

# Voltage Control Phase Shifter 4 - 8GHz



## Features

- Wide Band Operation 4-8GHz
- 360° Phase Shift
- Low Insertion Loss and Phase Error
- Single Control Operation
- Customization available upon request

Parameters	Min.	Typ.	Max.	Units
Frequency Range	4		8	GHz
Phase Range		360		deg
Phase Flatness		±10	±20	deg
Insertion Loss		5.5	6.0	dB
Insertion Loss Temperature Coefficient		0.1		dB/ °C
Input VSWR		2.1	2.5	:1
Output VSWR		2	2.5	:1
0.1dB Compression Point (P0.1dB)		25		dBm
Control Voltage	0	10		V
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	+27dBm

### Environmental Specifications

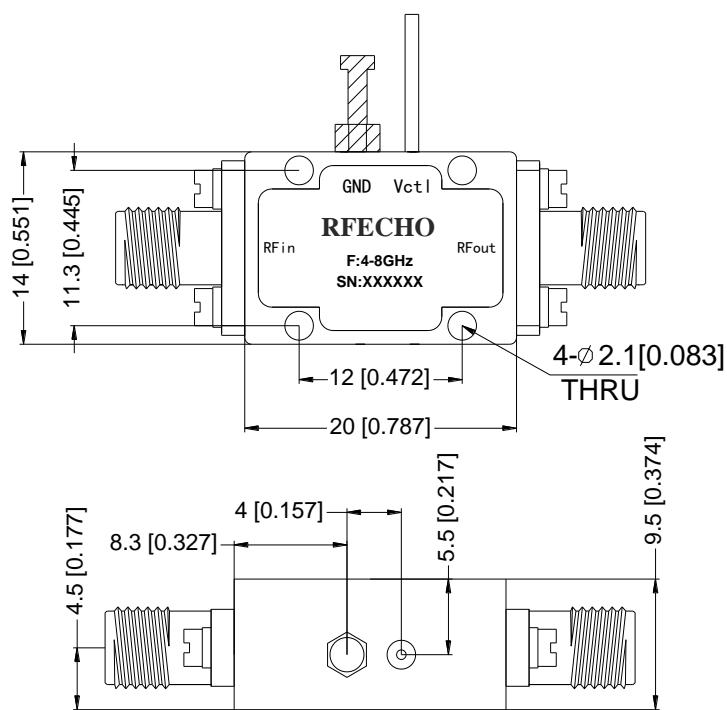
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

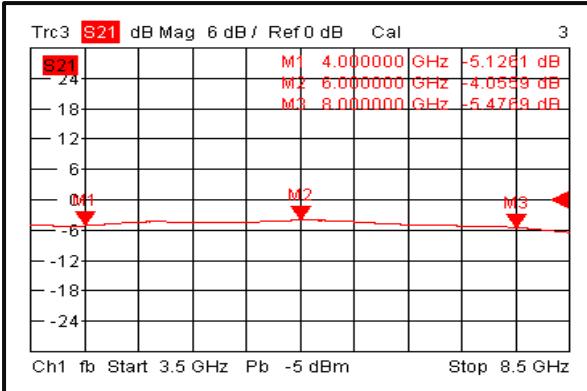
Part No.	Description
DBVCPS04000800B	4-8GHz Voltage Phase Shifter

### Outline Drawing:

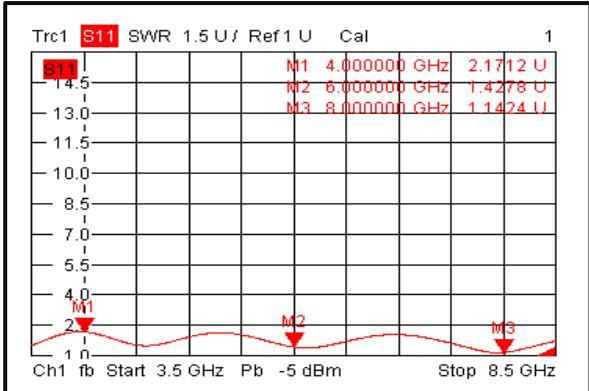
All Dimensions in mm (inches) Tolerances  $\pm 0.1[0.004]$



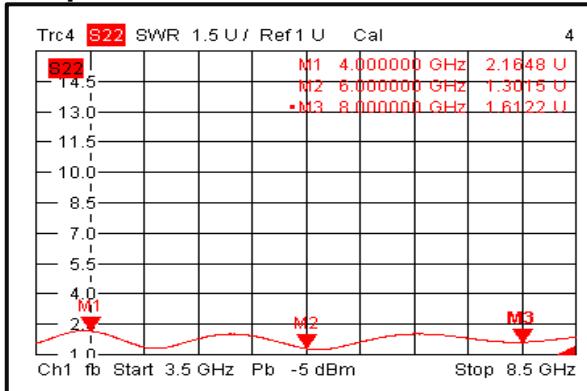
### Insertion Loss @ +25°C



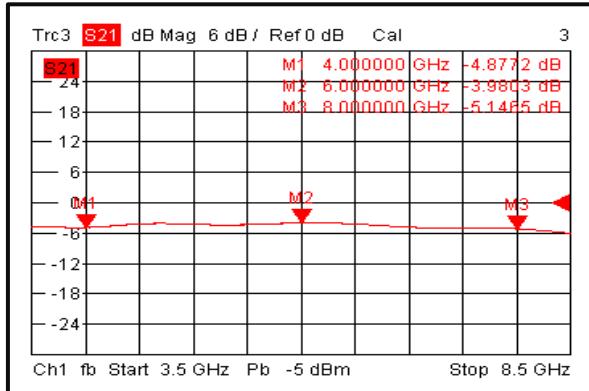
### Input VSWR @ +25°C



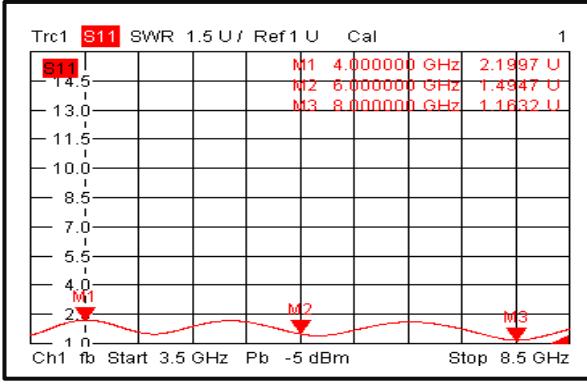
### Output VSWR @ +25°C



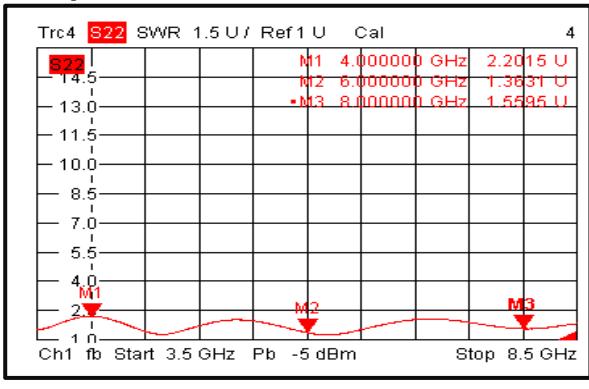
### Insertion Loss @ -40°C



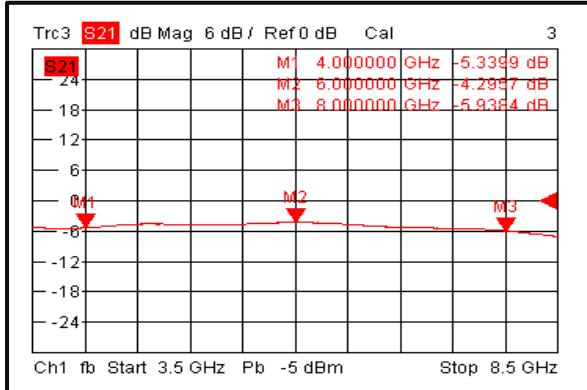
### Input VSWR @ -40°C



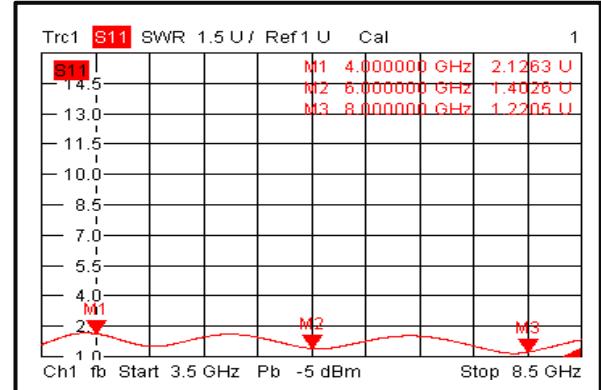
### Output VSWR @ -40°C



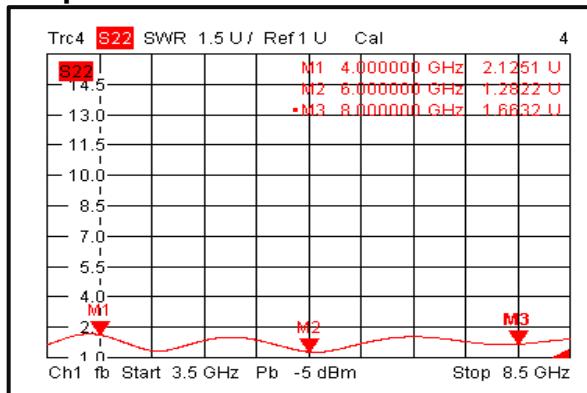
### Insertion Loss @ +85°C



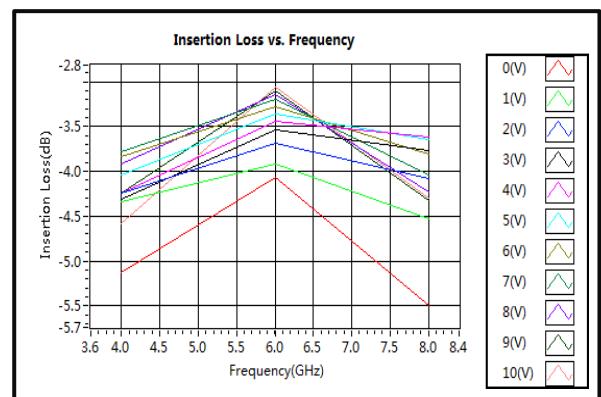
### Input VSWR @ +85°C



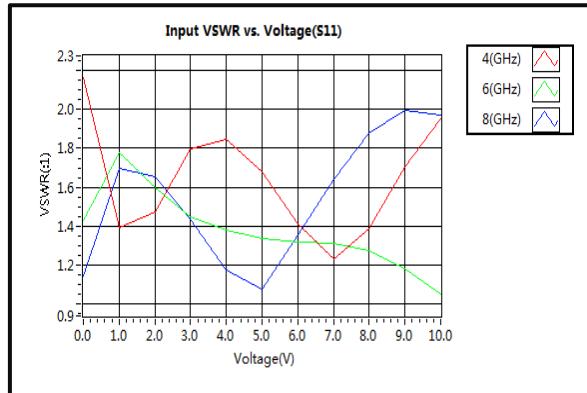
### Output VSWR @ +85°C



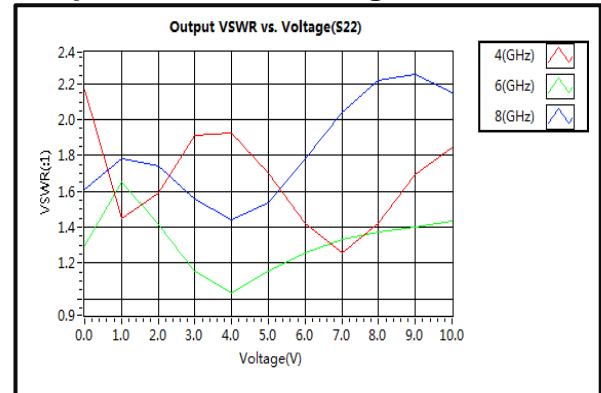
### Insertion Loss vs. Frequency



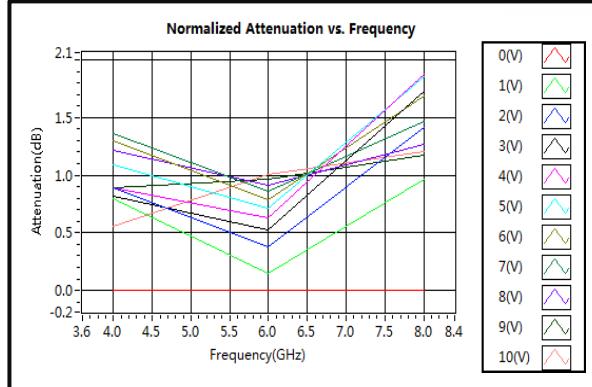
### Input VSWR vs. Voltage



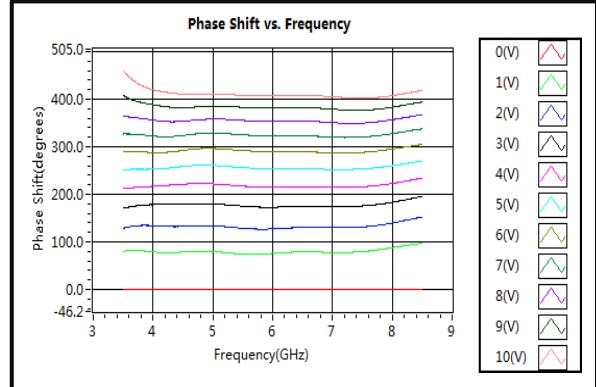
### Output VSWR vs. Voltage



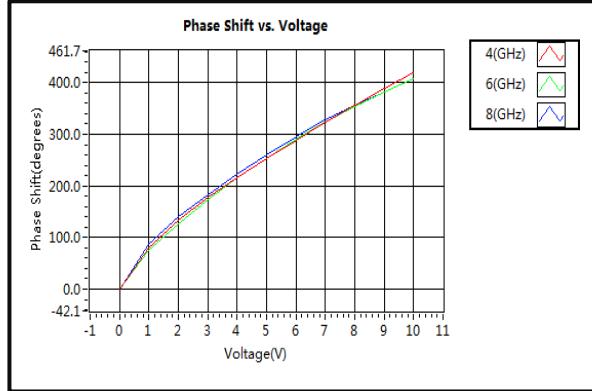
### Normalized Attenuation vs. Frequency



### Phase Shift vs. Frequency



### Phase Shift vs. Voltage



### IIP3

