

# Voltage Controlled Phase Shifter 250 - 500MHz

## Features

- Wide Band Operation 250-500MHz
- 360° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Control Operation
- Customization available upon request



Parameters	Min	Typ.	Max	Units
Frequency Range	250		500	MHz
Phase Range		360		°
Insertion Loss		4.0	5.0	dB
Insertion Loss Temperature Coefficient		0.01		dB/ °C
Phase Flatness		±30		°
Control Voltage	0	14		V
Input VSWR		1.6	2.0	: 1
Output VSWR		1.6	2.0	: 1
0.1dB Compression Point (P0.1dB)		30		dBm
Input IP3		35		dBm
Weight	2.3			ounces
Impedance	50			Ω
Current Consumption	5			mA
Input / Output Connectors	SMA-Female			
Finishing	Gold Plating			
Material	Aluminum			
Sealing	Hermetically Sealed ( Optional )			



### Absolute Maximum Ratings

Control Voltage	0~20V
RF Input power	+30dBm

### Environmental Specifications

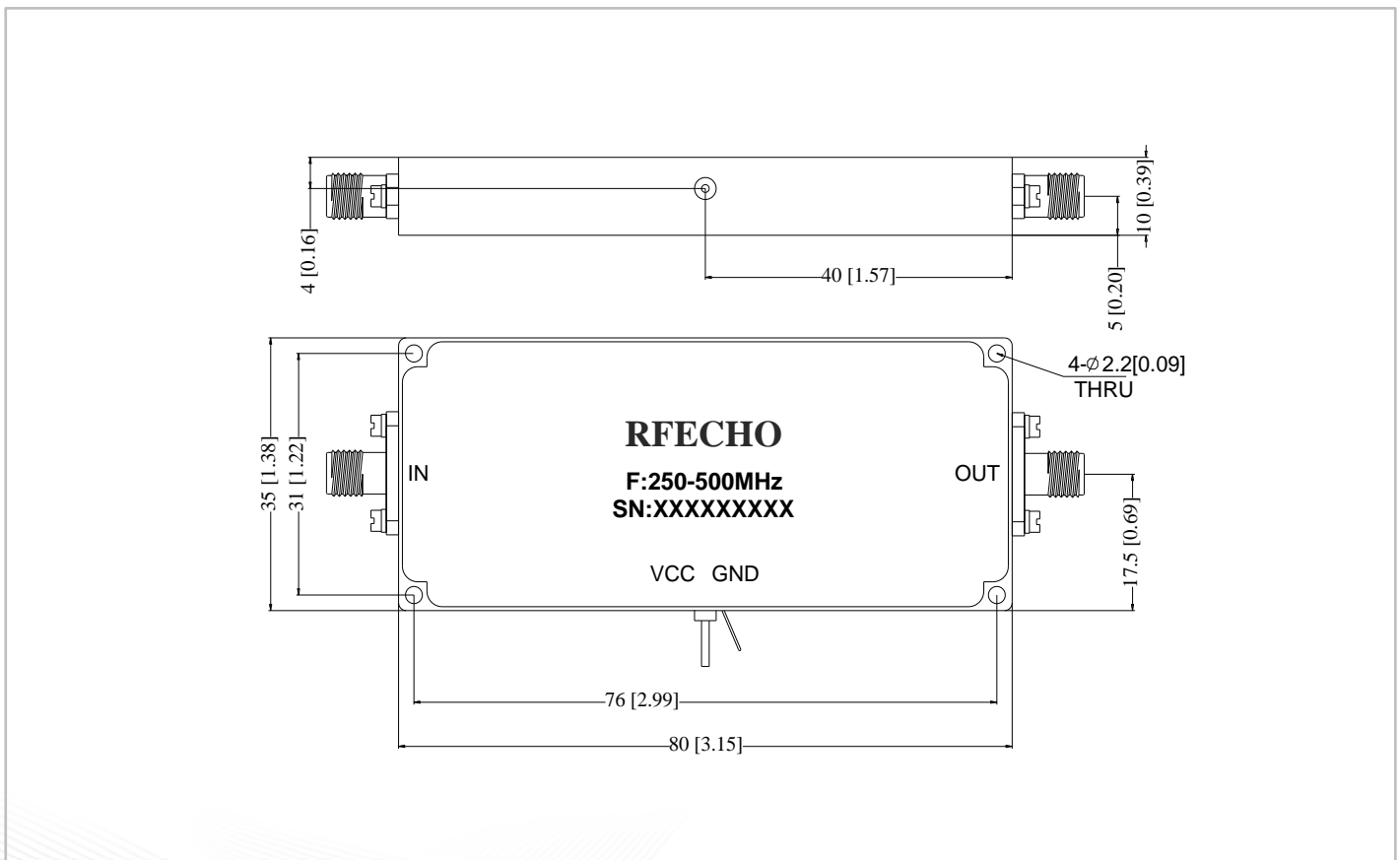
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

Part No.	Description
DBVCPS00250050A	250-500MHz Voltage Phase Shifter

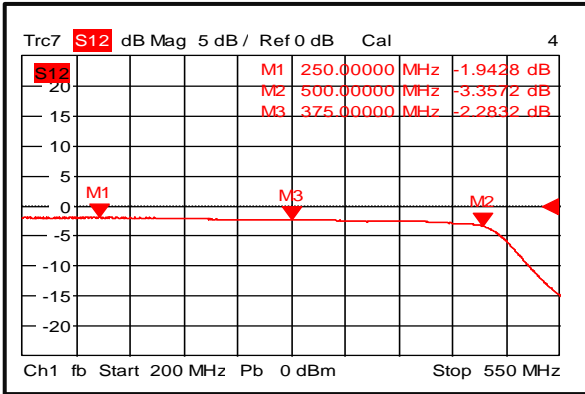
### Outline Drawing:

All Dimensions in mm (inches)

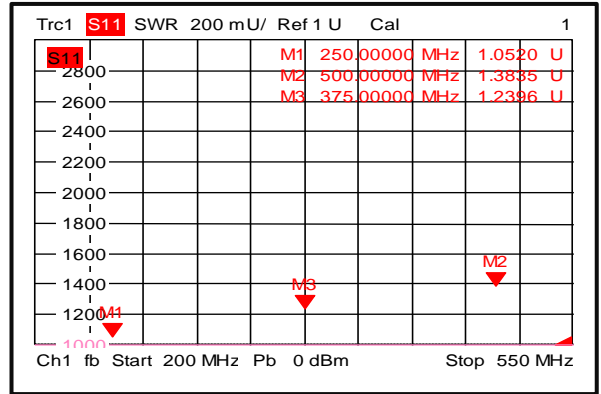




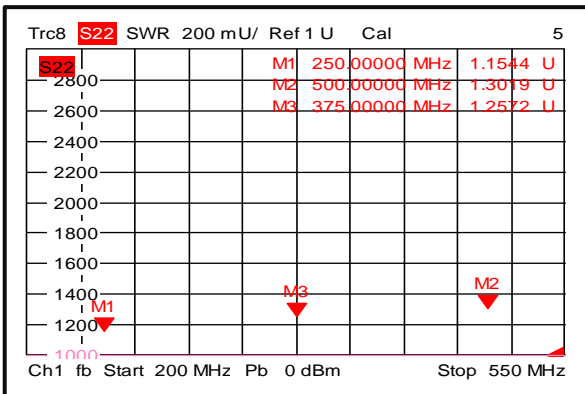
### Insertion Loss @ +25°C



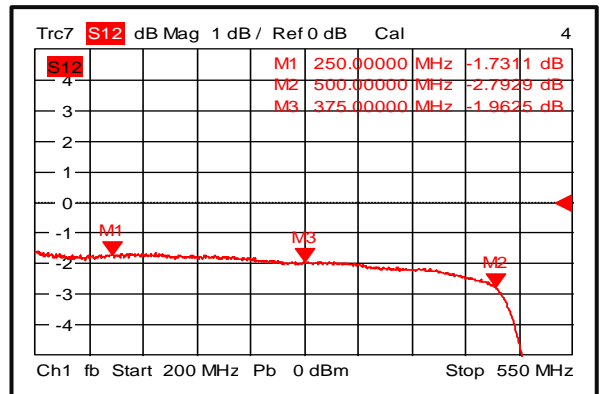
### Input VSWR @ +25°C



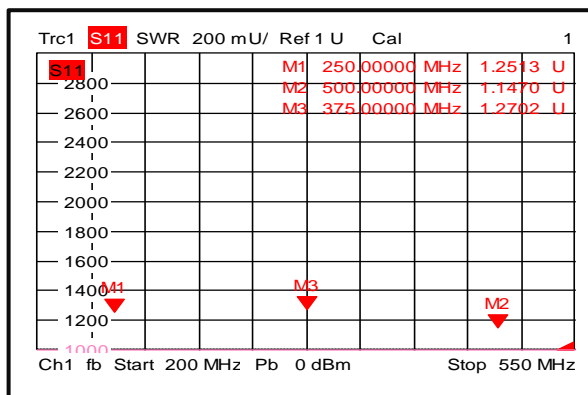
### Output VSWR @ +25°C



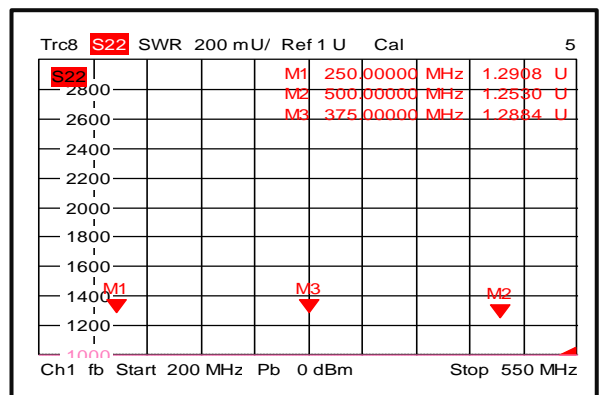
### Insertion Loss @ -40°C



### Input VSWR @ -40°C

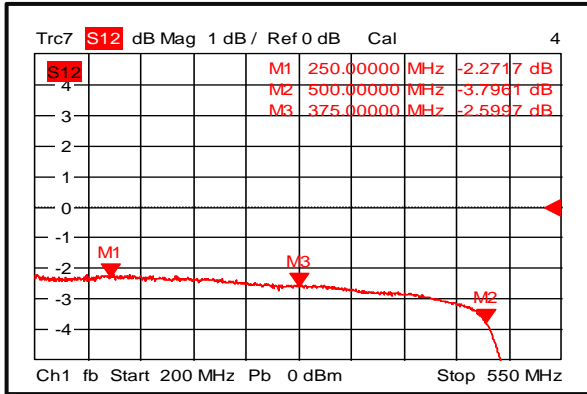


### Output VSWR @ -40°C

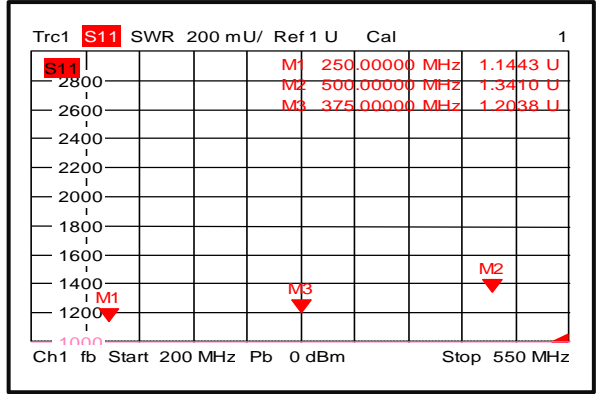




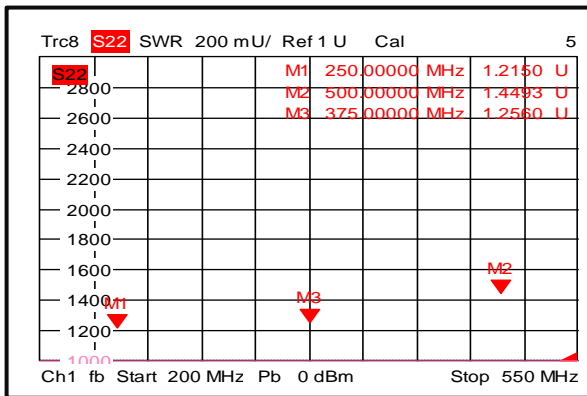
### Insertion Loss @ +85°C



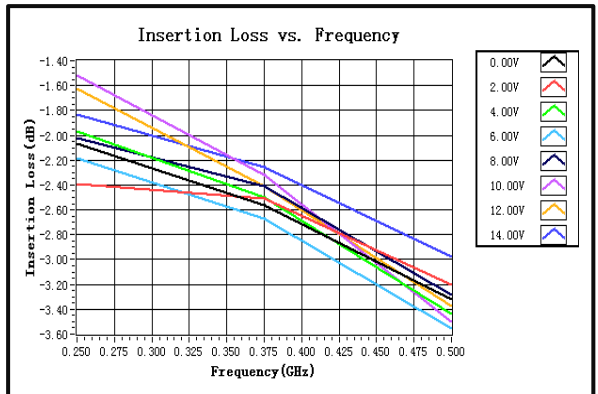
### Input VSWR @ +85°C



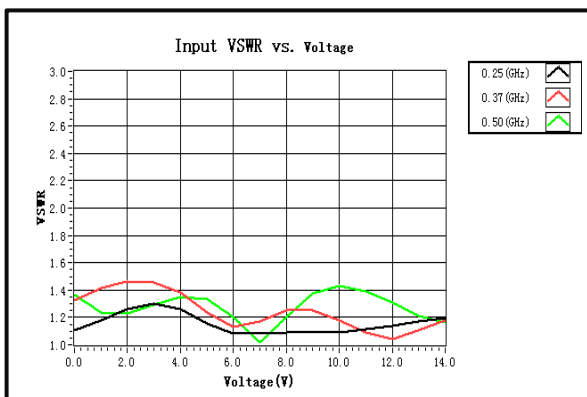
### Output VSWR @ +85°C



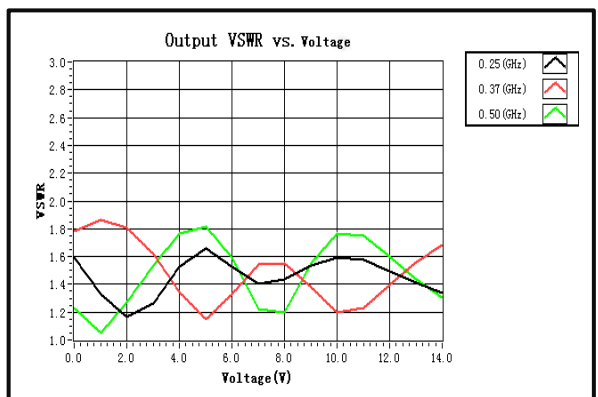
### Insertion Loss vs. Frequency



### Input VSWR vs. Voltage

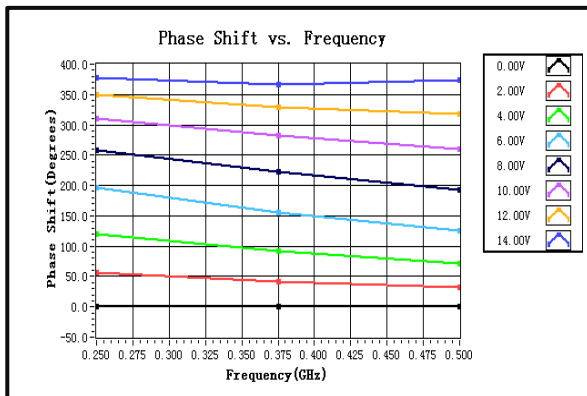


### Output VSWR vs. Voltage

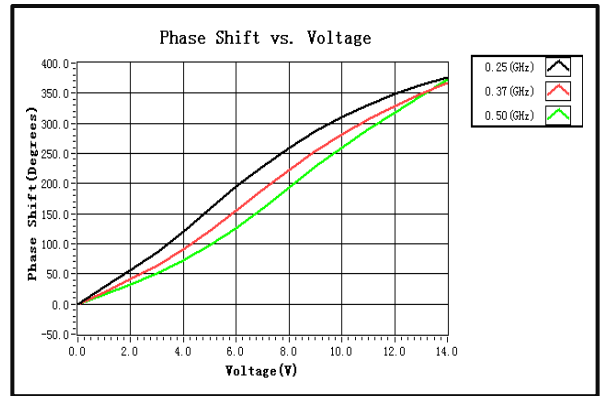




### Phase Shift vs. Frequency



### Phase Shift vs. Voltage



### Attenuation vs. Frequency

