



Voltage Controlled Phase Shifter 250 - 500MHz

Features

- Wide Band Operation 250-500MHz
- 180° 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	180	250		°
Insertion Loss		3.5	4.0	dB
Insertion Loss Temperature Coefficient		0.01		dB/ °C
Phase Flatness		±15	±35	°
Control Voltage	0	13		V
Input VSWR		1.8	2.0	: 1
Output VSWR		1.8	2.0	: 1
0.1dB Compression Point (P0.1dB)		30		dBm
Input IP3		35		dBm
Weight	1.76			ounces
Impedance	50			Ω
Current Consumption	5			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

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

Environmental Specifications

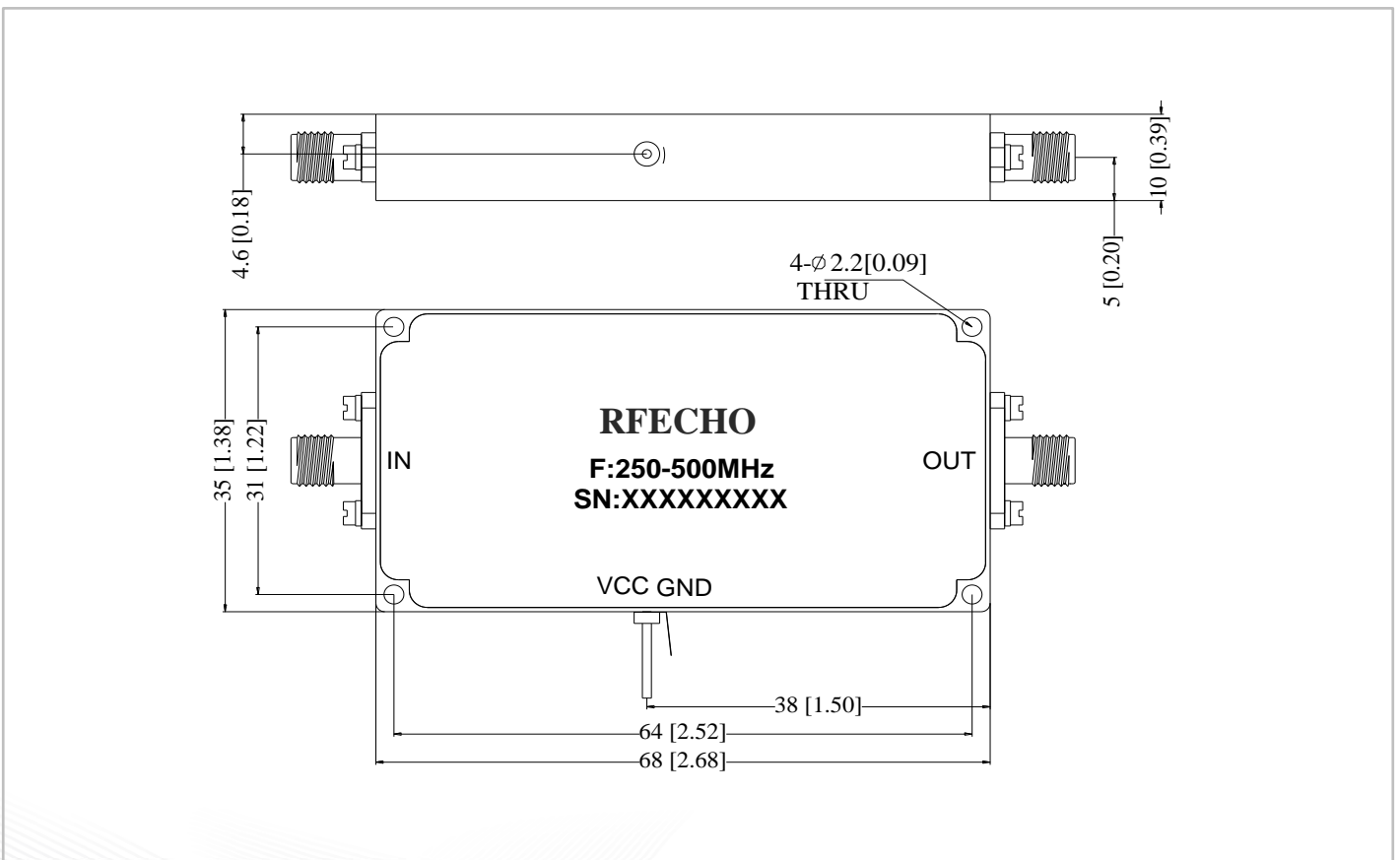
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

Part No.	Description
DBVCPS00250050B	250-500MHz Voltage Phase Shifter

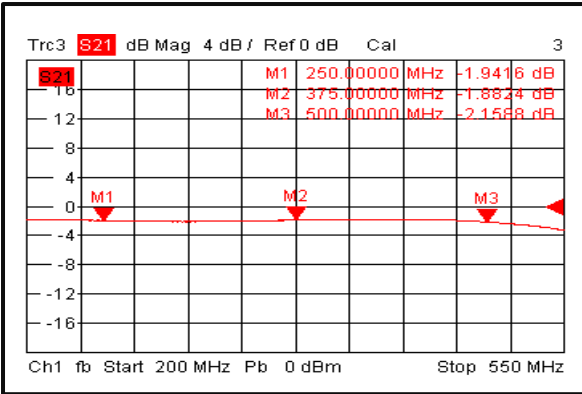
Outline Drawing:

All Dimensions in mm (inches)

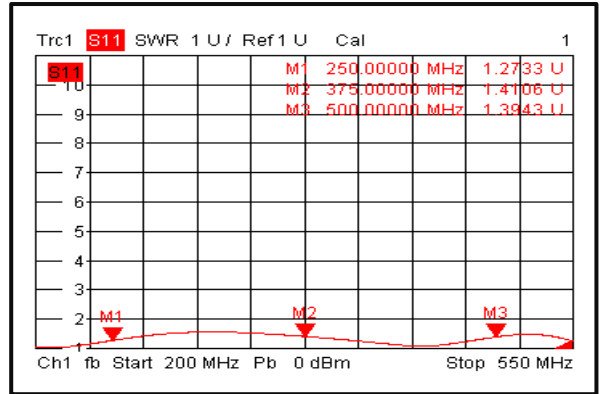




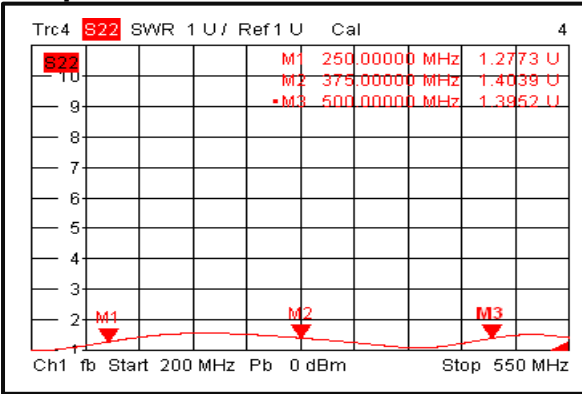
Insertion Loss @ +25°C



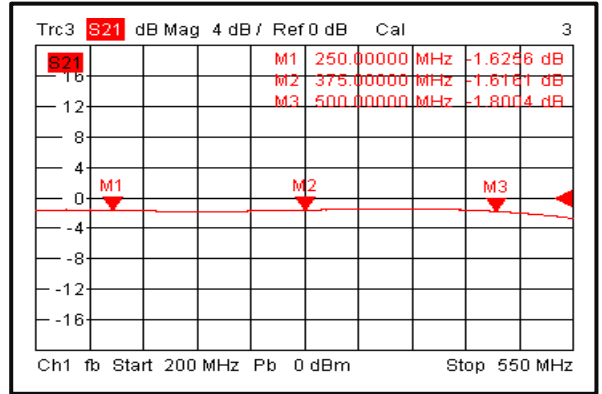
Input VSWR @ +25°C



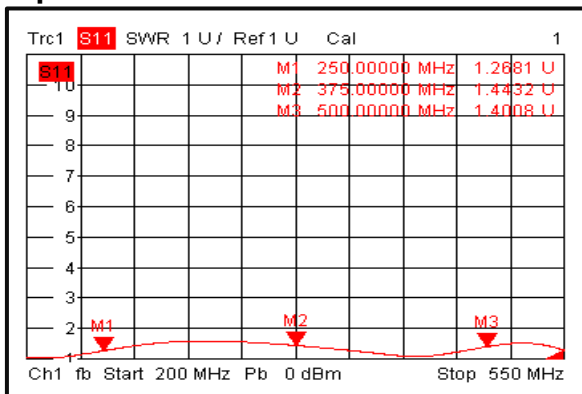
Output VSWR @ +25°C



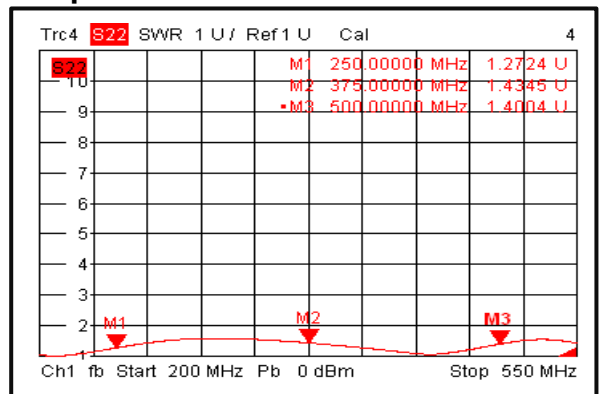
Insertion Loss @ -40°C



Input VSWR @ -40°C

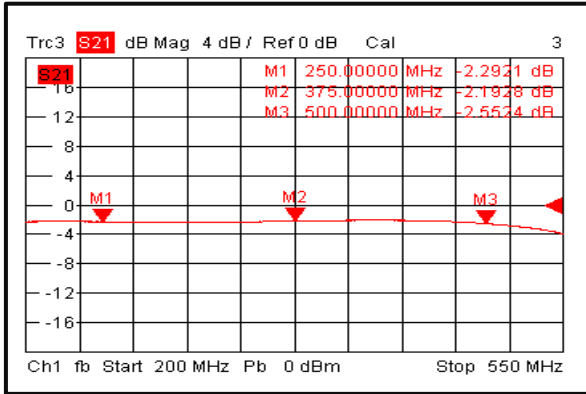


Output VSWR @ -40°C

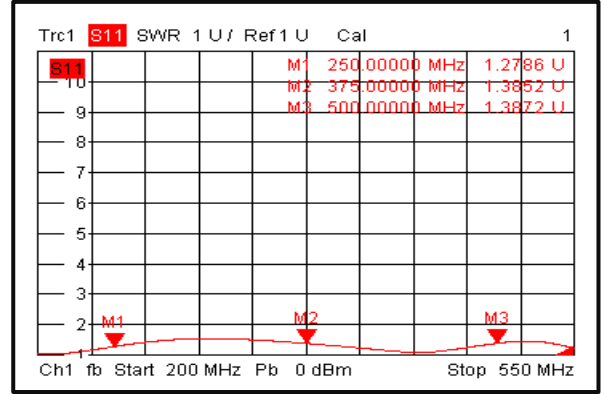




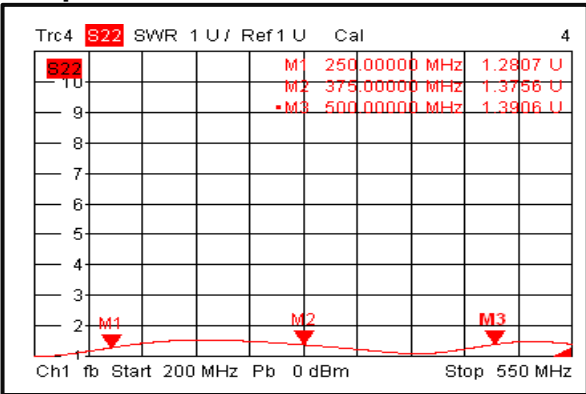
Insertion Loss @ +85°C



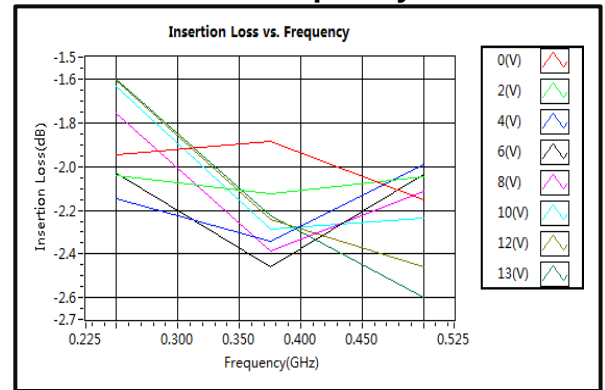
Input VSWR @ +85°C



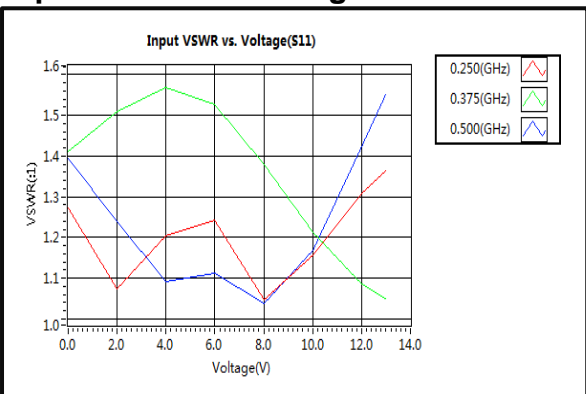
Output VSWR @ +85°C



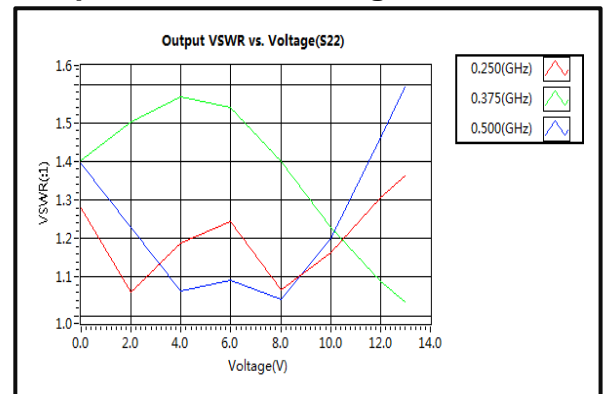
Insertion Loss vs. Frequency



Input VSWR vs. Voltage

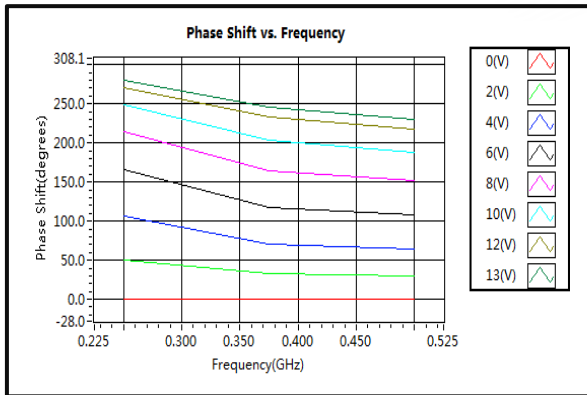


Output VSWR vs. Voltage

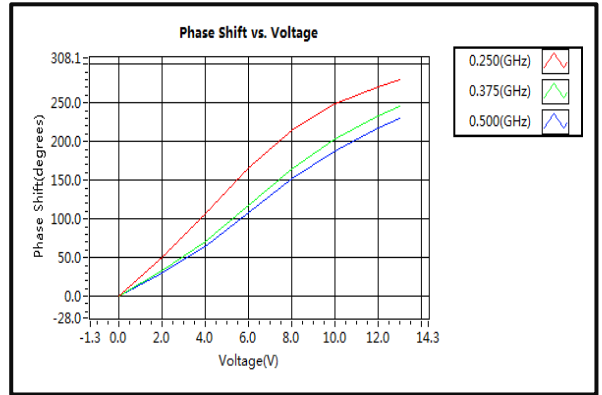




Phase Shift vs. Frequency



Phase Shift vs. Voltage



Attenuation vs. Frequency

