

Absorptive Voltage Control Attenuator 20 - 50GHz

Features

- Wide Band Operation 20-50GHz
- Wide Attenuation Range 30dB
- Series-Shunt Reflective Topology
- Single Control Operation
- Customization available upon request



Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	20-27		27-35			35-50			GHz	
Attenuation Range		30			35			40		dB
Insertion Loss		3.5	4		4	4.5		4.6	5	dB
Insertion Loss Temperature Coefficient		0.05			0.05			0.05		dB/ °C
Input VSWR		1.5	2		1.7	2		1.7	2	: 1
Output VSWR		1.5	2		1.7	2		1.7	2	: 1
0.1dB Compression Point (P0.1dB)		24			24			24		dBm
Input Ip3		32			32			32		dBm
Control Voltage	-3		0	-3		0	-3		0	V
Weight	0.3 Max.									Ounces
Impedance	50									Ω
current	30									mA
Input / Output Connectors	2.4mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Absolute Maximum Ratings

Control Voltage (Vctrl)	-5-0V
RF Input power	+24dBm

Environmental Specifications

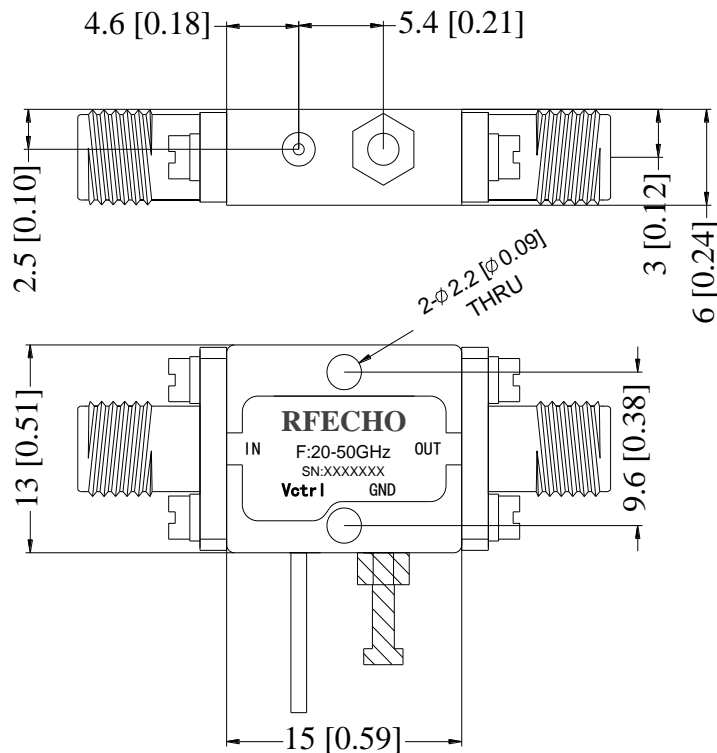
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

Part No.	Description
DBVA3020005000A	20-50GHz Voltage Control Attenuator

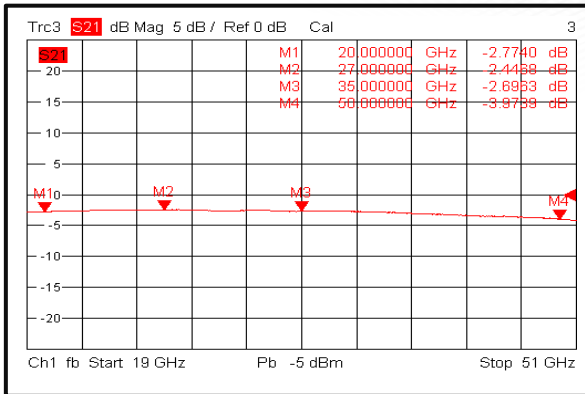
Outline Drawing:

All Dimensions in mm (inches) Tolerances ± 0.1 (0.004)

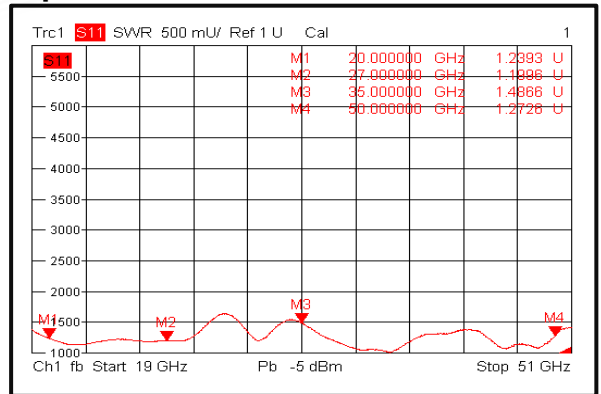




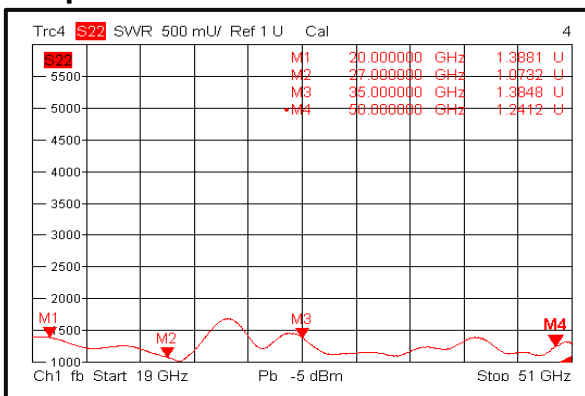
Insertion Loss @+25°C



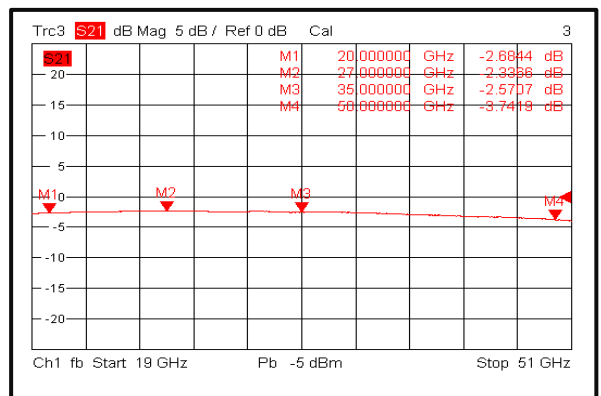
Input VSWR @+25°C



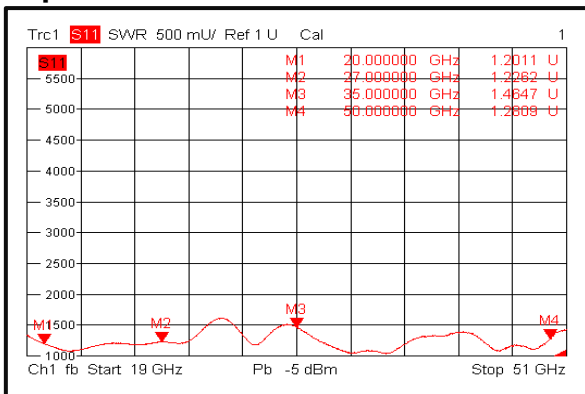
Output VSWR @+25°C



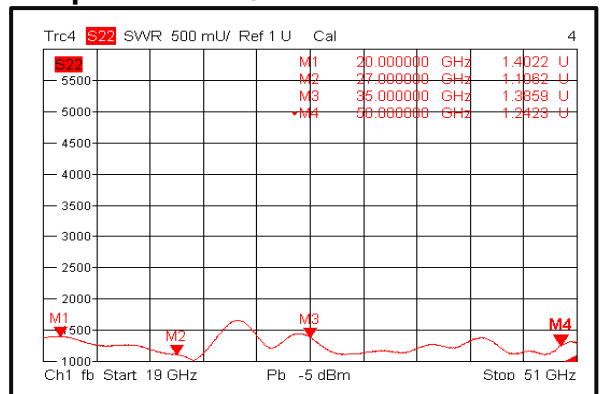
Insertion Loss @-40°C



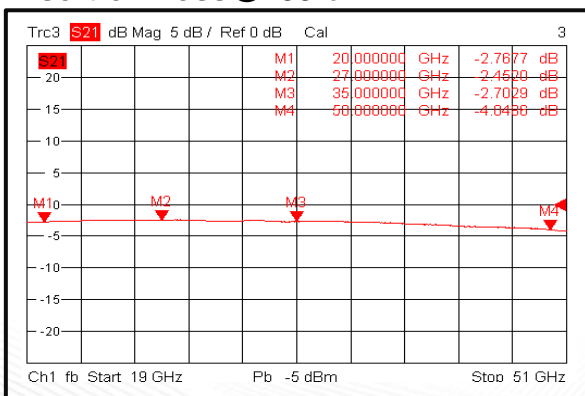
Input VSWR @-40°C



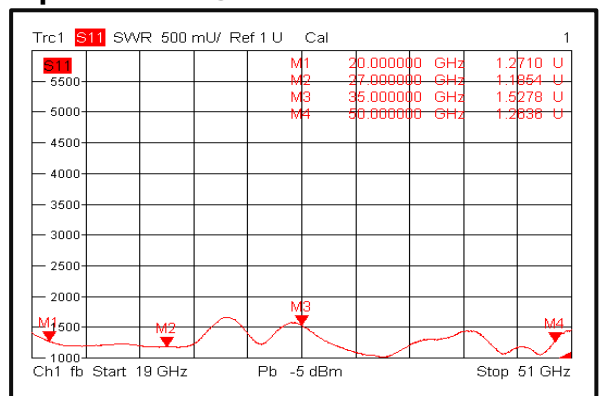
Output VSWR @-40°C



Insertion Loss @+85°C

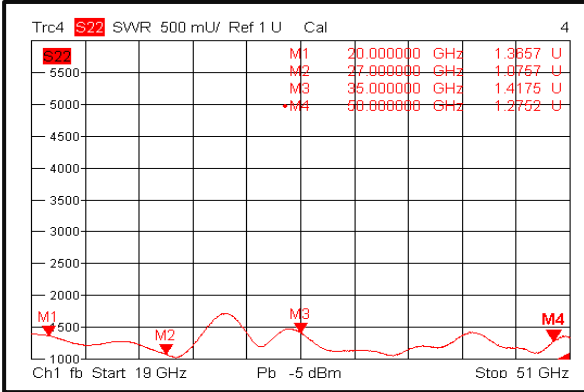


Input VSWR @+85°C

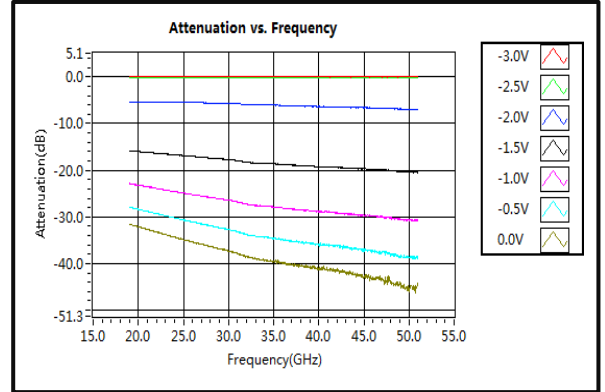




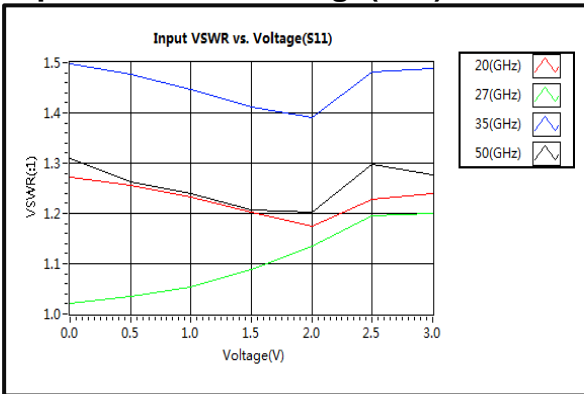
Output VSWR @+85°C



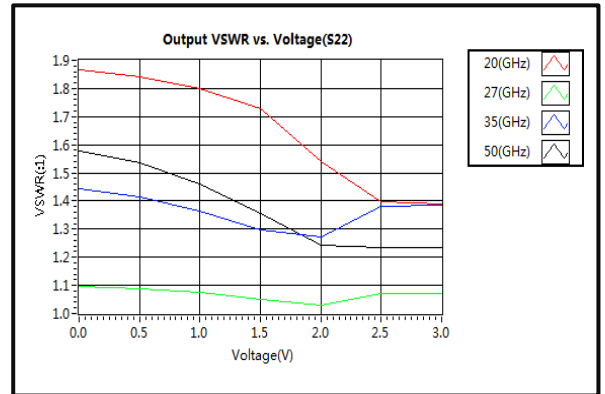
Attenuation vs. Frequency



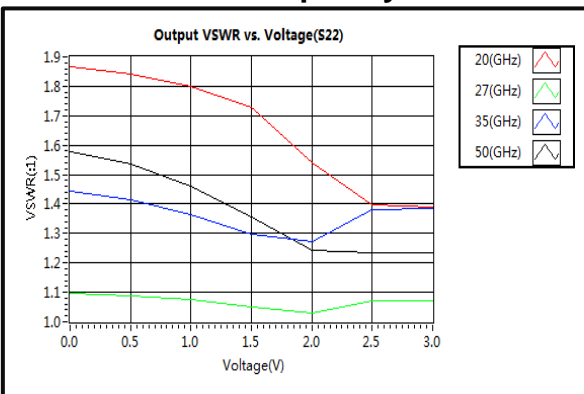
Input VSWR vs. Voltage(S11)



Output VSWR vs. Voltage(S22)



Phase Shift vs. Frequency



IIP3

