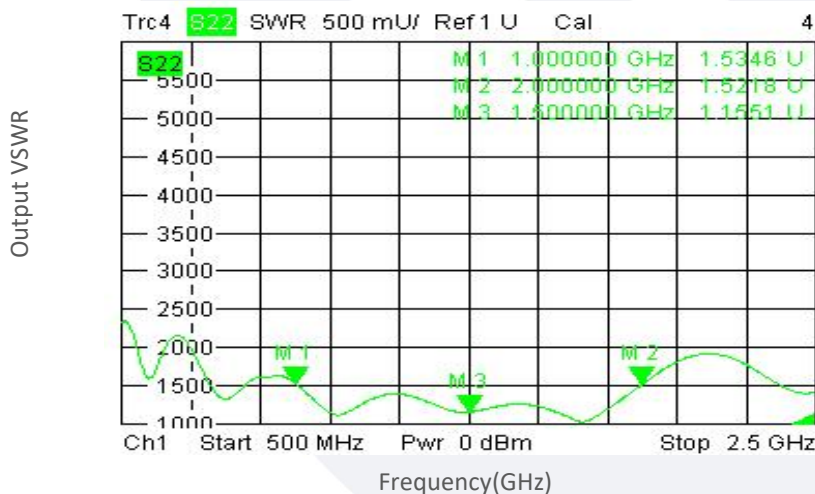


3.3V:

Input VSWR vs Frequency



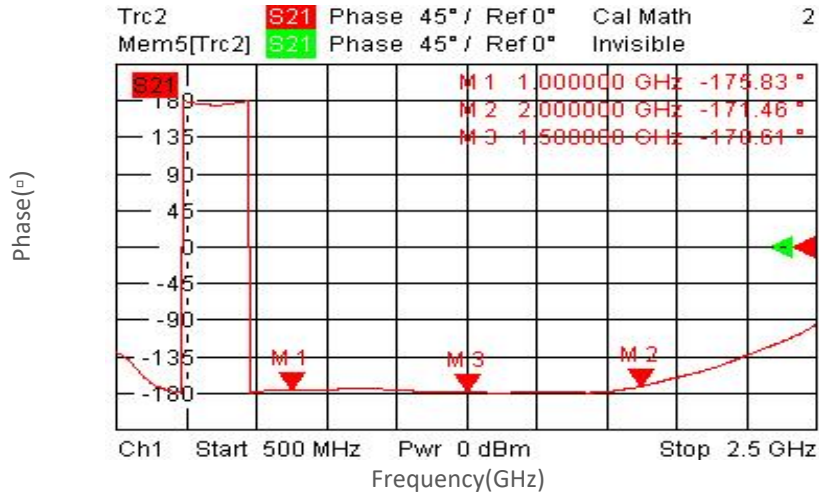
Output VSWR vs Frequency



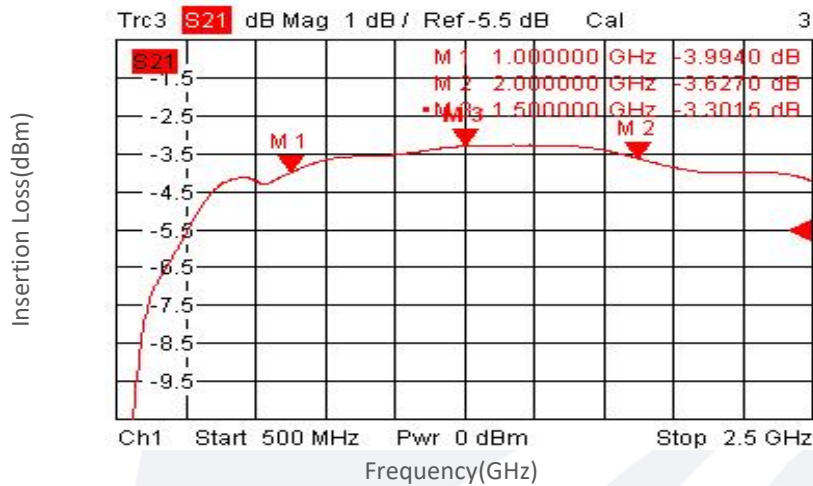
Typical Performance Data:

3.3V:

Phase vs Frequency

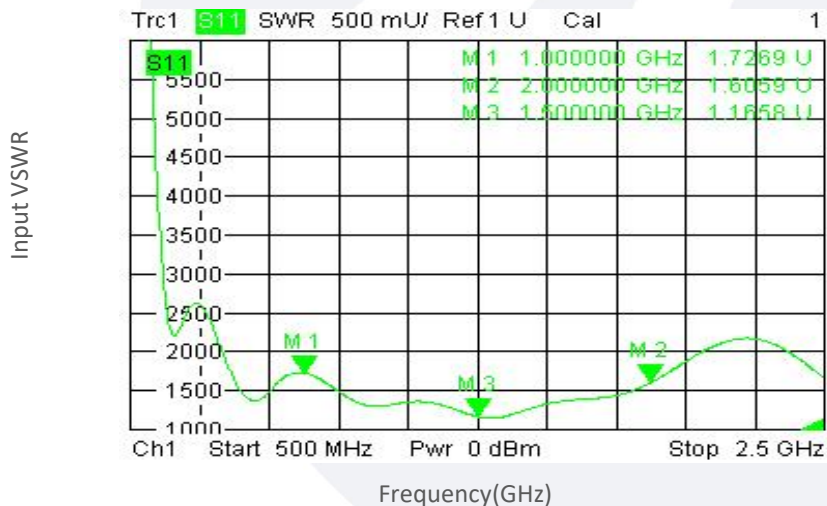


Insertion Loss vs Frequency



4.4V:

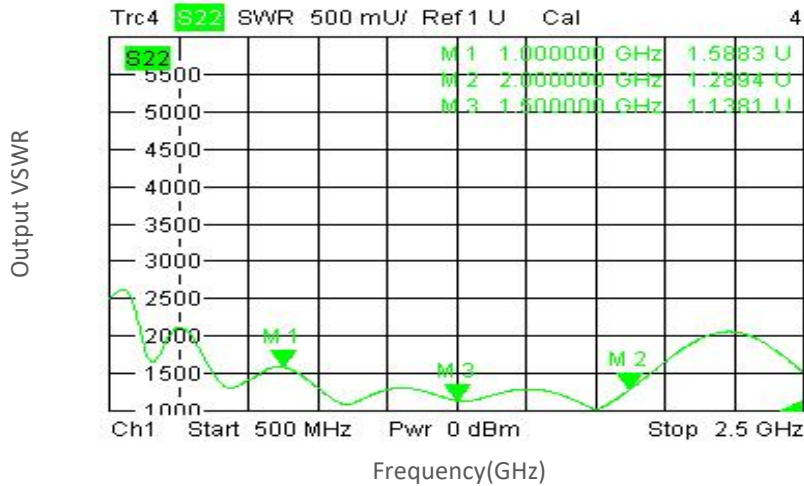
Input VSWR vs Frequency



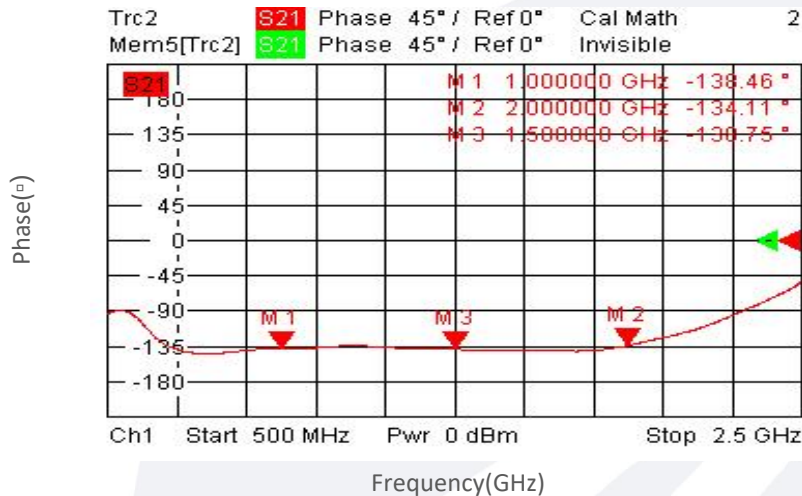
Typical Performance Data:

4.4V:

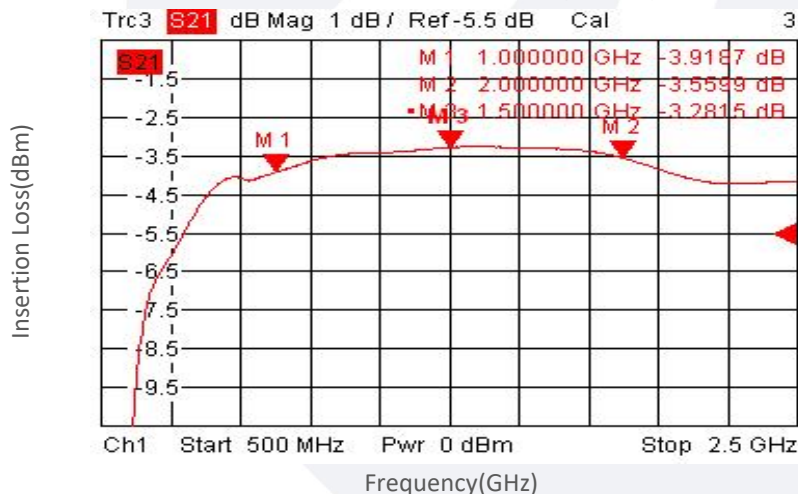
Output VSWR vs Frequency



Phase vs Frequency



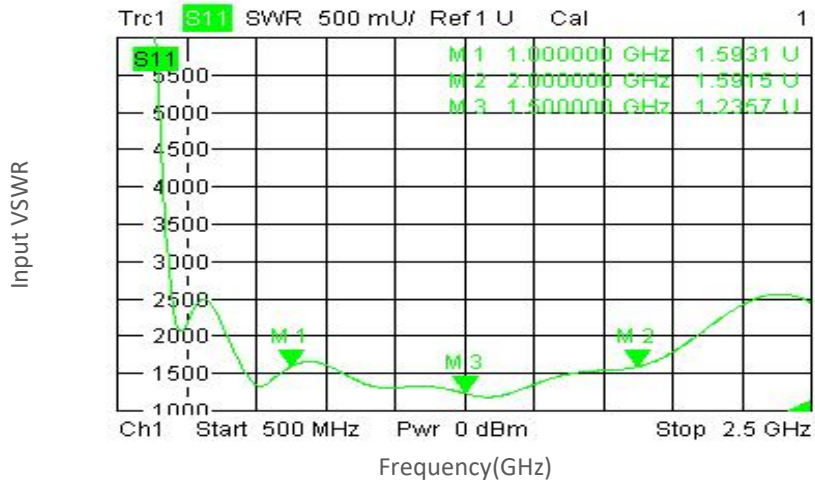
Insertion Loss vs Frequency



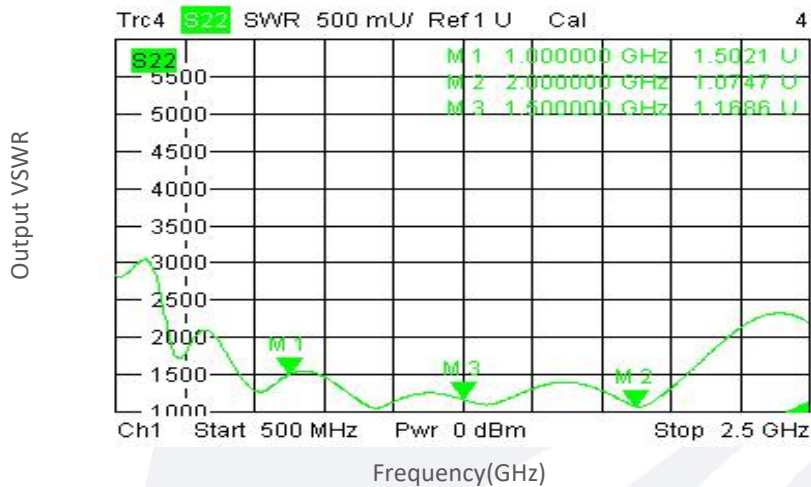
Typical Performance Data:

5.7V:

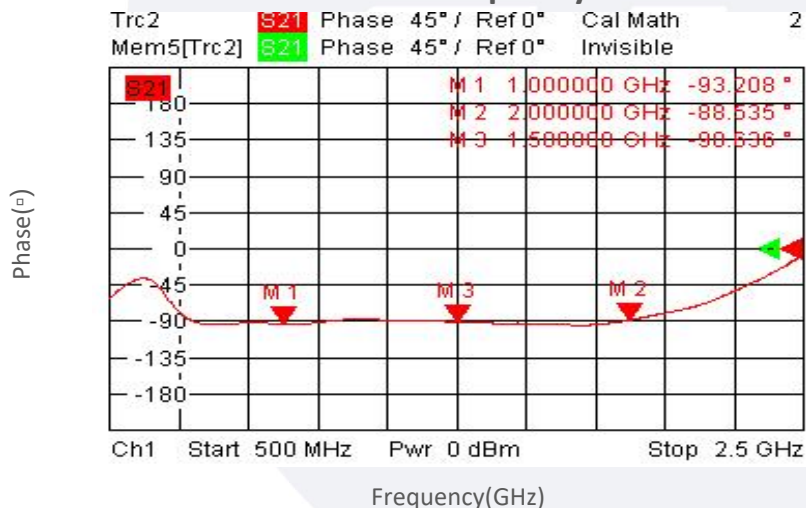
Input VSWR vs Frequency



Output VSWR vs Frequency



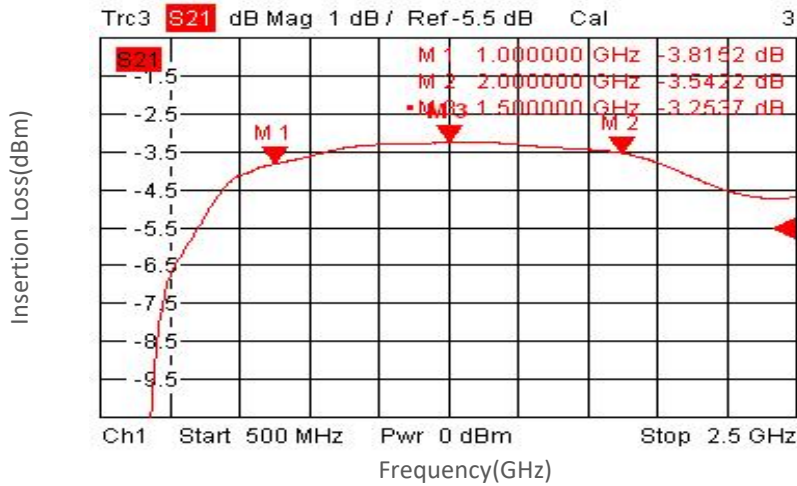
Phase vs Frequency



Typical Performance Data:

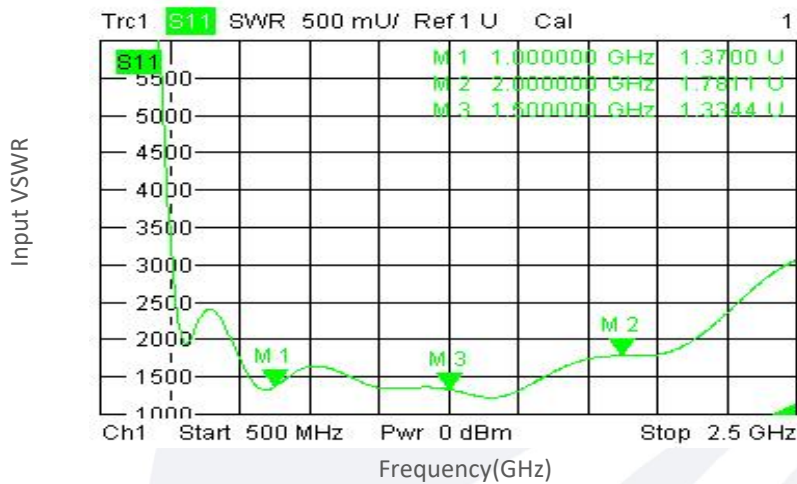
5.7V:

Insertion Loss vs Frequency

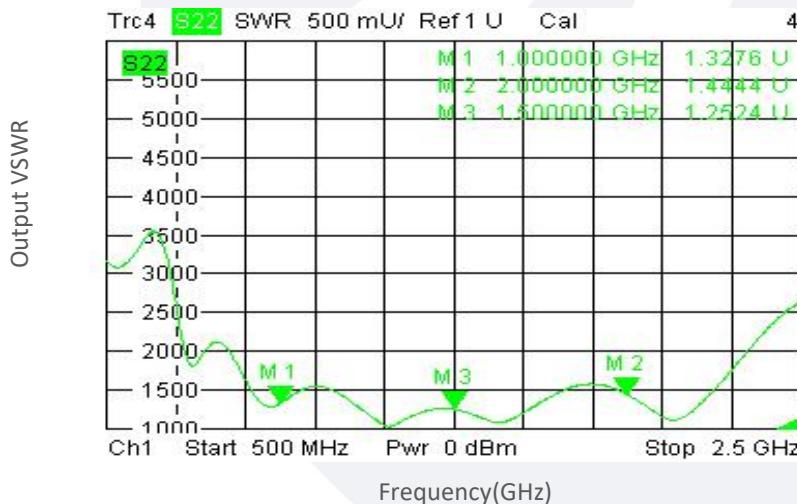


7.2V:

Input VSWR vs Frequency



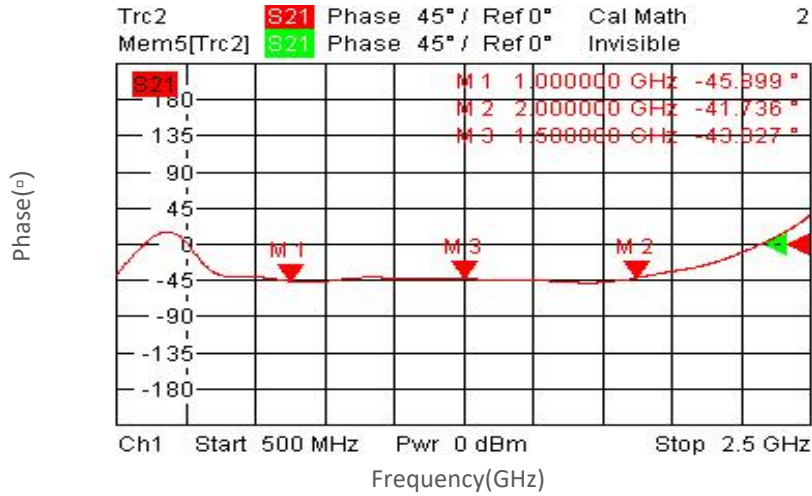
Output VSWR vs Frequency



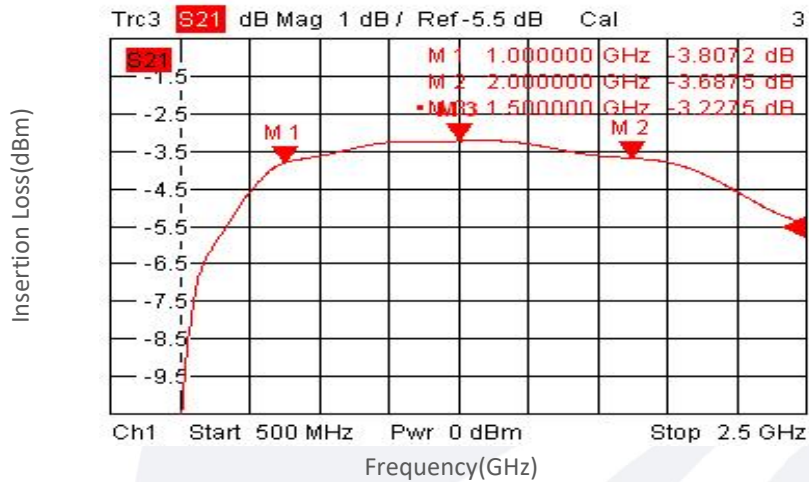
Typical Performance Data:

7.2V:

Phase vs Frequency

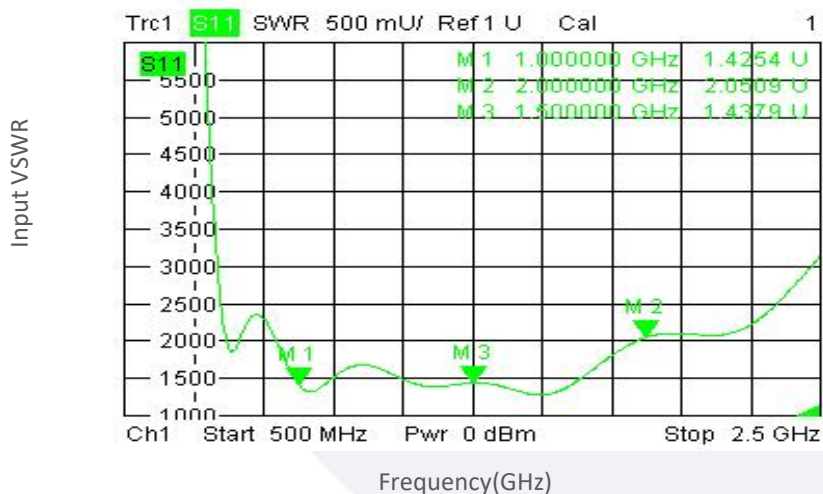


Insertion Loss vs Frequency



8.8V:

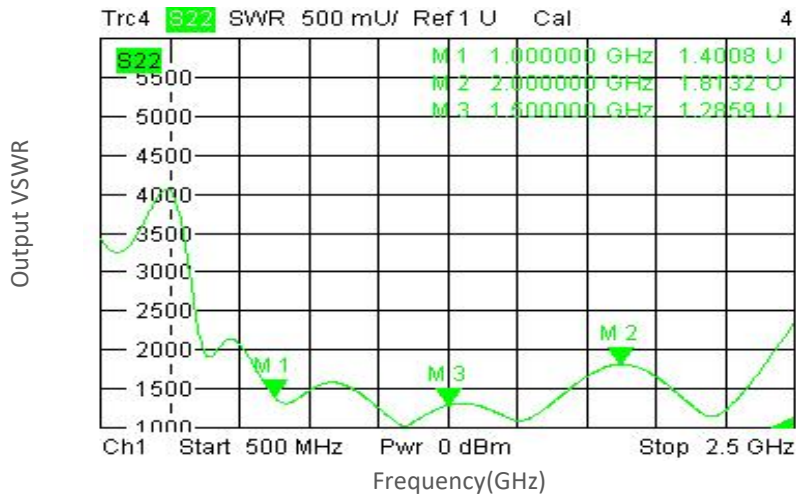
Input VSWR vs Frequency



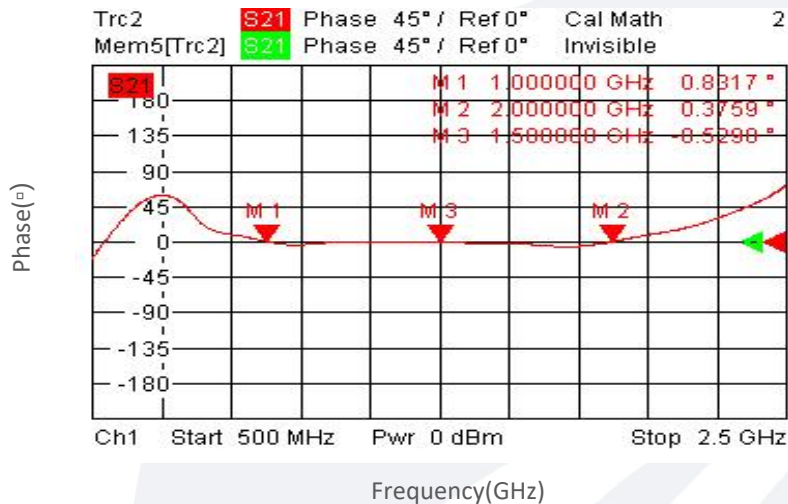
Typical Performance Data:

8.8V:

Output VSWR vs Frequency



Phase vs Frequency



Insertion Loss vs Frequency

