



# Voltage Control Phase Shifter 138-186MHz

## Features

- Wide Band Operation 138-186MHz
- 180° Phase Shift
- Low Insertion Loss and Low Phase Error
- Single Control Operation
- Customization available upon request



Parameters	Min	Typ.	Max	Units
Frequency Range	10MHz to 170Mhz (30% BW) (138~186MHz Shown)			MHz
Phase Range		180		deg
Phase Error		±15		deg
Insertion Loss		1.0	1.3	dB
Insertion Loss Temperature Coefficient		0.01		dB/ °C
Input VSWR		1.5	2.0	:1
Output VSWR		1.5	2.0	:1
0.1dB Compression Point (P0.1dB)		30		dBm
Control Voltage	0	10		V
Current Consumption	5			mA
Impedance	50			Ω
Weight	2.12			Ounces
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



### Absolute Maximum Ratings

Control Voltage	0~ 15V
RF Input Power	+30dBm

### Ordering Information

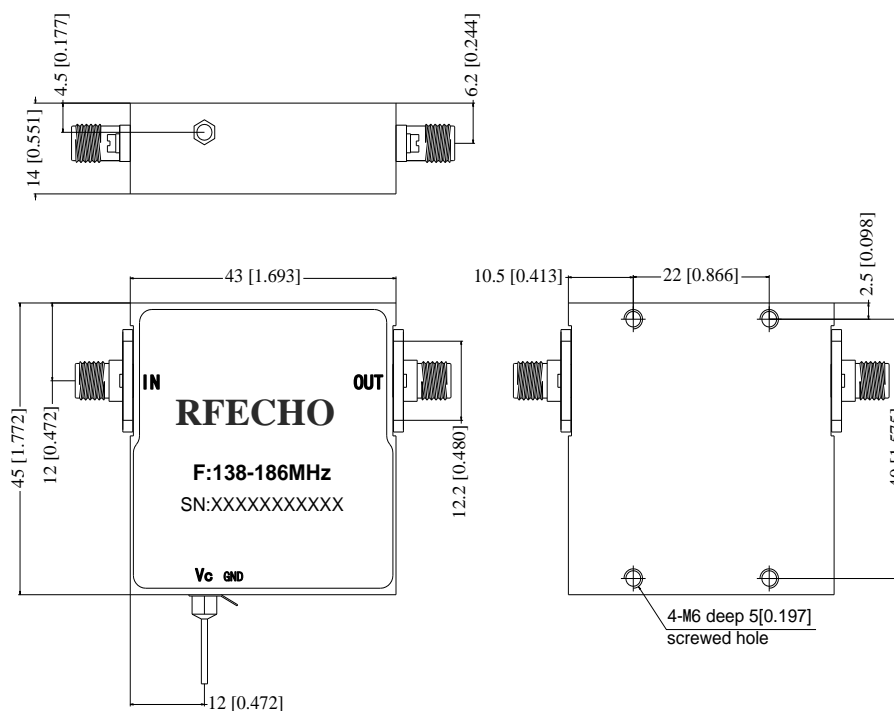
Part No.	Description
DBVCPS00100017A	138-186MHz Voltage Phase Shifter

### 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

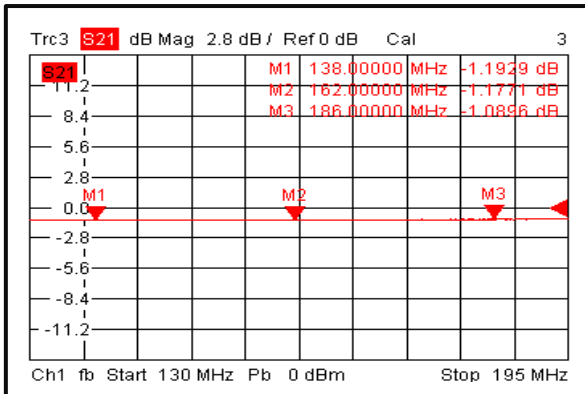
### Outline Drawing:

All Dimensions in mm (inches)

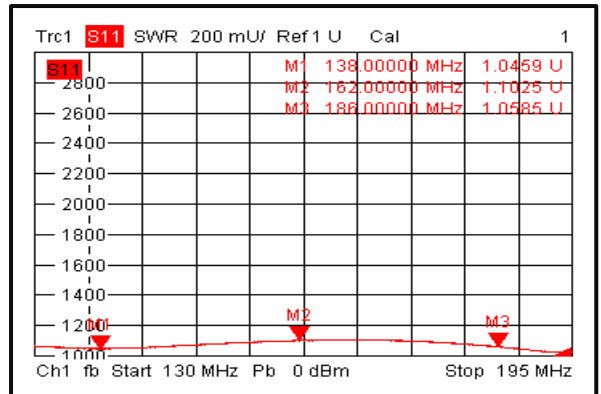




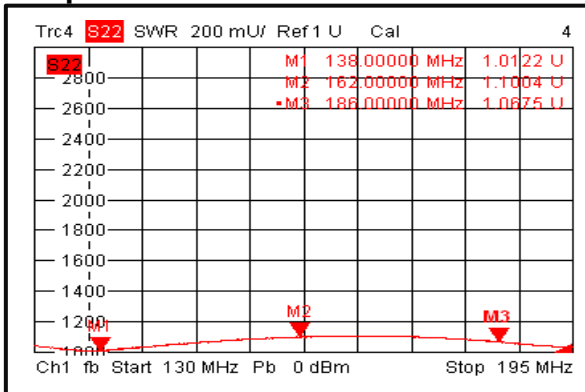
### Insertion Loss @ +25°C



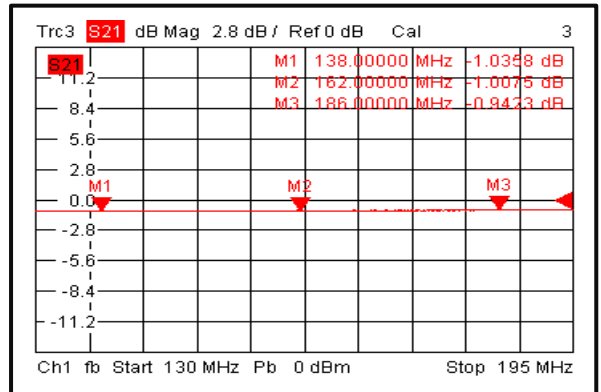
### Input VSWR @ +25°C



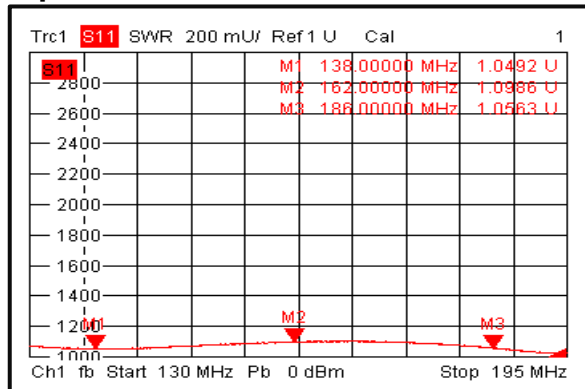
### Output VSWR @ +25°C



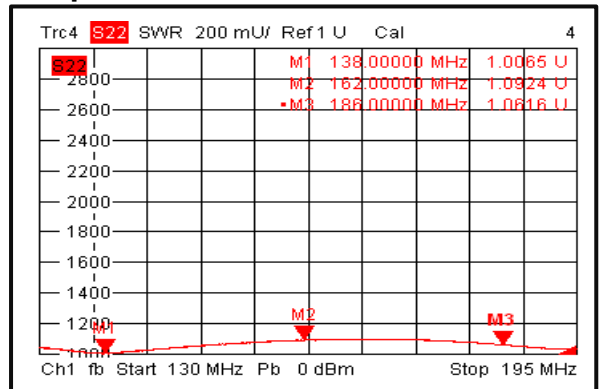
### Insertion Loss @ -40°C



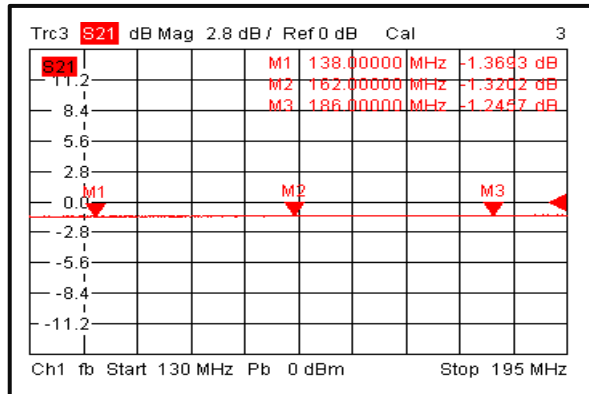
### Input VSWR @ -40°C



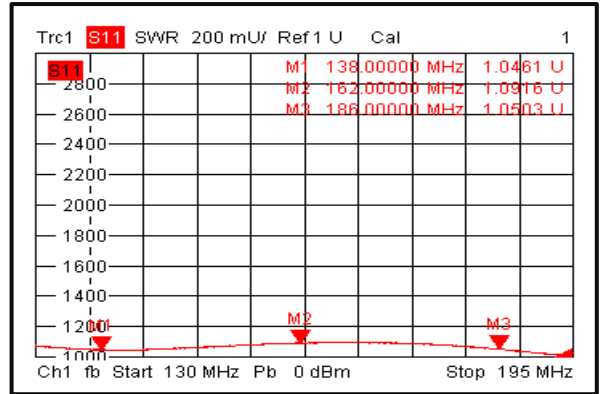
### Output VSWR @ -40°C



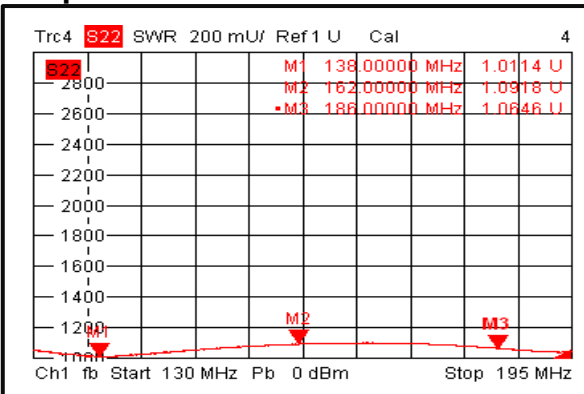
## Insertion Loss @ +85°C



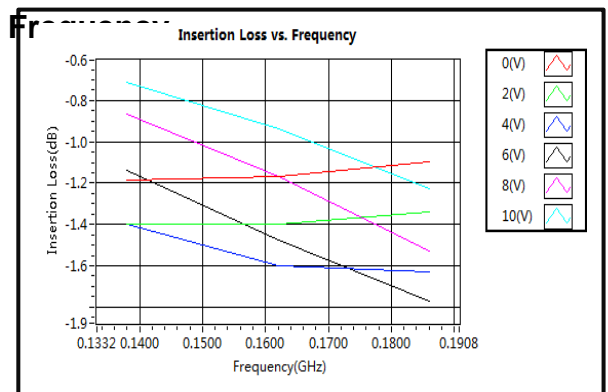
## Input VSWR @ +85°C



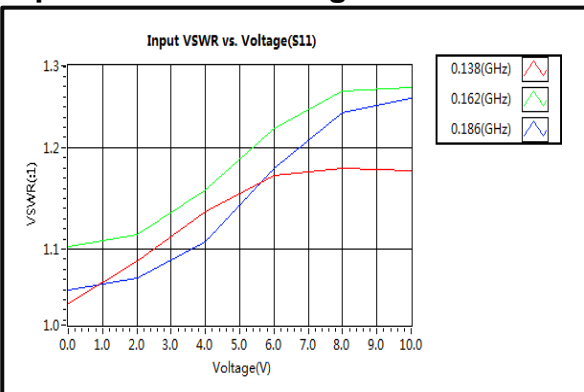
## Output VSWR @ +85°C



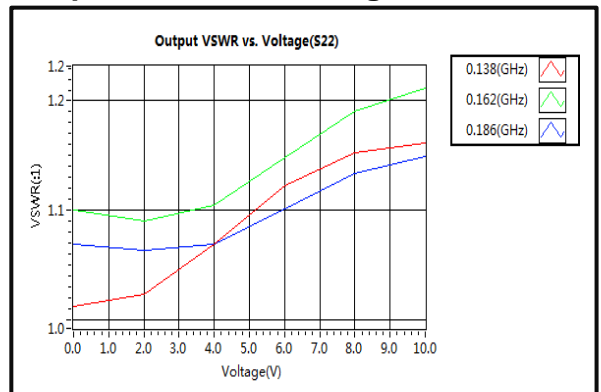
## Insertion Loss vs.



## Input VSWR vs. Voltage

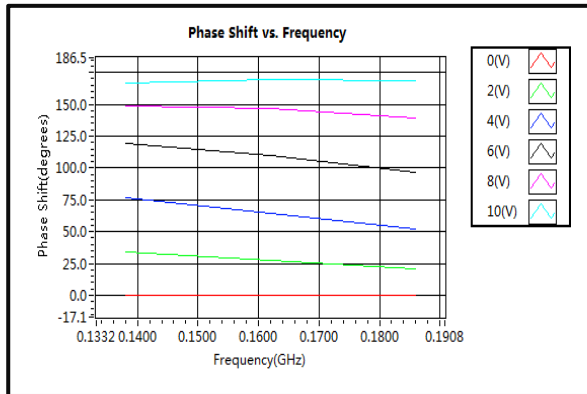


## Output VSWR vs. Voltage

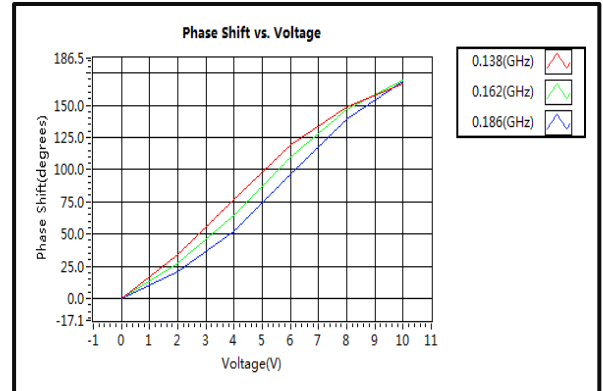




## Phase Shift vs. Frequency



## Phase Shift vs. Voltage



## Attenuation vs. Frequency

