



# Reflective Voltage Control Attenuator 2-18GHz



## Features

- Wide Band Operation 2-18GHz
- Wide Attenuation Range 50dB
- Single Voltage Control
- Low Insertion Loss
- Customization available upon request

Parameters	Min.	Typ.	Max.	Units
Frequency Range	2		18	GHz
Attenuation Range		50		dB
Insertion Loss		1.4	1.8	dB
Insertion Loss Temperature Coefficient		0.003		dB / °C
Input VSWR		1.5	1.8	: 1
Output VSWR		1.5	1.8	: 1
Input Power (CW)			5	w
Peak Power(1us wide, 0.1% Duty Cycle)			75	w
0.1dB Compression Point (P0.1dB)		37		dBm
Input IP3		45		dBm
Switching Speed	5 Typ.			us
Control Voltage	0	10		V
Input Control Current	15 Max.			mA
Weight	0.75 Max.			Ounces
Impedance	50			$\Omega$
Input / Output Connectors	SMA - Female			
Control Input Connector	SMC – Male			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed ( Optional )			



### Absolute Maximum Ratings

Control Voltage	0~13V
RF Input power	+37.5dBm

### Environmental Specifications

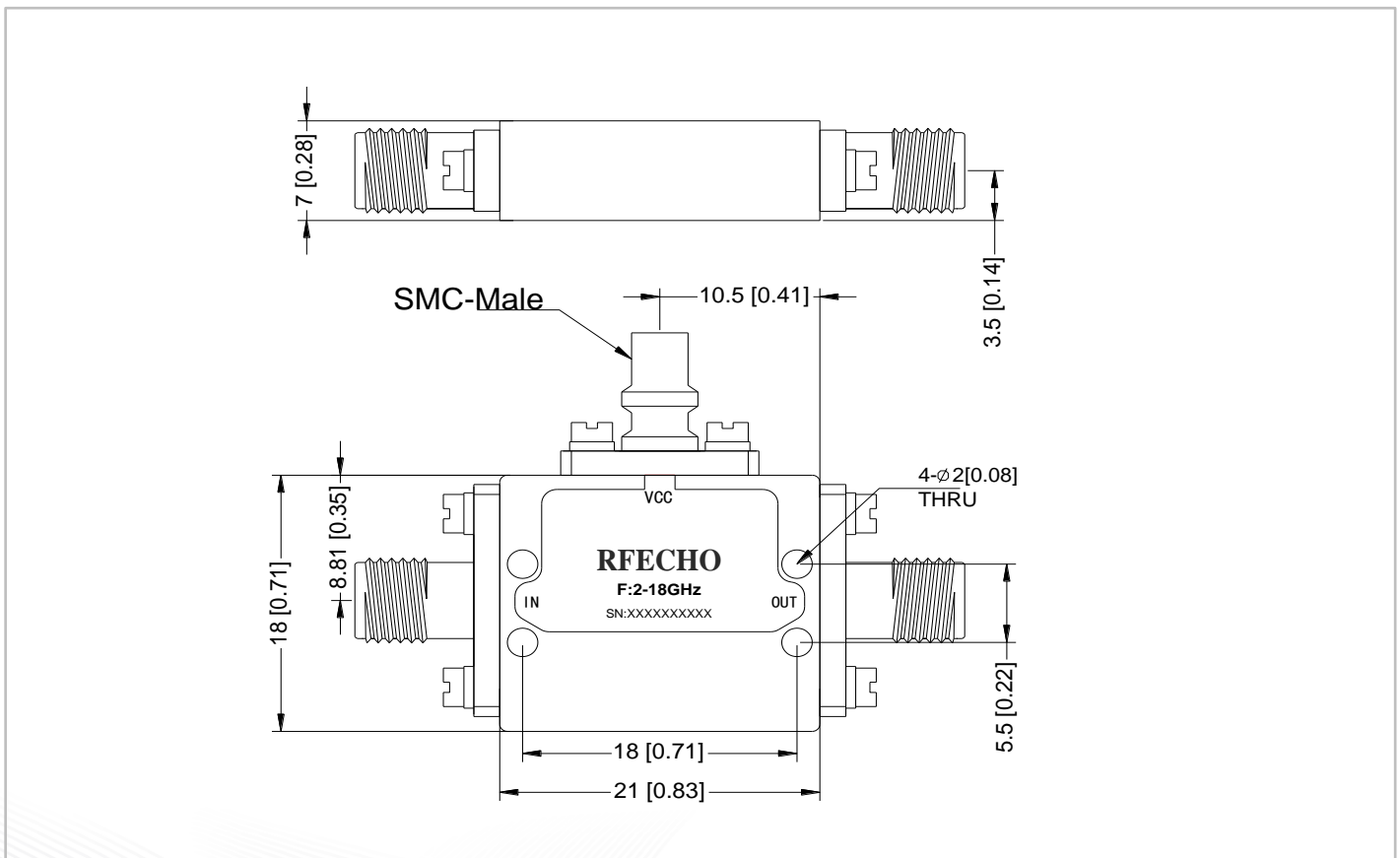
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

Part No.	Description
DBVA5002001800A	2-18GHz Voltage Control Attenuator

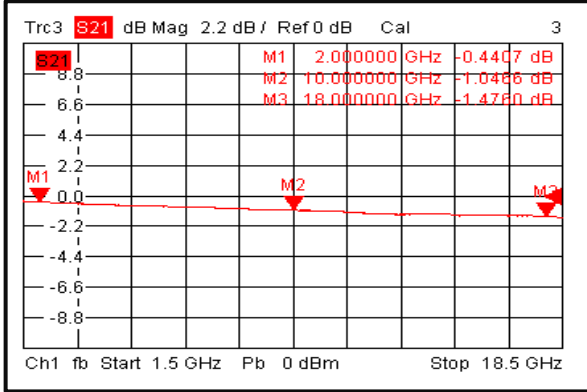
### Outline Drawing:

All Dimensions in mm (inches) Tolerances  $\pm 0.1$  (0.004)

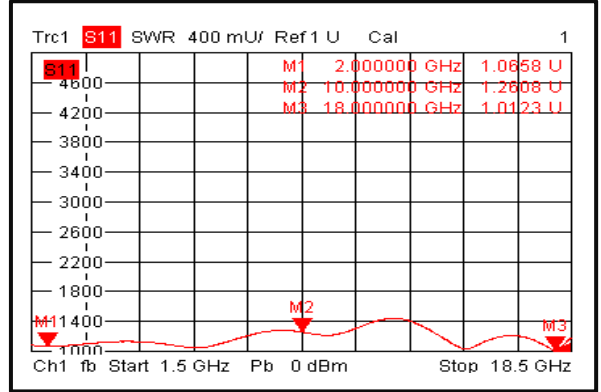




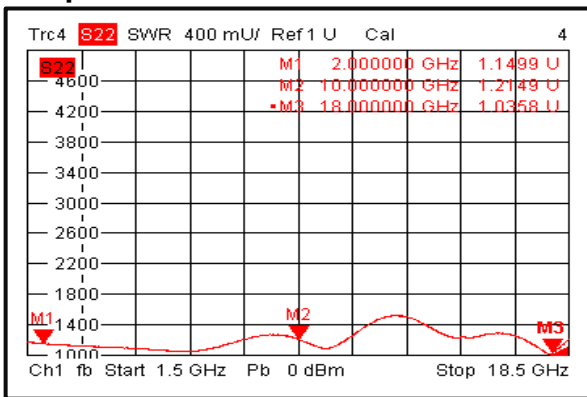
### Insertion Loss @+25°C



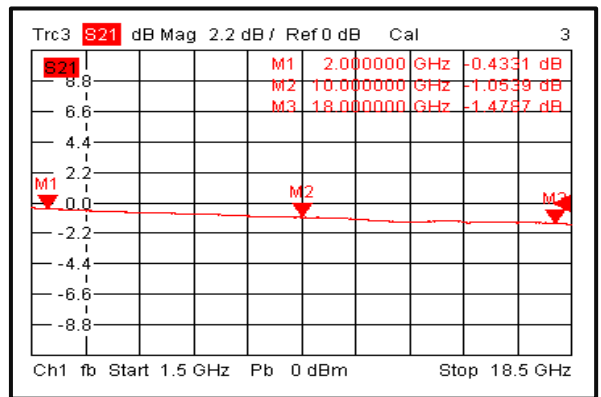
### Input VSWR @+25°C



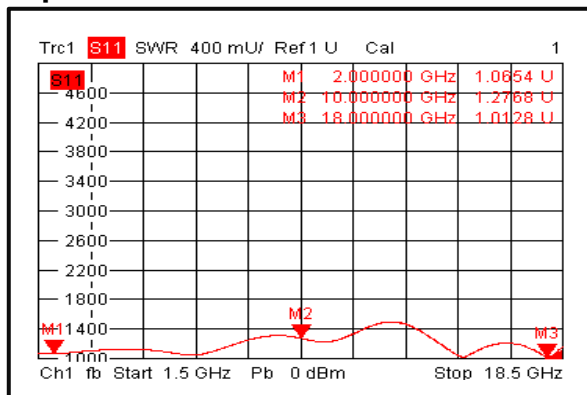
### Output VSWR @+25°C



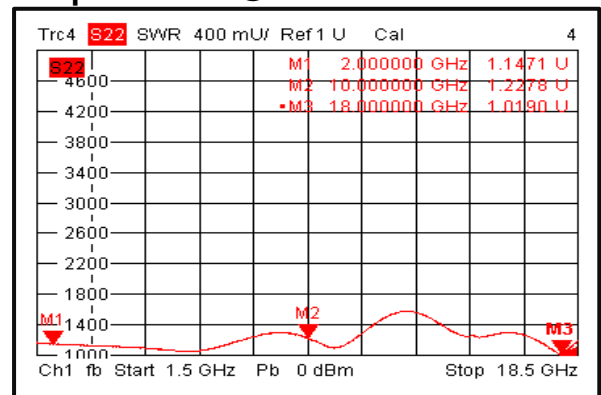
### Insertion Loss @-40°C



### Input VSWR @-40°C

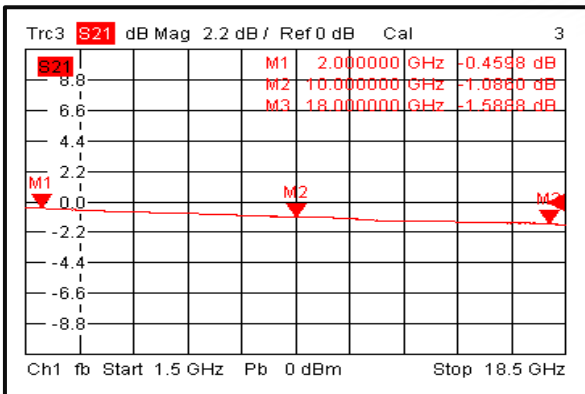


### Output VSWR @-40°C

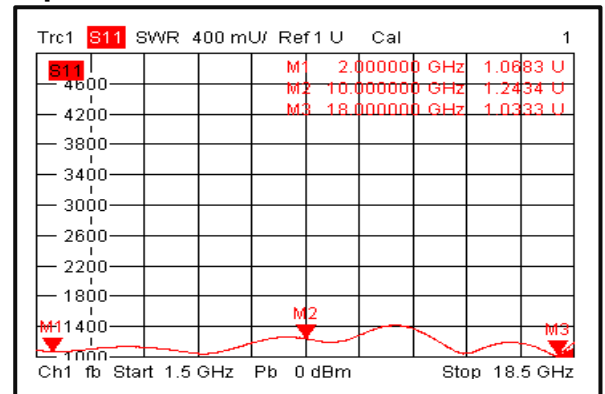




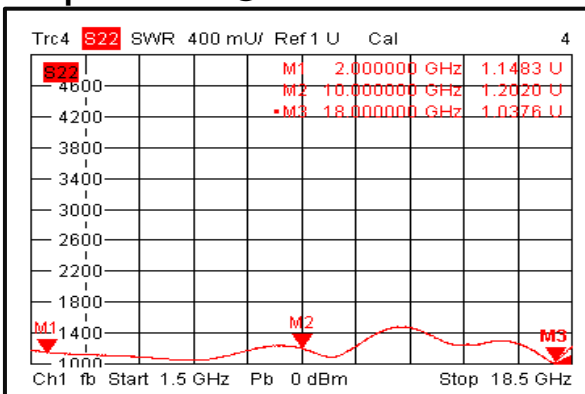
### Insertion Loss @+85°C



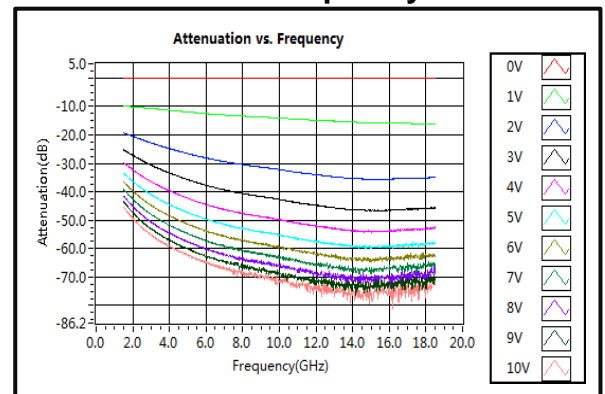
### Input VSWR @+85°C



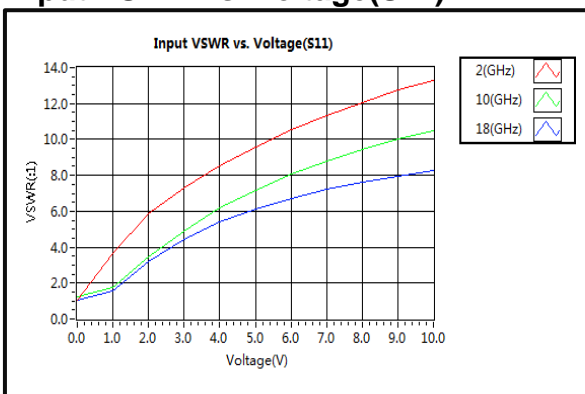
### Output VSWR @+85°C



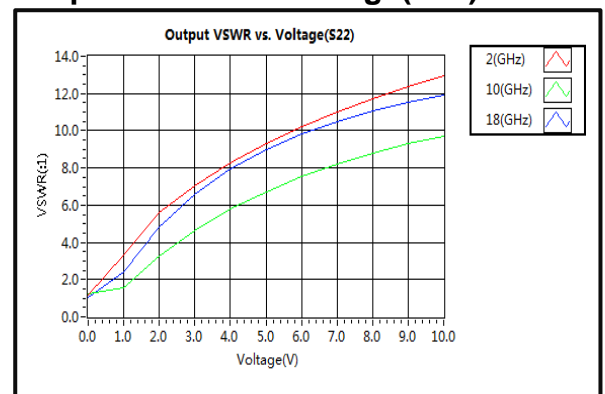
### Attenuation vs. Frequency



### Input VSWR vs. Voltage(S11)

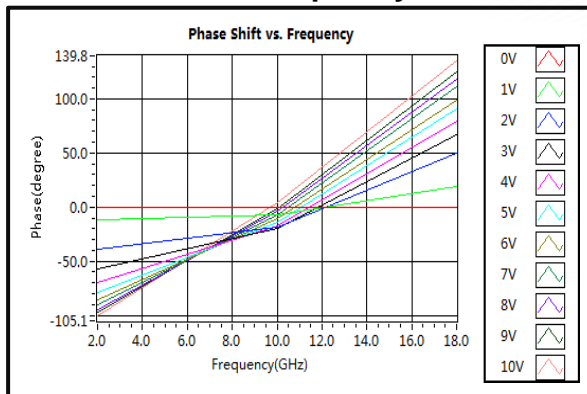


### Output VSWR vs. Voltage(S22)

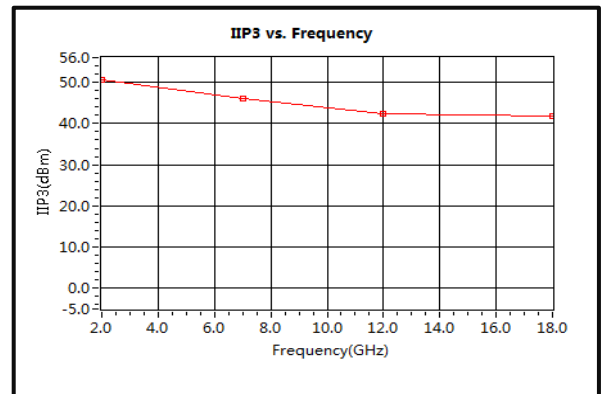




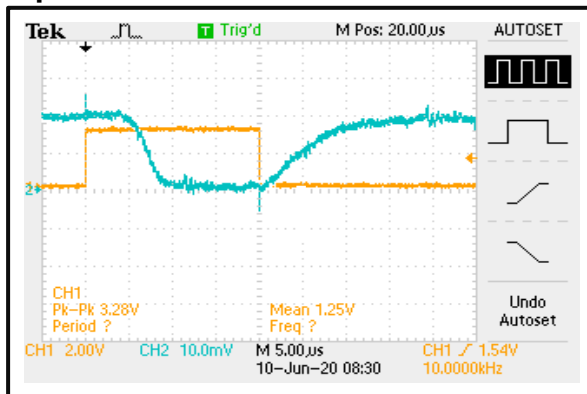
### Phase Shift vs. Frequency



### IIP3



### Speed



### Speed

