

# Absorptive Voltage With Inverted Control Signal 4-8GHz

## Features

- Wide Band Operation 4-8GHz
- Wide Attenuation Range 30dB
- Absorptive Topology
- Single Control Operation



Parameters	Min.	Typ.	Max.	Units
Frequency Range	4		8	GHz
Attenuation Range	30			dB
Insertion Loss		1.5	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Input VSWR		1.4	1.6	: 1
Output VSWR		1.4	1.6	: 1
Input 1dB Compression Point			30	dBm
IP3 Input		45		dBm
Switching Speed		1		us
Control Voltage	@ Insertion Loss State	10 Typ.		
	@ Attenuation State	10~0 Typ.		
Biassing		5		V
Current		70 Max.		mA
Weight		2.5 Max.		ounces
Impedance		50		Ω
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

### Absolute Maximum Ratings

Biassing	+5.5V
Control Voltage	13~0V
RF Input Power	+30 dBm

### 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 Uncontrolled 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

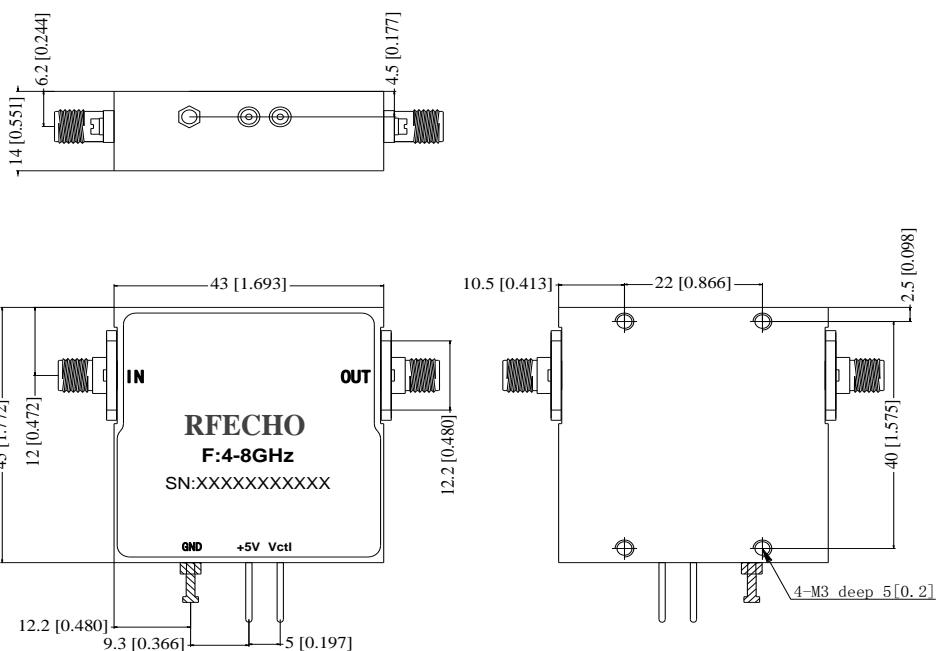
### Ordering Information

Part No.	ECCN	Description
DBVA3004000800D	EAR99	4-8GHz Voltage Control Attenuator

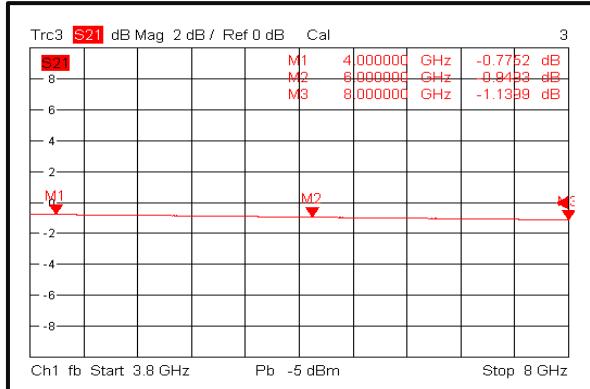
### Outline Drawing:

All Dimensions in mm (inches)

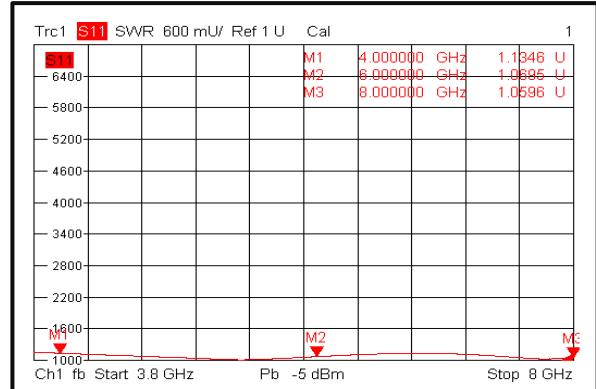
Housing Tolerances  $\pm 0.1$  (0.004)



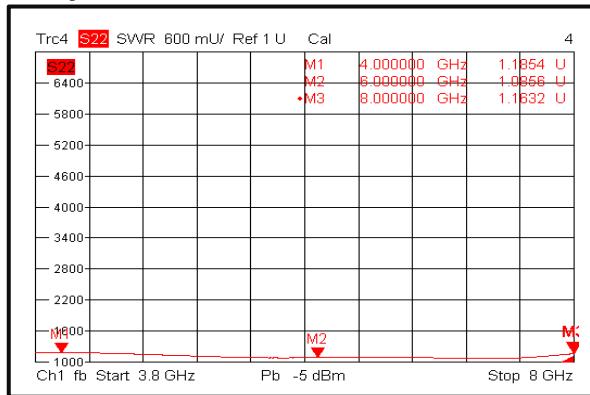
### Insertion Loss @+25°C



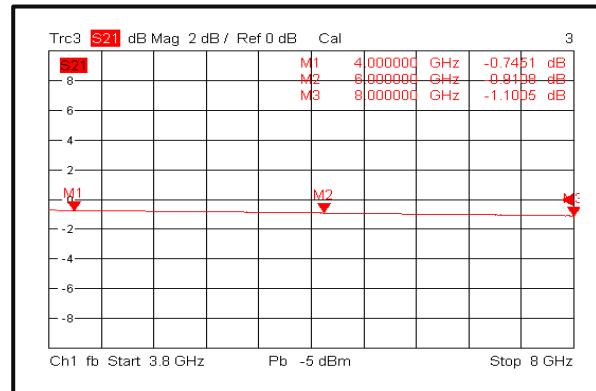
### Input VSWR @+25°C



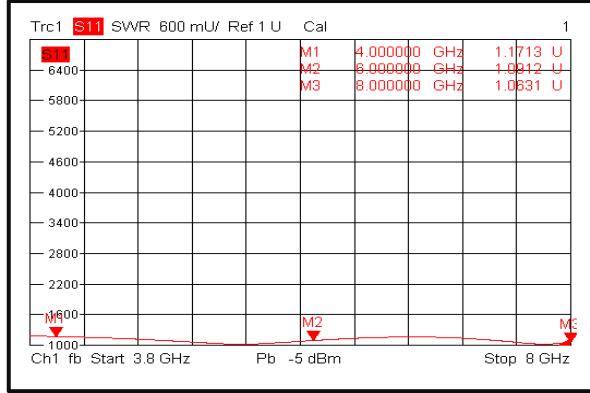
### Output VSWR @+25°C



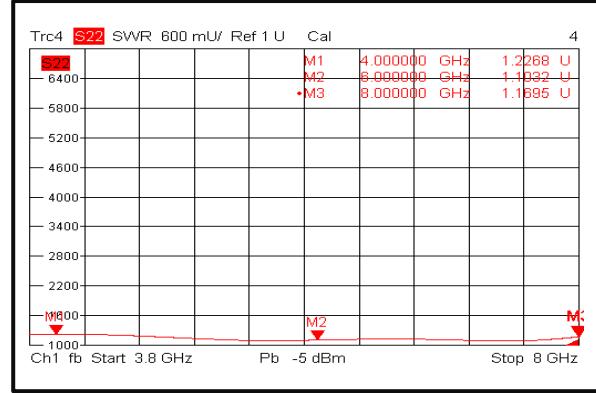
### Insertion Loss @-40°C



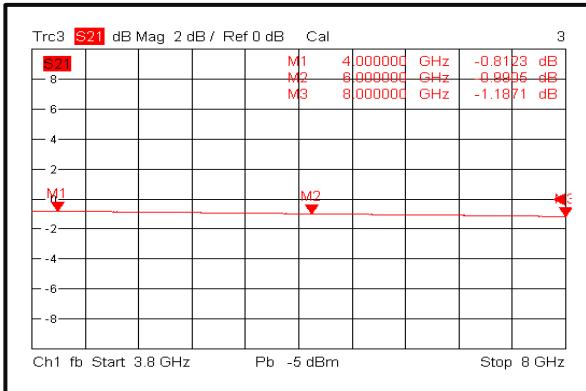
### Input VSWR @-40°C



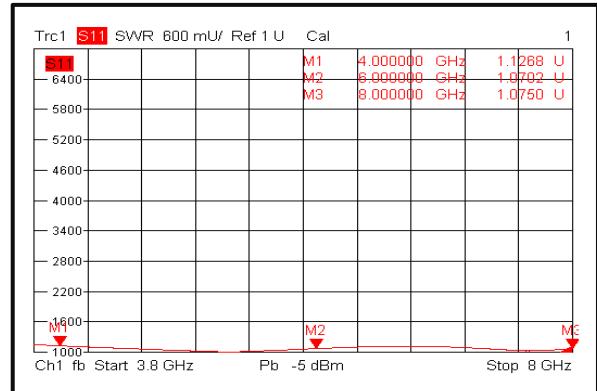
### Output VSWR @-40°C



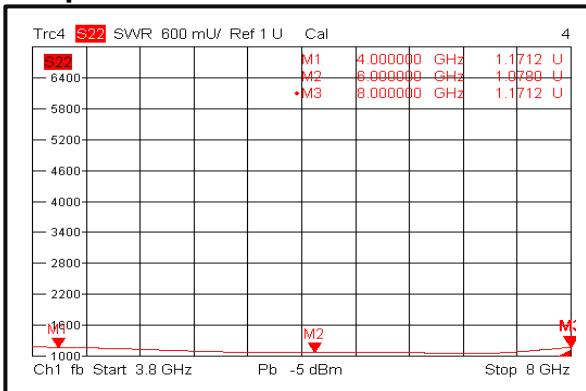
### Insertion Loss@+85°C



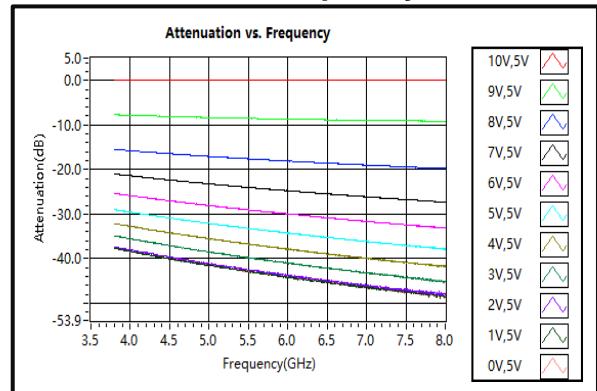
### Input VSWR @+85°C



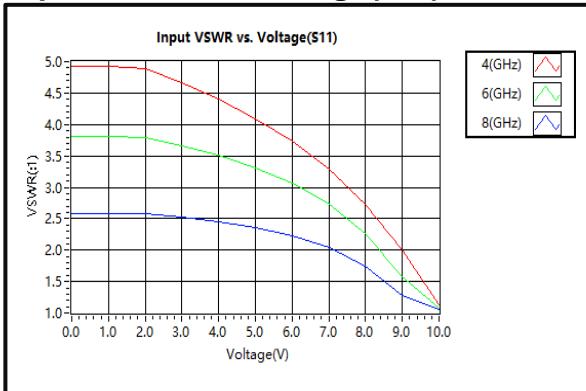
### Output VSWR @+85°C



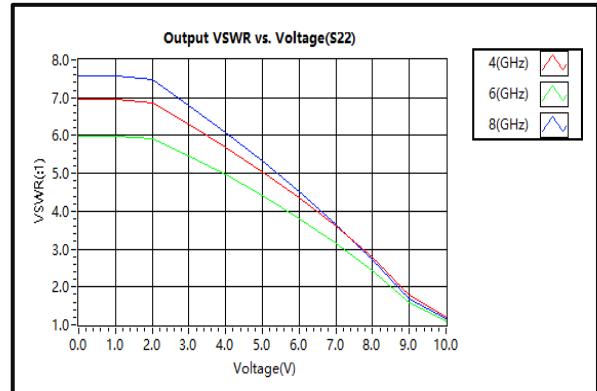
### Attenuation vs. Frequency



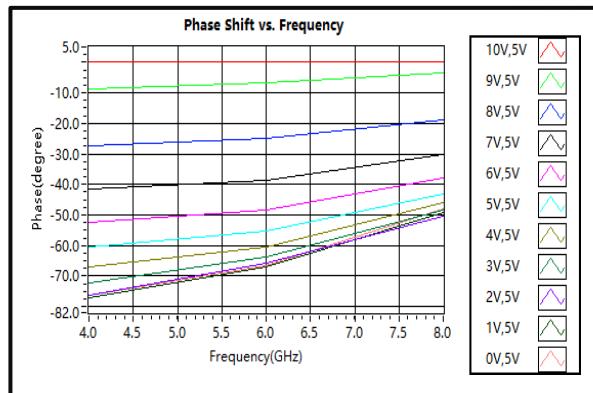
### Input VSWR vs. Voltage(s11)



### Output VSWR vs. Voltage(s22)



## Phase Shift vs. Frequency



## IIP3

