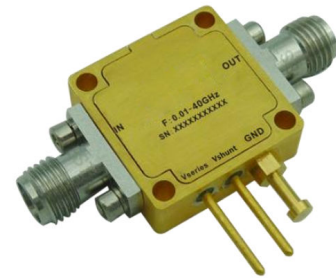




Absorptive Voltage Control Attenuator 0.01-40GHz



Features

- Ultra Wide Band Operation 0.01-40GHz
- Wide Attenuation Range 17dB
- Absorptive Topology
- Double Negative Control Operation
- Customization available upon request

Parameter	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.01 ~ 18			18~ 27			27~40			GHz
Attenuation Range		17			18			17		dB
Insertion Loss		2	2.5		3	3.5		3.2	3.5	dB
Insertion Loss Temperature Coefficient		0.01			0.01			0.01		dB/ °C
Input VSWR		1.6	2		2	2.5		3	3.5	: 1
Output VSWR		1.6	2.5		1.6	2.5		1.6	2.5	: 1
0.1dB Compression Point (P0.1dB)		24			24			23		dBm
Input Ip3		33			33			32		dBm
Control Voltage		-1	0.5		-1	0.5		-1	0.5	V
Weight	0.39									ounces
Impedance	50									Ω
Current Consumption	30									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	+24dBm

Environmental Specifications

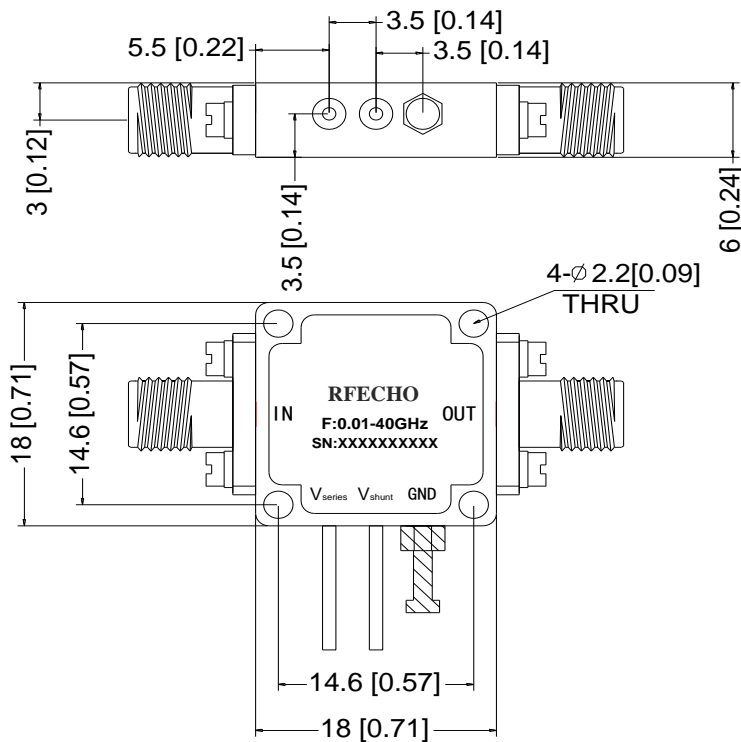
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

Ordering Information

Part No.	Description
DBVA1800014000A	0.01-40GHz Voltage Control Attenuator

Outline Drawing:

All Dimensions in mm (inches)

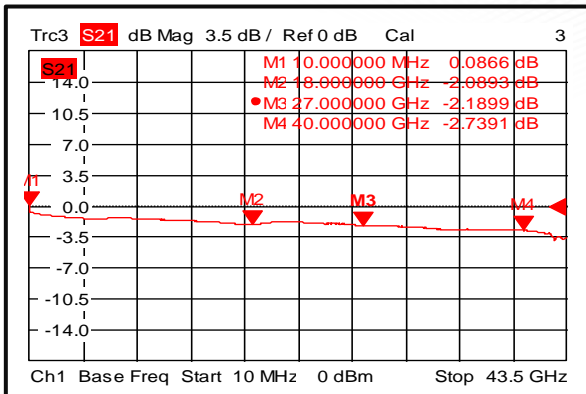


Voltage Control Table

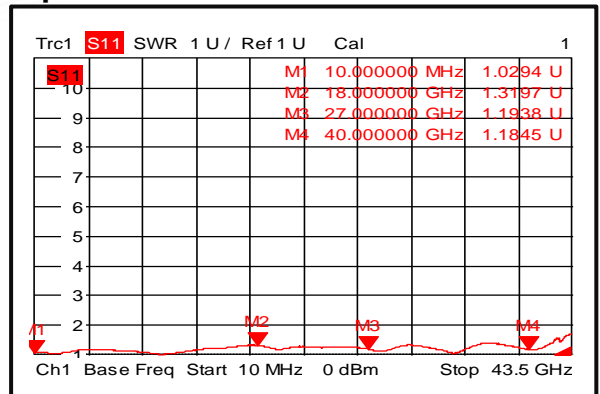
Vseries (V)	Vshunt (V)	Attenuation(dB)
0.5	-1	0
-0.36	-0.81	1
-0.43	-0.76	2
-0.66	-0.72	4
-0.77	-0.62	8
-0.81	-0.53	12
-0.91	-0.44	14
-1	0	17



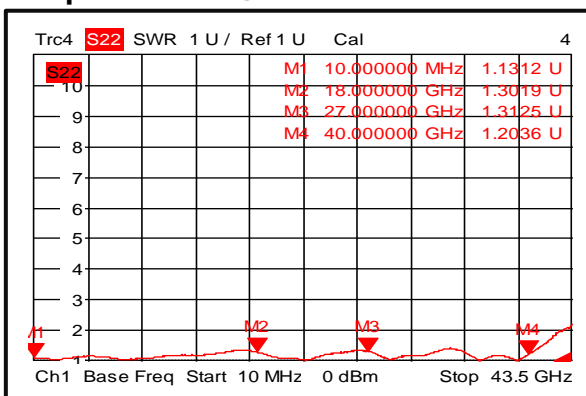
Insertion Loss @+25°C



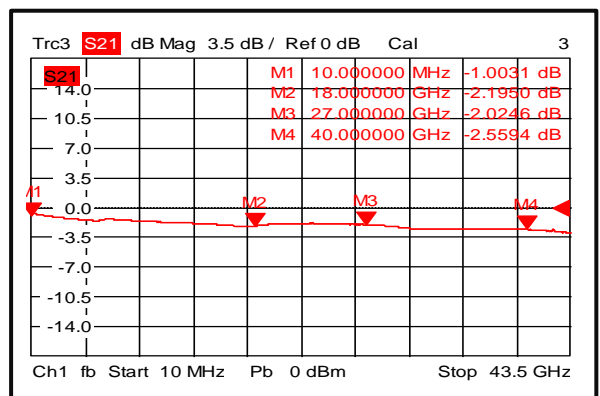
Input VSWR @+25°C



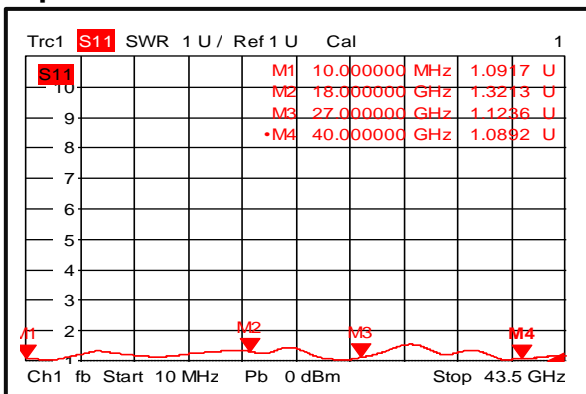
Output VSWR @+25°C



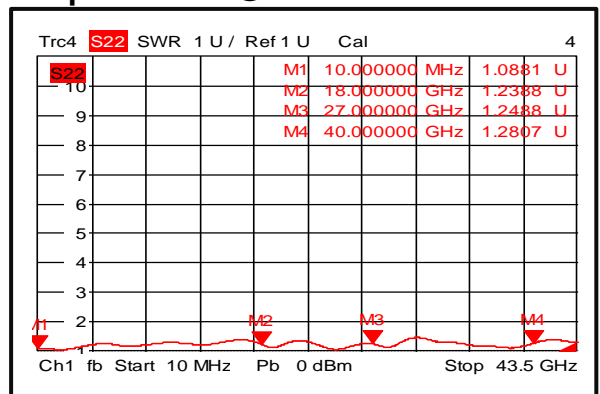
Insertion Loss @-40°C



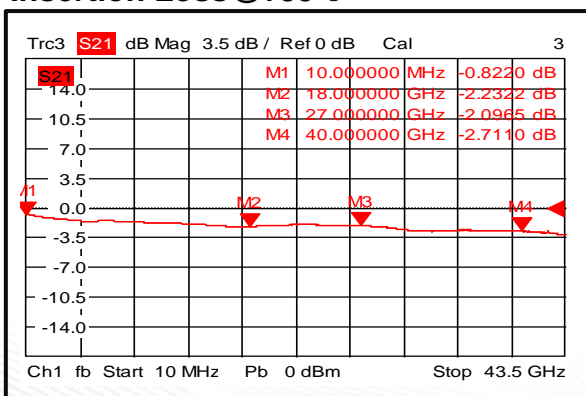
Input VSWR @-40°C



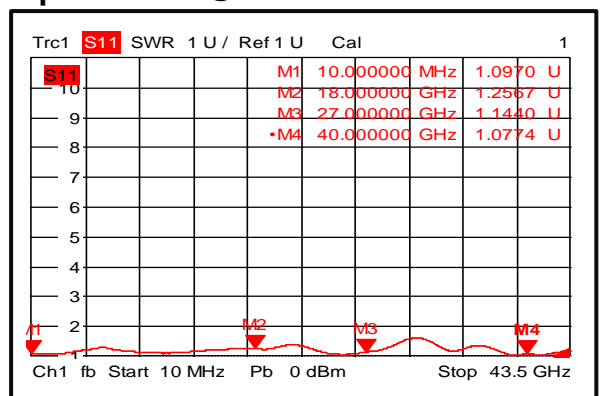
Output VSWR @-40°C



Insertion Loss @+85°C

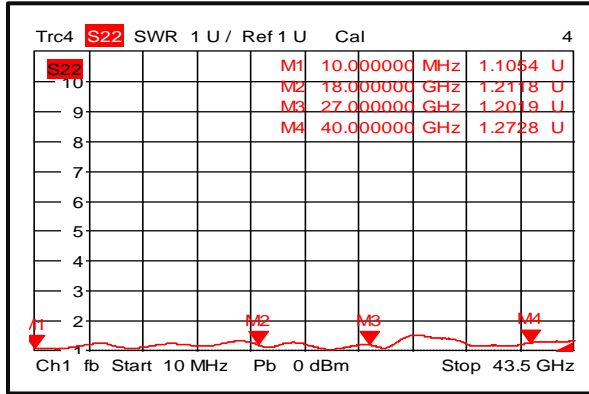


Input VSWR @+85°C

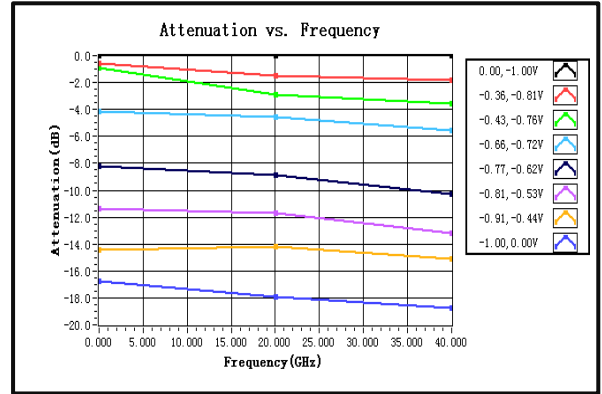




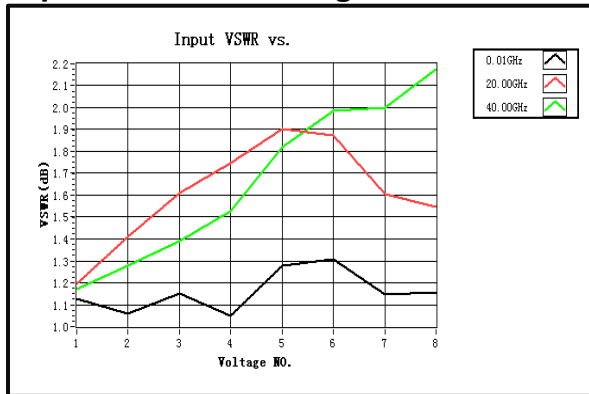
Output VSWR @+85°C



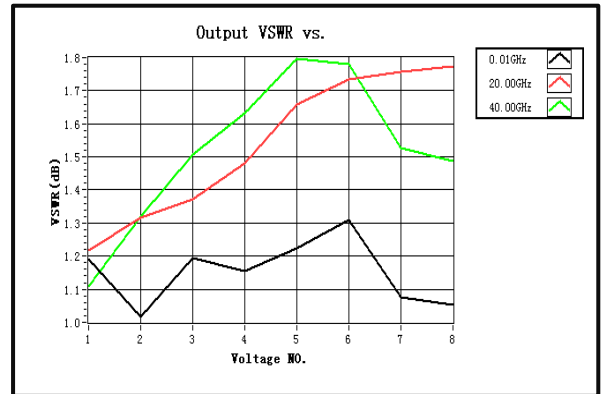
Attenuation vs. Frequency



Input VSWR vs. Voltage



Output VSWR vs. Voltage



Phase Shift vs. Frequency

