

# Absorptive Voltage Control Attenuator 2-18GHz

## Features

- Wide Band Operation 2-18GHz
- Wide Attenuation Range 50dB
- Absorptive Topology
- Single Control Operation
- Customization available upon request



Parameters	Min	Typ.	Max	Units
Frequency Range	2		18	GHz
Attenuation Range	50			dB
Insertion Loss		2.0	3.0	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
Input IP3		43		dBm
Control Voltage	0	10		V
Switching Speed		2.5 Max.		us
Weight		0.3 Max.		ounces
Impedance		50		Ω
current		30		mA
Input / Output Connectors		SMA-Female		
Finish		Gold plated		
Material		Copper		
Sealing		Hermetically Sealed (Optional)		

### Absolute Maximum Ratings

Control Voltage	DC ~ 13V
RF Input power	+30dBm

### Environmental Specifications

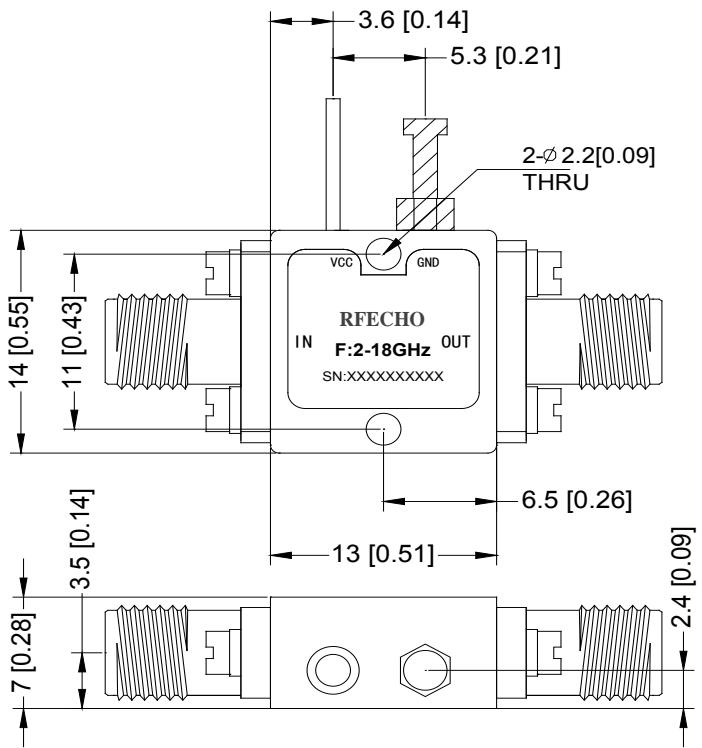
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

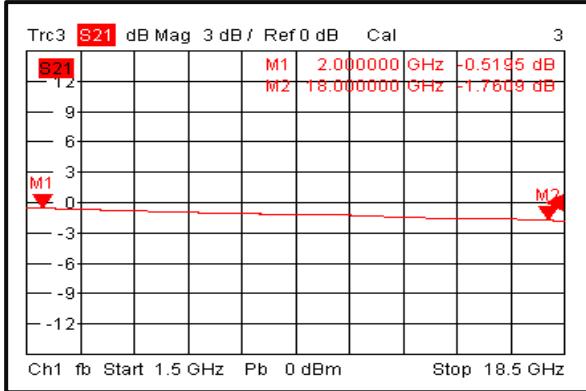
Part No.	Description
DBVA5002001800F	2-18GHz Voltage Control Attenuator

### Outline Drawing:

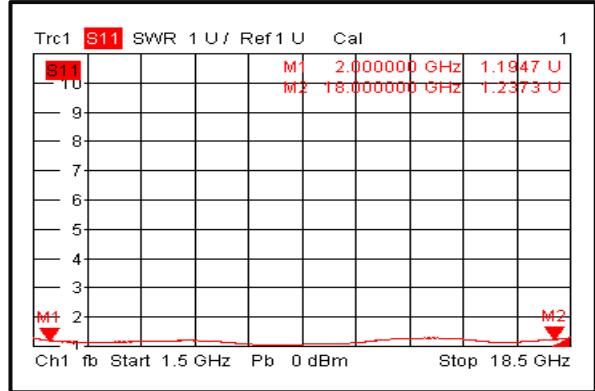
All Dimensions in mm (inches)



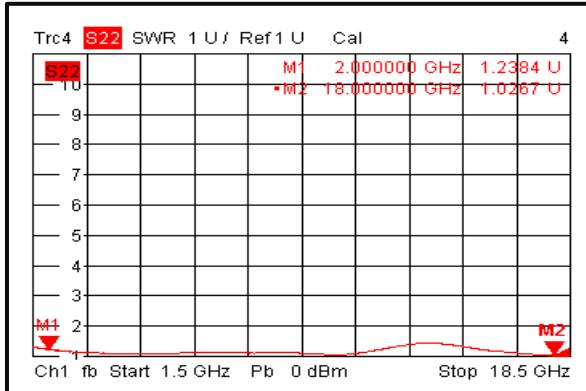
### Insertion Loss@+25°C



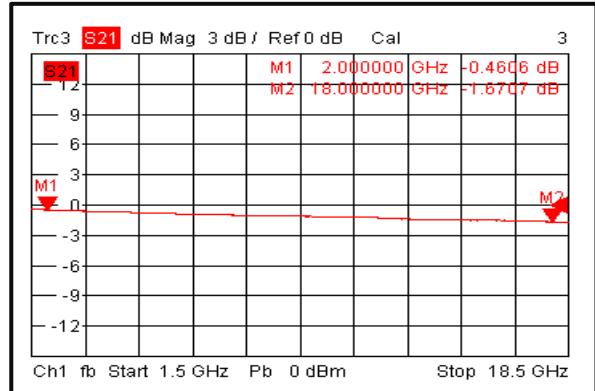
### Input VSWR @+25°C



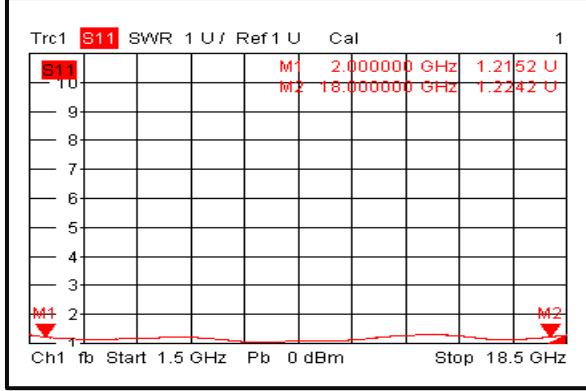
### Output VSWR @+25°C



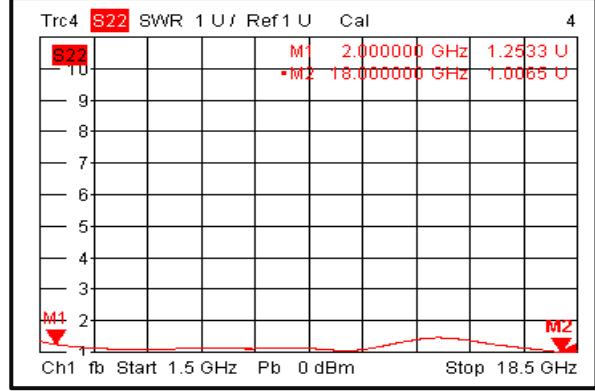
### Insertion Loss @-40°C



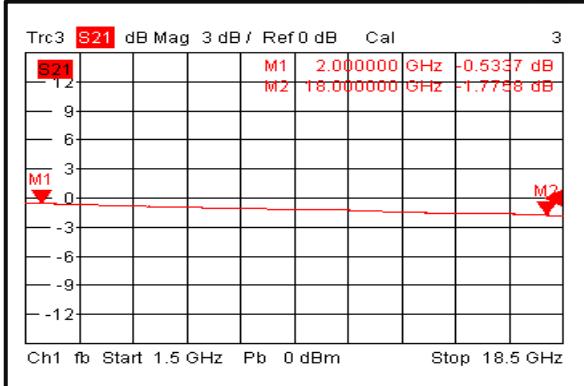
### Input VSWR @-40°C



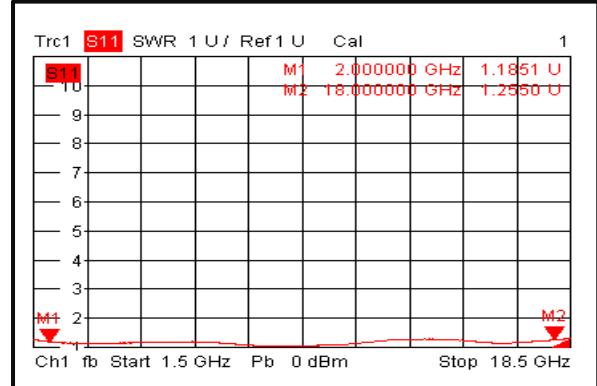
### Output VSWR @-40°C



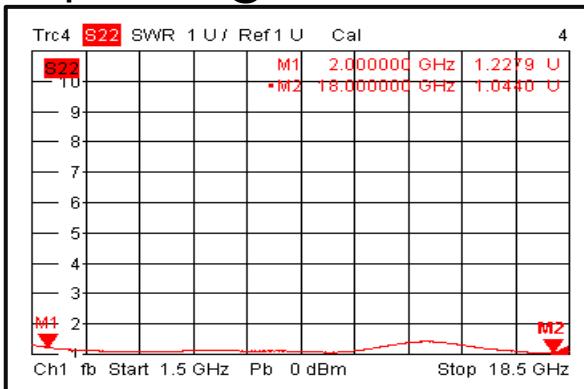
### Insertion Loss@+80°C



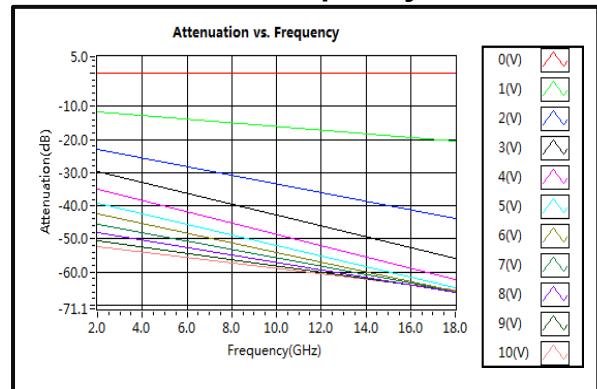
### Input VSWR @+80°C



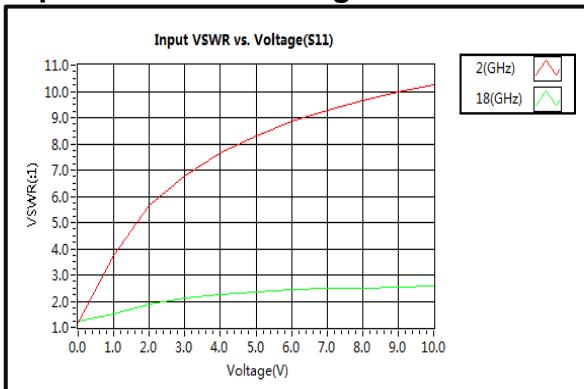
### Output VSWR @+85°C



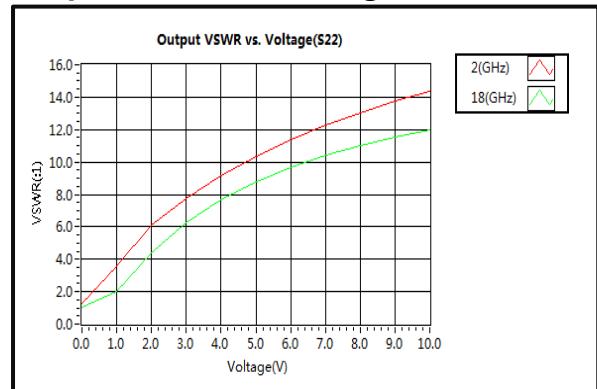
### Attenuation vs. Frequency



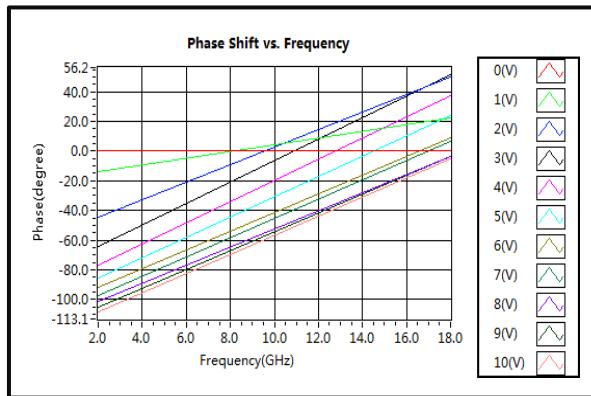
### Input VSWR vs. Voltage



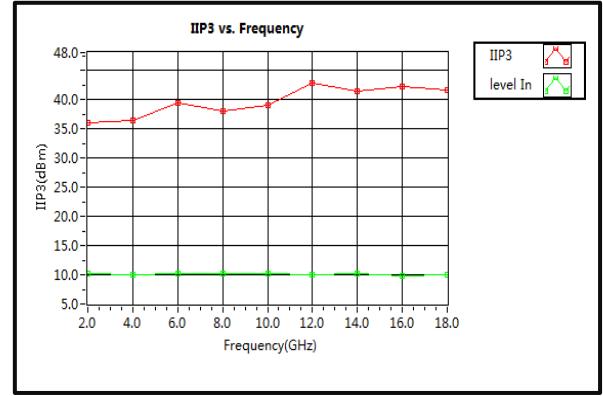
### Output VSWR vs. Voltage



## Phase Shift vs. Frequency



## IIP3



## Speed



## Speed

