

# Absorptive Voltage Control Attenuator 8-13GHz

## Features

- Wide Band Operation 8-13GHz
- Wide Attenuation Range 50dB
- Reflective Topology
- Single Control Operation
- Customization available upon request



Parameters	Min	Typ.	Max	Units
Frequency Range		8-13		GHz
Attenuation Range	50			dB
Insertion Loss		1.5	1.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
0.1 dB Compression		30		dBm
Input Ip3		43		dBm
Switching Speed			2.5	us
Control Voltage	0	10		V
Weight		0.35		ounces
Impedance		50		Ω
current		15		mA
Input /Output Connectors		SMA-Female		
Finish		Gold plated		
Material		Aluminum		
Sealed		Hermetically Sealed (optional)		

### Absolute Maximum Ratings

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

### Environmental Specifications

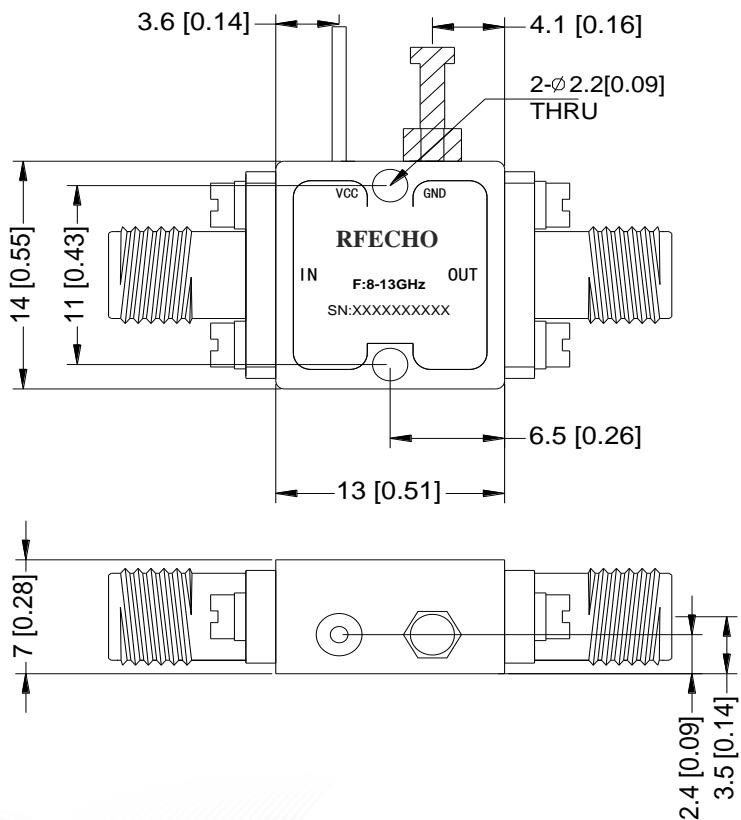
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

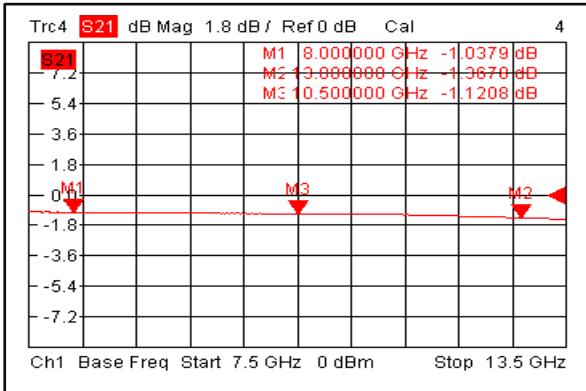
Part No.	Description
DBVA5008001300A	8-13GHz Voltage Control Attenuator

### Outline Drawing:

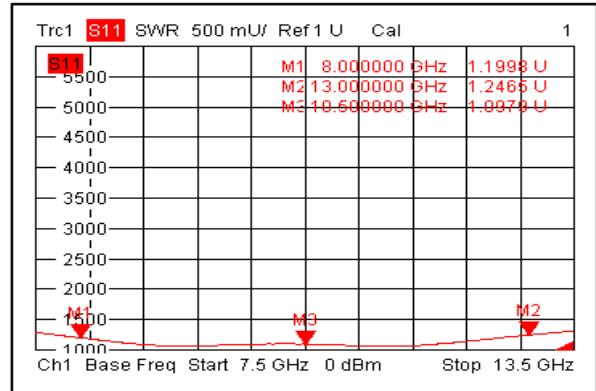
All Dimensions in mm (inches)



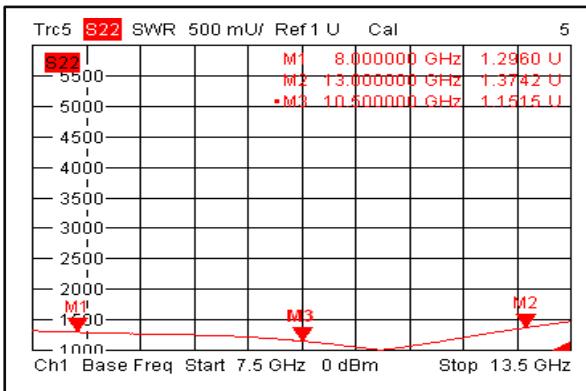
### Insertion Loss @+25°C



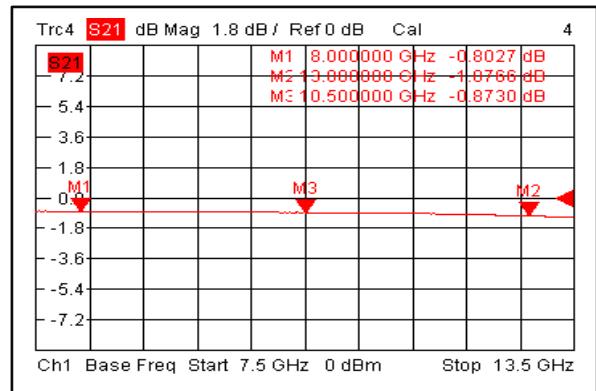
### Input VSWR @+25°C



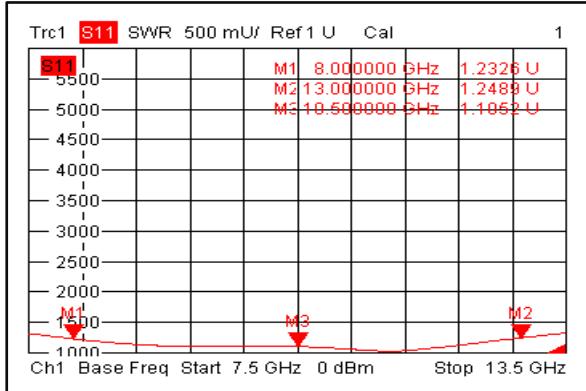
### Output VSWR @+25°C



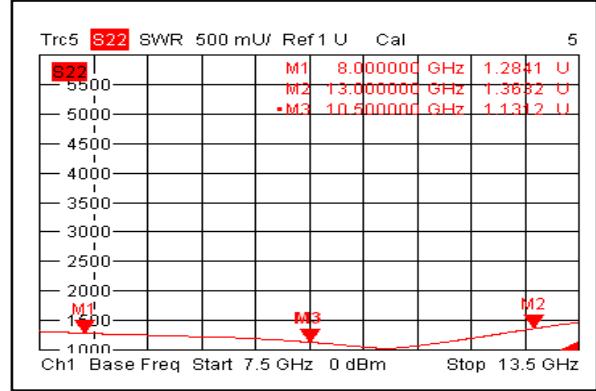
### Insertion Loss @-40°C



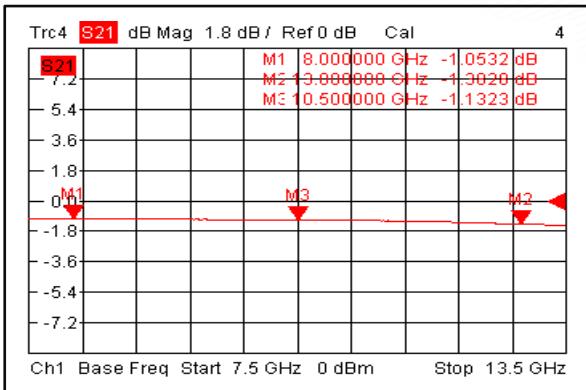
### Input VSWR @-40°C



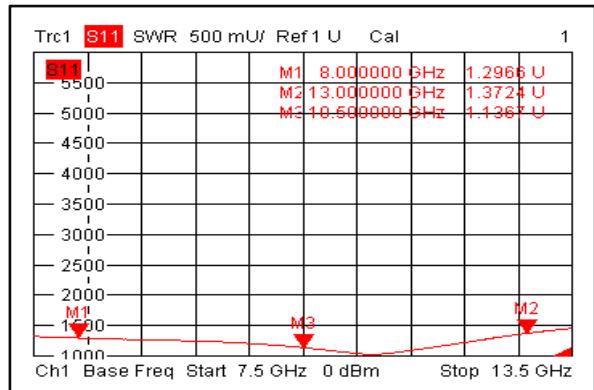
### Output VSWR @-40°C



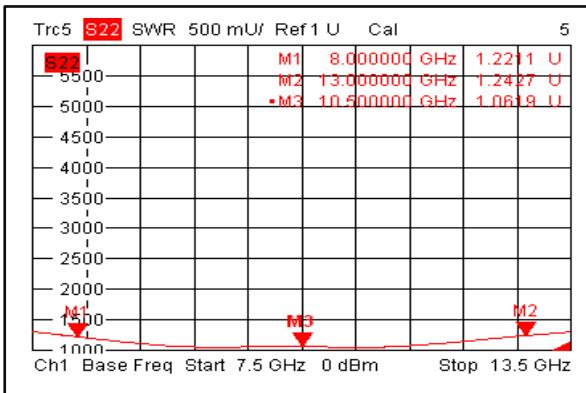
### Insertion Loss @+85°C



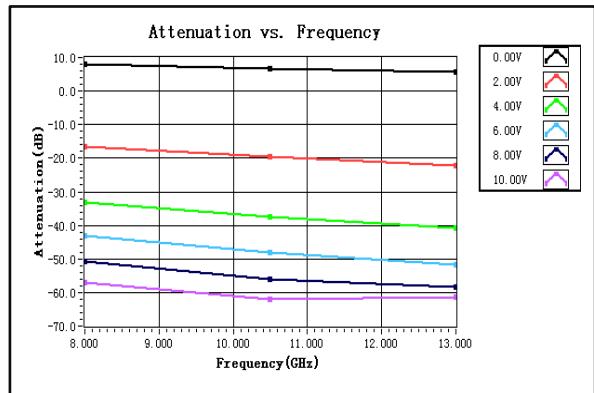
### Input VSWR @+85°C



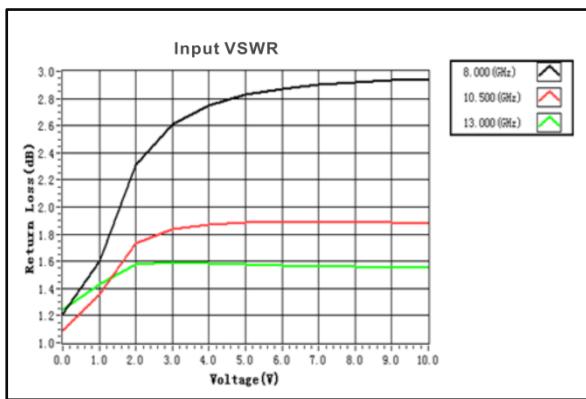
### Output VSWR @+85°C



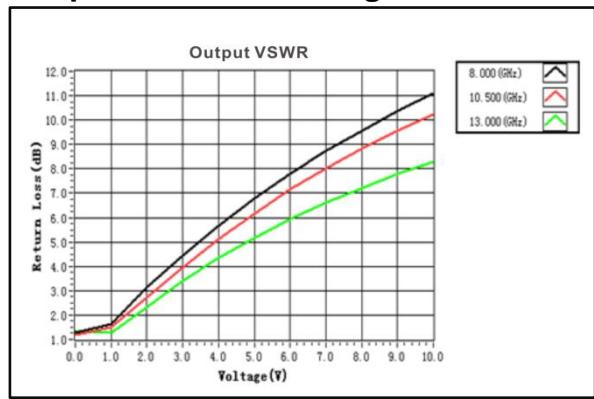
### Attenuation vs. Frequency



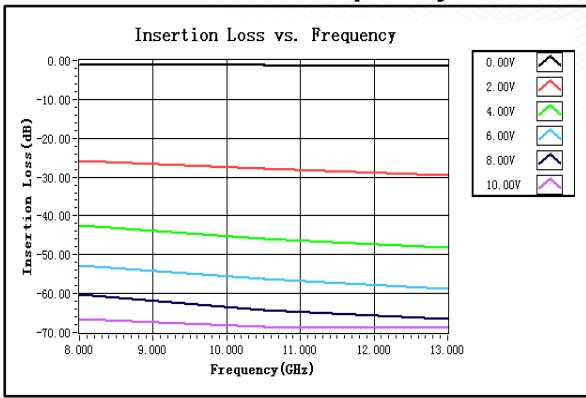
### Input VSWR vs. Voltage



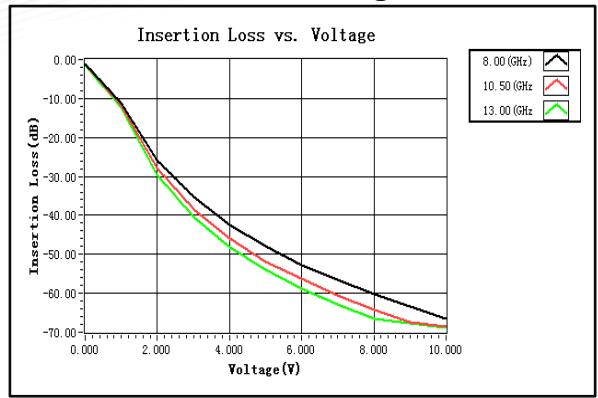
### Output VSWR vs. Voltage



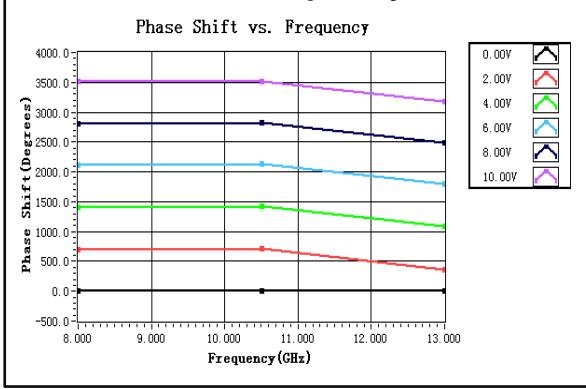
### Insertion Loss vs. Frequency



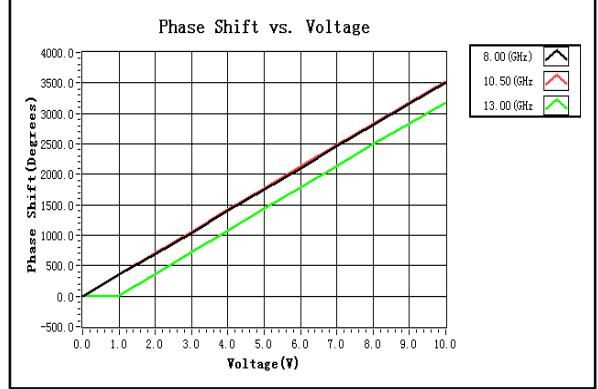
### Insertion Loss vs. Voltage



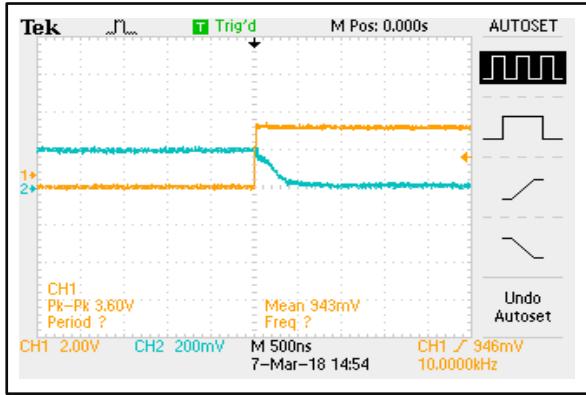
### Phase Shift vs. Frequency



### Phase Shift vs. Voltage



### Speed



### Speed

