

Voltage Control Phase Shifter 8-18GHz

Features

- Wide Band Operation 8-18GHz
- 360° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Control Operation
- Customization available upon request



Parameters	Min.	Typ.	Max.	Units
Frequency Range	8		18	GHz
Phase Range		360		deg
Insertion Loss(0V)		6.0	8.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Phase Flatness		±15		deg
Control Voltage	0	13		V
Input Return Loss(0V)	6	8		dB
Output Return Loss(0V)	6	8		dB
0.1dB Compression Point (P0.1dB)		23		dBm
Current		5 Max.		mA
Impedance		50		Ω
Weight		0.5 Max.		ounces
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Control Voltage	0~ 15V
RF Input power	+26dBm

Environmental Specifications

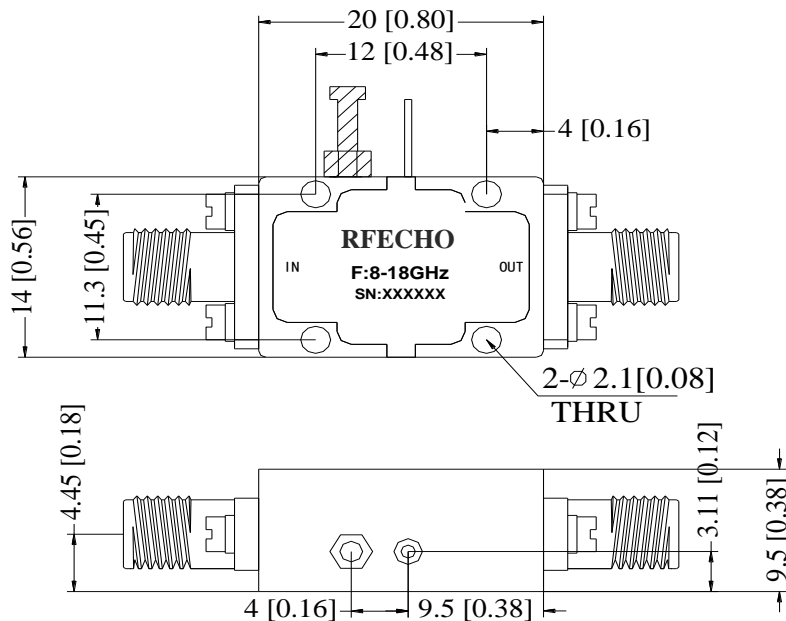
Operational Temperature	-40°C ~+85°C
Storage Temperature	-50°C ~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Ordering Information

Part No.	Description
DBVCPS08001800A	8-18GHz Voltage Control Phase Shifter

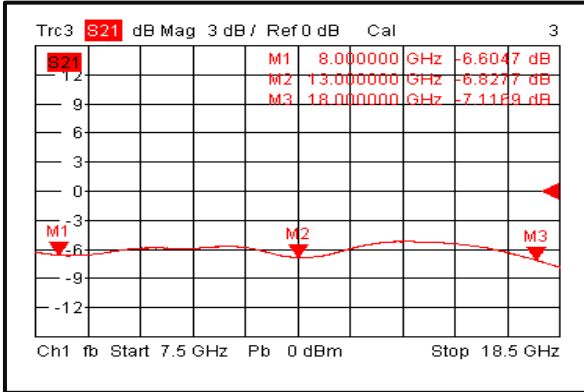
Outline Drawing:

All Dimensions in mm (inches) Tolerances ± 0.1 (0.004)

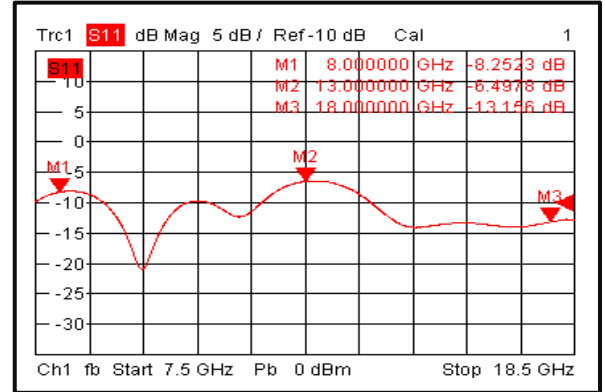




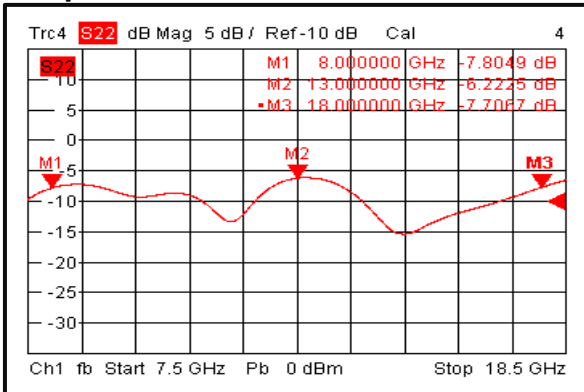
Insertion Loss @ +25°C



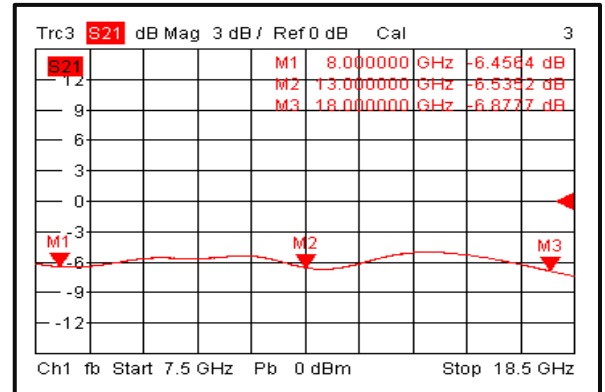
Input Return Loss @ +25°C



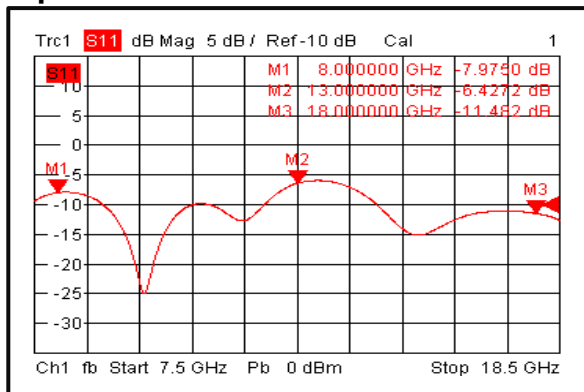
Output Return Loss @ +25°C



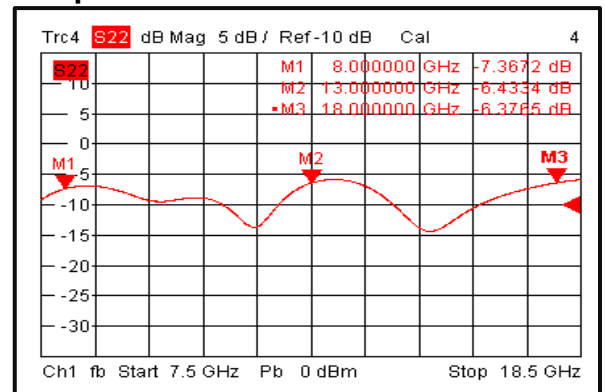
Insertion Loss @ -40°C



Input Return Loss @ -40°C

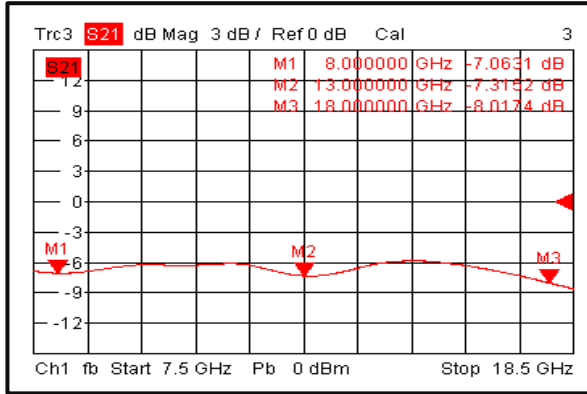


Output Return Loss @ -40°C

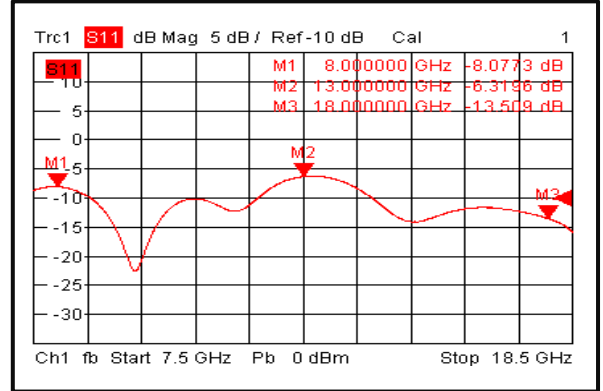




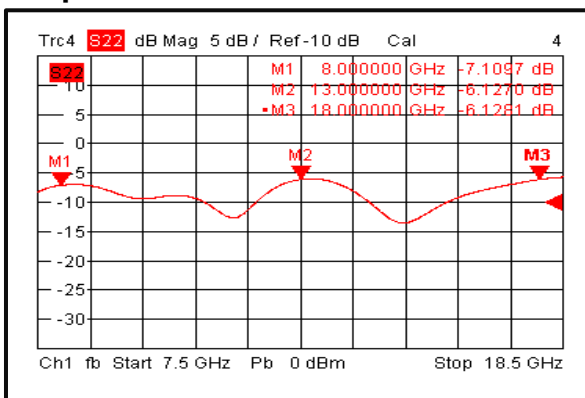
Insertion Loss @ +85°C



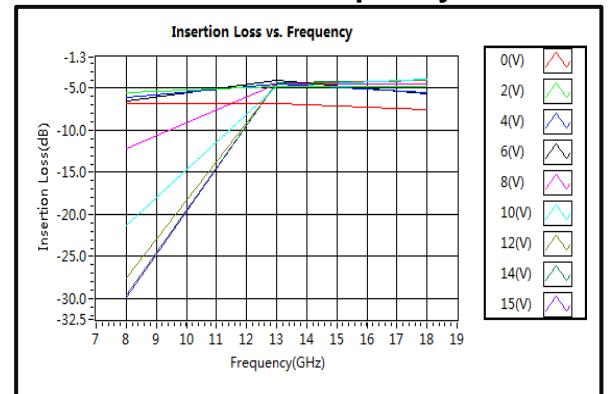
Input Return Loss @ +85°C



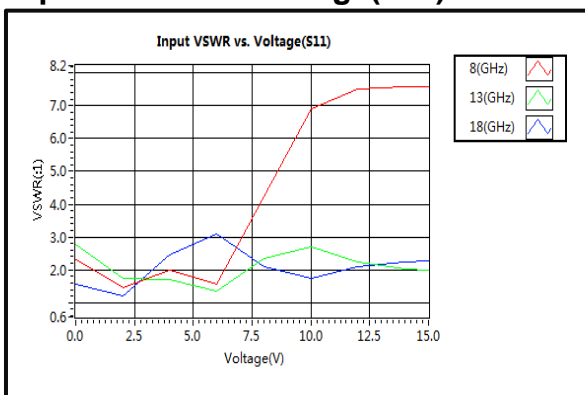
Output Return Loss @ +85°C



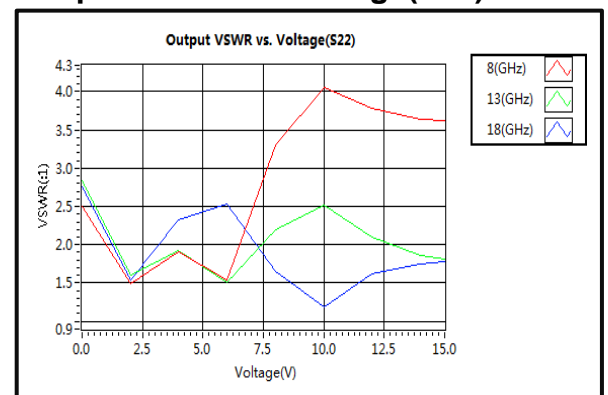
Insertion Loss vs. Frequency



Input VSWR vs. Voltage(S11)

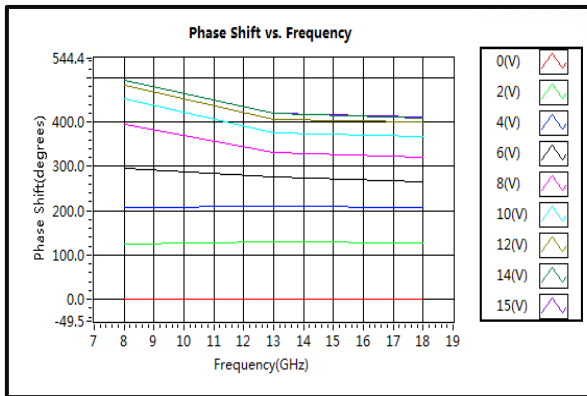


Output VSWR vs. Voltage(S22)

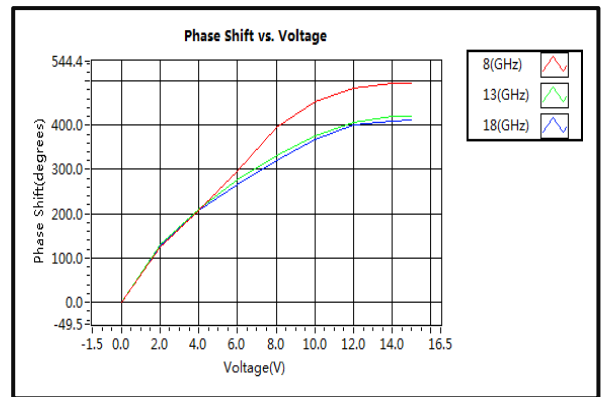




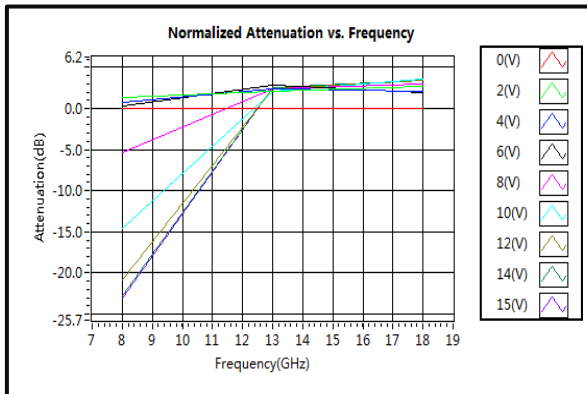
Phase Shift vs. Frequency



Phase Shift vs. Voltage



Normalized Attenuation vs. Frequency



IIP3

