

Reflective Voltage Control Attenuator 10-13GHz

Features

- Wide Band Operation 10-13GHz
- Wide Attenuation Range 15dB
- Reflective Topology
- Single Control Operation
- Customization available upon request



Parameters	Min.	Typ.	Max.	Units
Frequency Range	10		13	GHz
Attenuation Range		15		dB
Insertion Loss		1.1	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
0.1dB Compression Point P0.1dB		20		dBm
Input Ip3		45		dBm
Switching Speed		10		us
Control Voltage	0	10		V
Weight	0.5 Max.			ounces
Impedance	50			Ω
Bias Current	20 Max.			mA
Input / Output Connectors	SMA - Female			
Finish	Gold plated			
Material	Aluminum			
Seal	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

Control Voltage	0 ~ 15V
RF Input power	+30dBm

Ordering Information

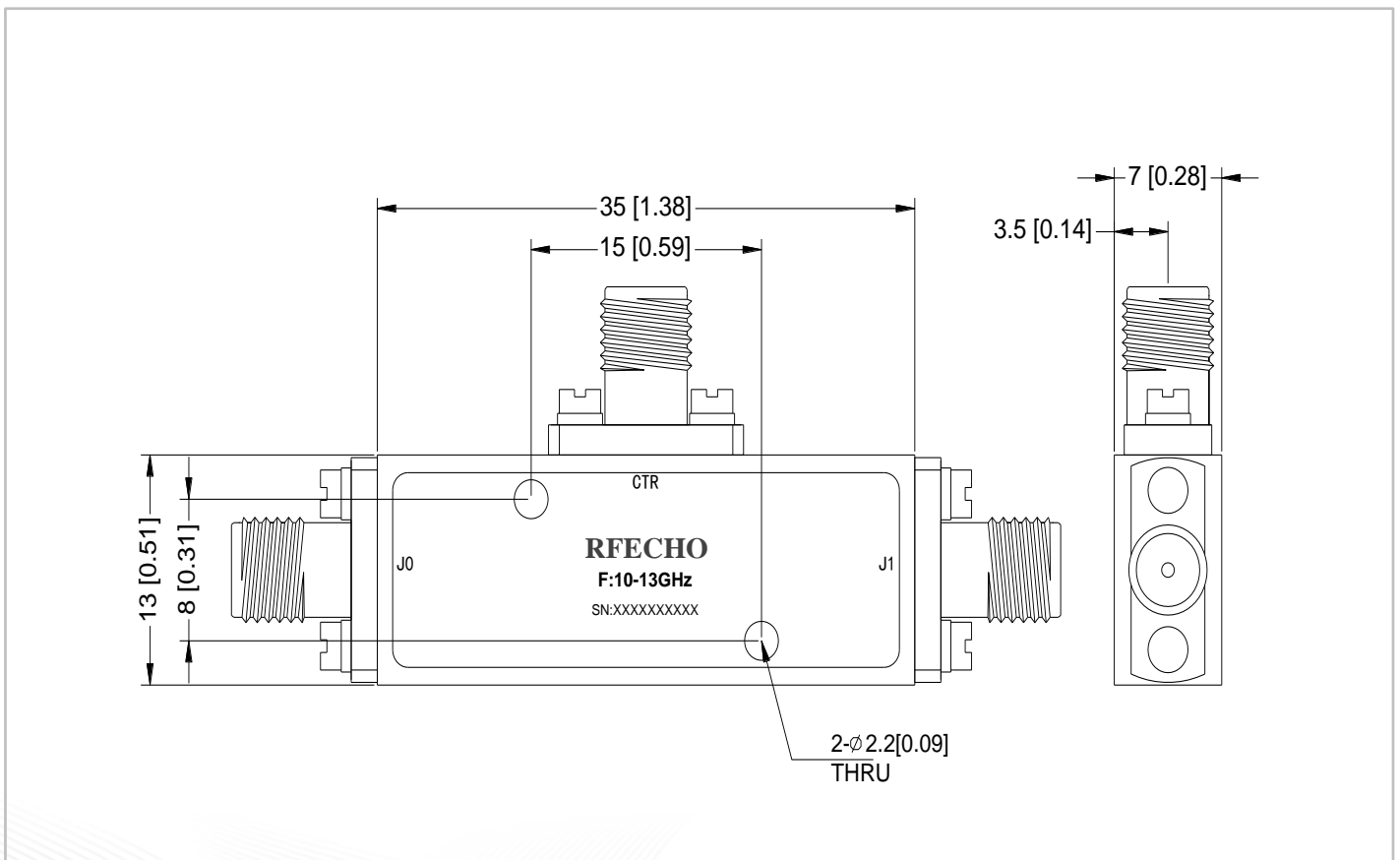
Part No.	Description
DBVA1510001300A	10-13GHz Voltage Control Attenuator

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

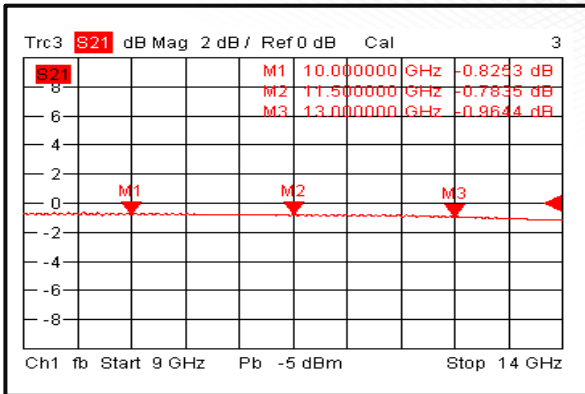
Outline Drawing:

All Dimensions in mm (inches)

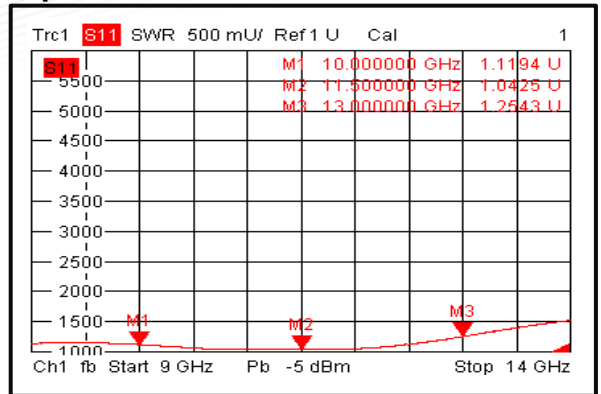




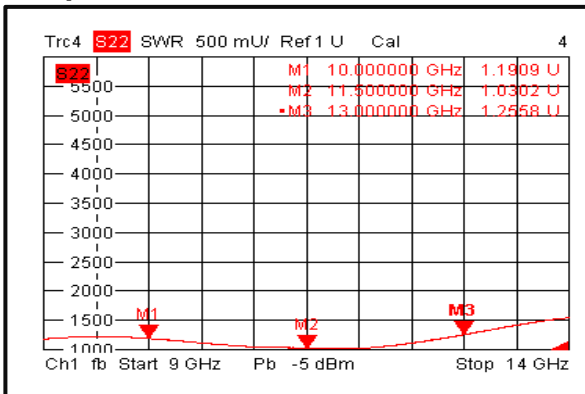
Insertion Loss @+25°C



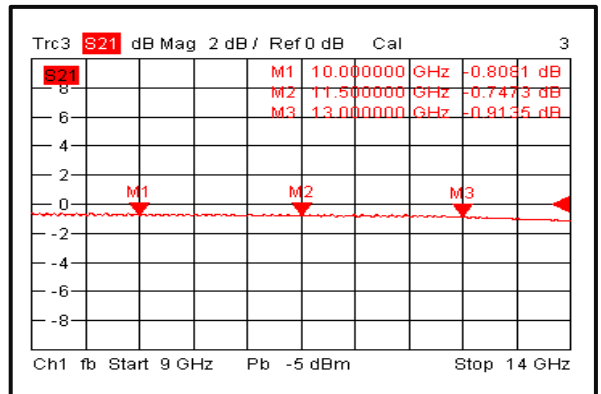
Input VSWR @+25°C



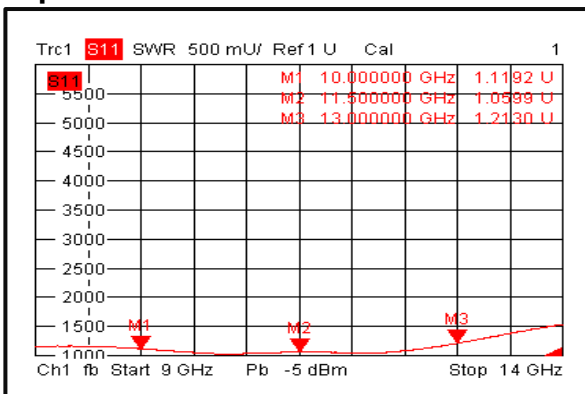
Output VSWR @+25°C



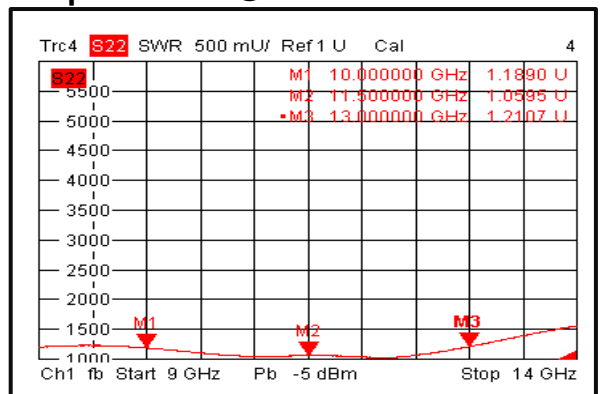
Insertion Loss @-40°C



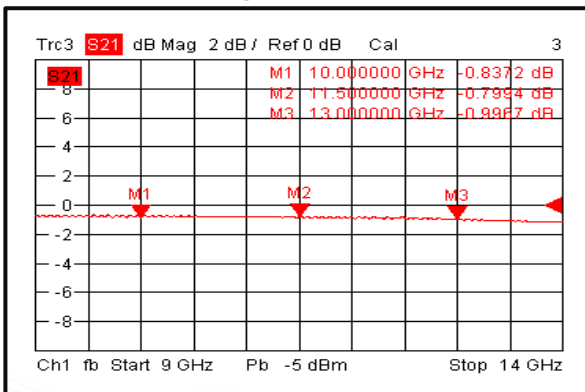
Input VSWR @-40°C



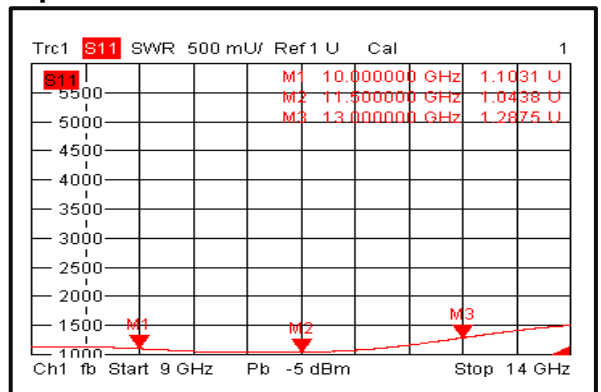
Output VSWR @-40°C



Insertion Loss @+85°C

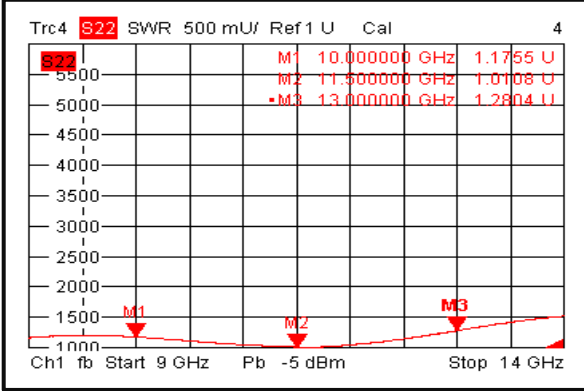


Input VSWR @+85°C

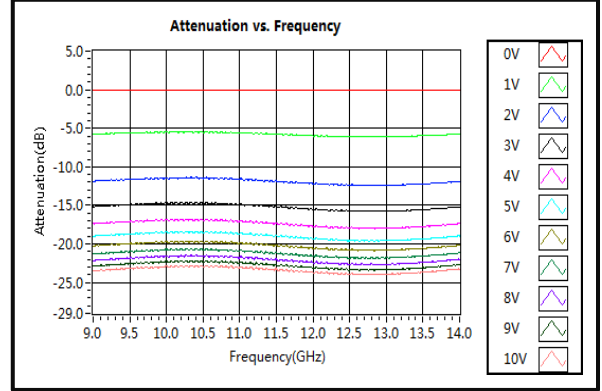




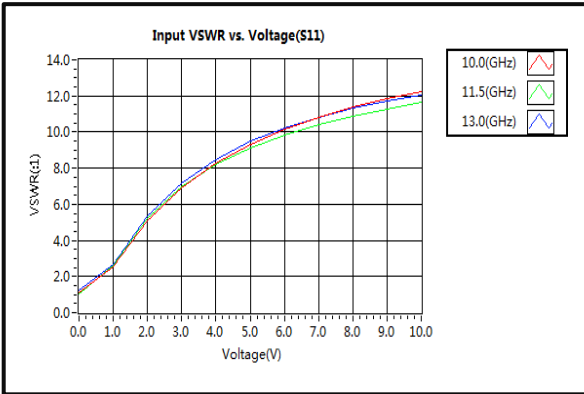
Output VSWR @+85°C



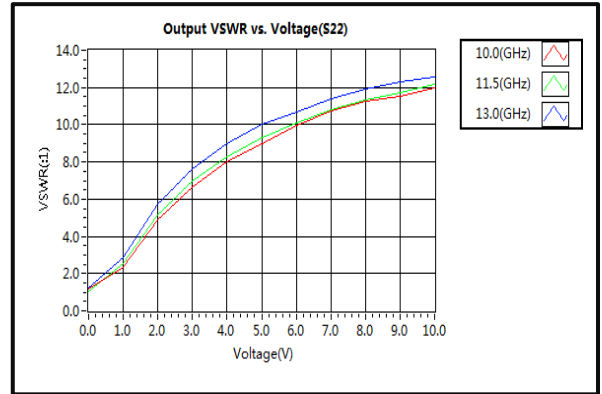
Attenuation vs. Frequency



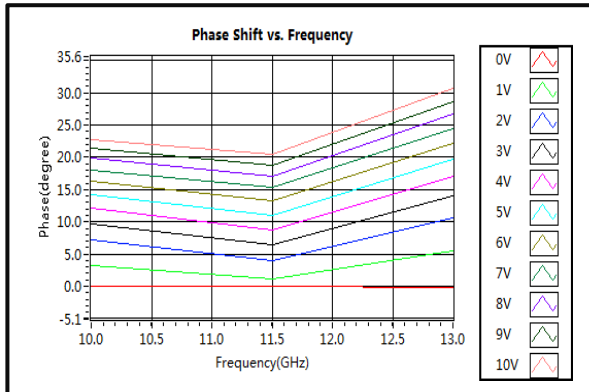
Input VSWR vs. Voltage(S11)



Output VSWR vs. Voltage(S22)



Phase Shift vs. Frequency



IIP3

