Absorptive Voltage Control Attenuator 0.01-50GHz

Features

- Ultra Wide Band Operation 0.01-50GHz
- Wide Attenuation Range 34dB
- Absorptive Topology
- Double Negative Control Operation
- Customization available upon request

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.01 ~ 18			18~ 34			34~50			GHz
Attenuation Range		34			34			34		dB
Insertion Loss		4.0	4.5		5.0	5.5		7.0	7.5	dB
Insertion Loss Temperature Coefficient		0.01			0.01			0.01		dB/ °C
Input VSWR		1.6			2.0			2.0		: 1
Output VSWR		1.6			2.0			2.0		: 1
0.1dB Compression Point (P0.1dB)		27			27			26		dBm
Input Ip3		33			33			32		dBm
Control Voltage		-1	0.5		-1	0.5		-1	0.5	V
Weight	0.4 Max.									ounces
Impedance	50									Ω
Current Consumption	40 Max.									mA
Input / Output Connectors	2.92mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									

Absolute Maximum Ratings

Control Voltage	-3V ~ +0.5V
RF Input power	+27dBm

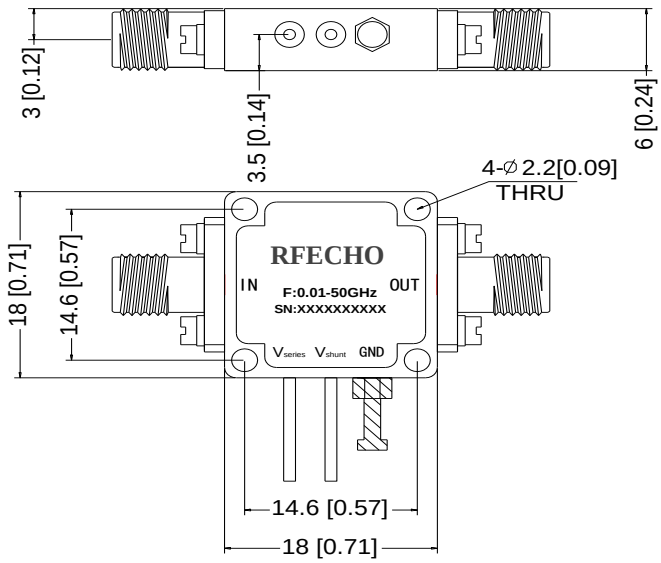
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH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

Ordering Information

Part No.	Description
DBVA3000015000D	0.01-50GHz Voltage Control Attenuator

Outline Drawing:

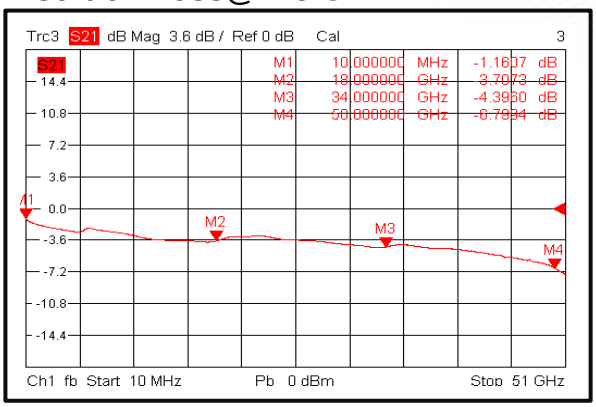
All Dimensions in mm (inches) Housing Tolerances ±0.1(0.004)



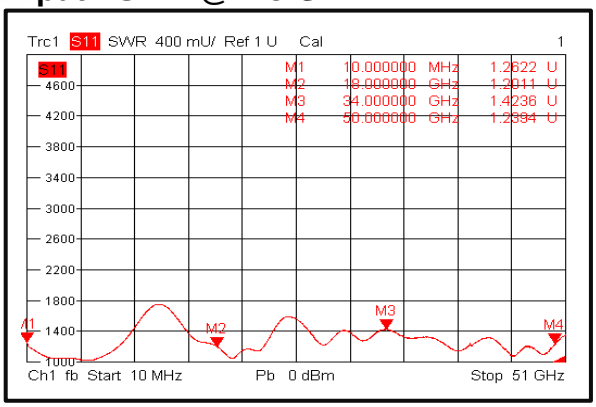
Voltage Control Table

Vseries (V)	Vshunt (V)	Attenuation(dB)
0.5	-1	0
-0.36	-0.81	2
-0.43	-0.76	4
-0.66	-0.72	8
-0.77	-0.62	16
-0.81	-0.53	24
-0.91	-0.44	28
-1	0	34

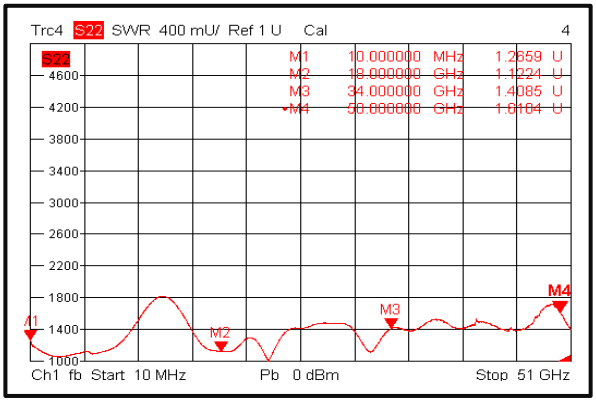
Insertion Loss@+25℃



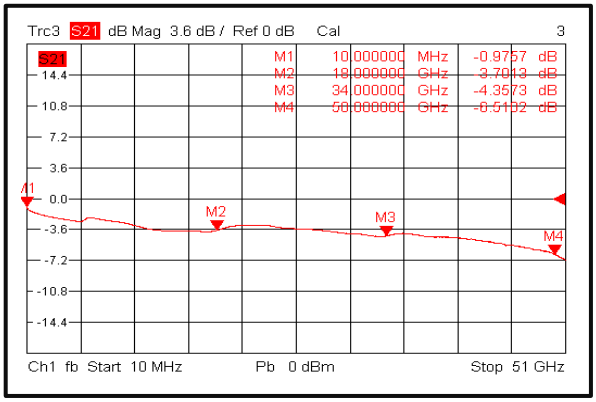
Input VSWR @+25℃



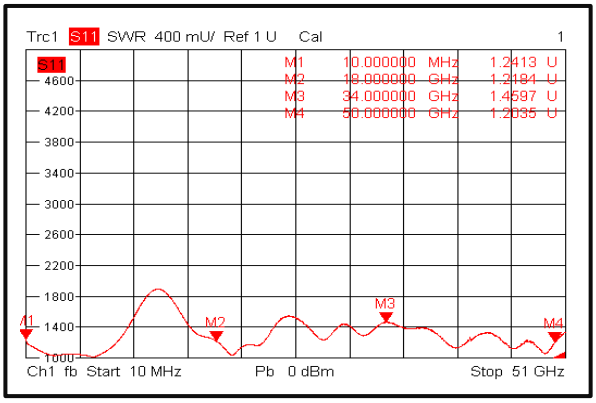
Output VSWR @+25℃



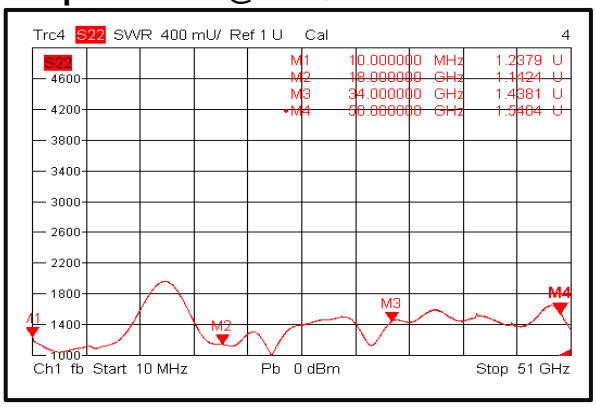
Insertion Loss @-40℃



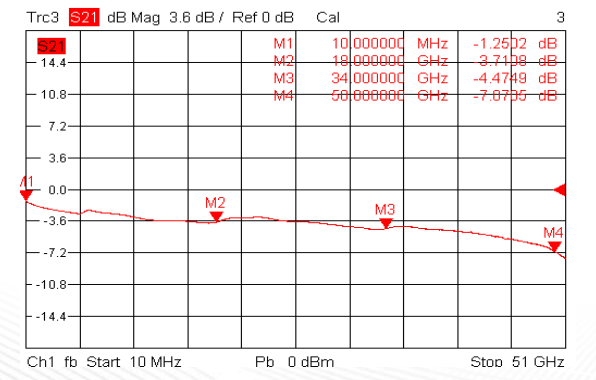
Input VSWR @-40℃



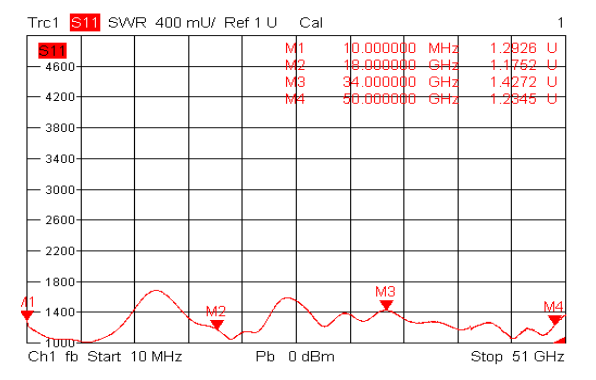
Output VSWR @-40℃



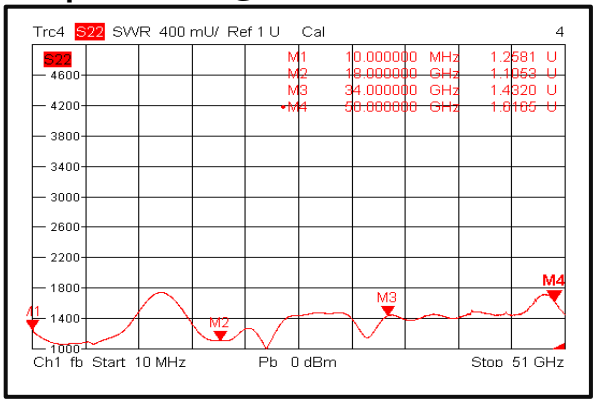
Insertion Loss@+85℃



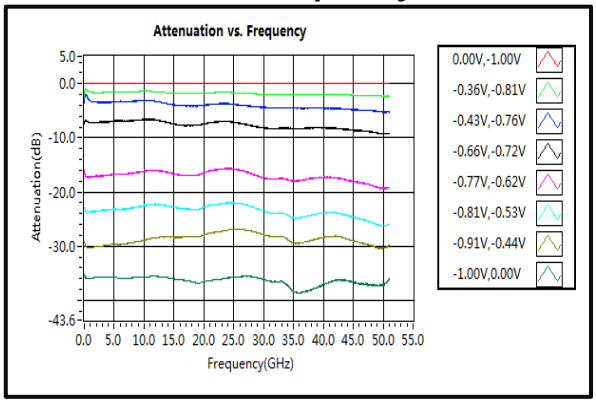
Input VSWR @+85℃



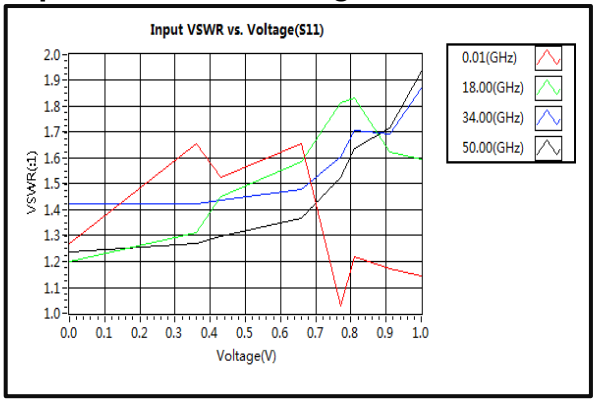
Output VSWR @+85℃



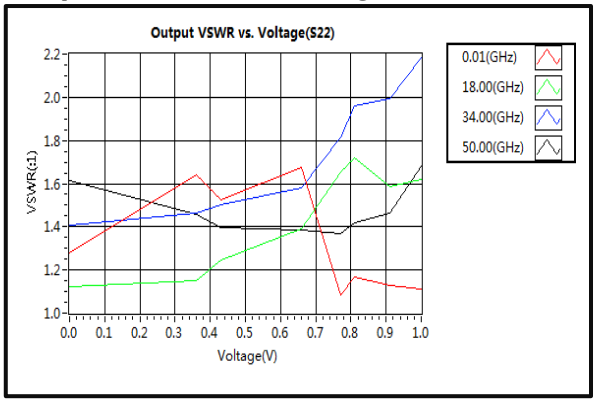
Attenuation vs. Frequency



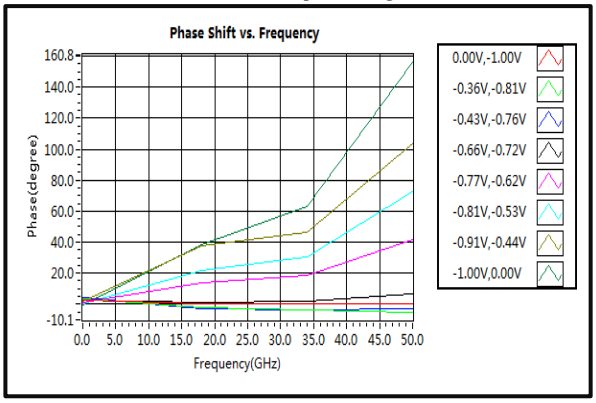
Input VSWR vs. Voltage



Output VSWR vs. Voltage



Phase Shift vs. Frequency



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