



Absorptive Voltage Control Attenuator 0.01-50GHz



Features

- Ultra Wide Band Operation 0.01-50GHz
- Wide Attenuation Range 17dB
- Absorptive Topology
- Double Negative Control Operation
- Customization available upon request

Absorptive Voltage Control Attenuator 0.01-50GHz

Electrical Specifications, TA = +25 °C

Description	PN: RFVAT0050A17									
	Absorptive Voltage Attenuator									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	0.01 ~ 18			18~ 34			34~50			GHz
Attenuation Range		17			17			18		dB
Insertion Loss		3	3.5		3.5	4		5	5.5	dB
Insertion Loss Temperature Coefficient		0.01			0.01			0.01		dB/°C
Input VSWR		1.6	2		2	2.5		2.5	2.8	ratio
Output VSWR		1.6	2		1.6	2		1.6	2	ratio
Input Power for 1 dB Compression		27			27			27		dBm
IM ₃		30			30			30		dBc
Weight	1.2									ounces
Impedance	50									Ω
current	20									mA
Input /Output Connector	2.92mm-Female(Standard)									
Finishing	Gold plating									
Material	Aluminum									
Seal	Hermetically Sealed (optional)									



Absolute Maximum Ratings

Control Voltage	-2V ~ +0.5V
RF Input power	+24dBm
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125

Environment specifications

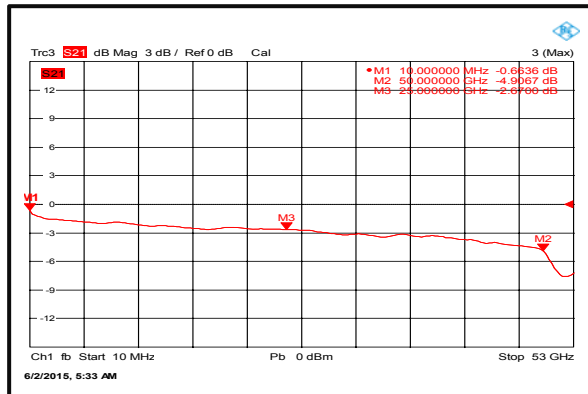
Operational Temperature (°C)	-45 ~ +85
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave,3 axis both directions

Ordering Information

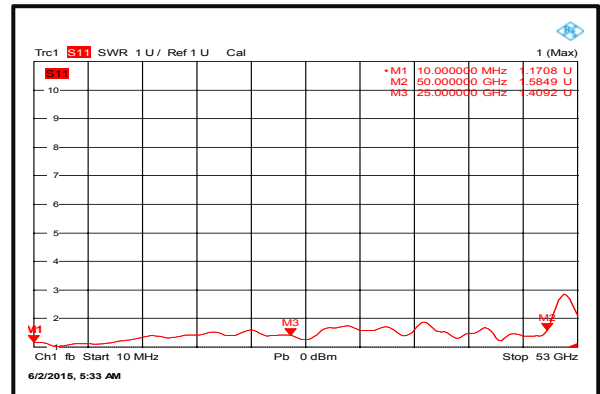
Part No	ECCN	Description
RFVAT0050A17	EAR99	0.01-50GHz Voltage Control Attenuator

Typical performance plots

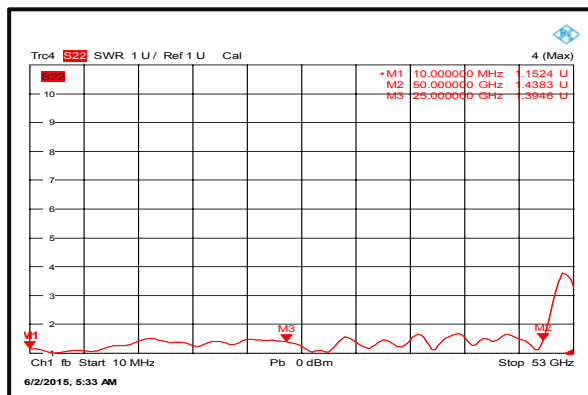
Insertion Loss



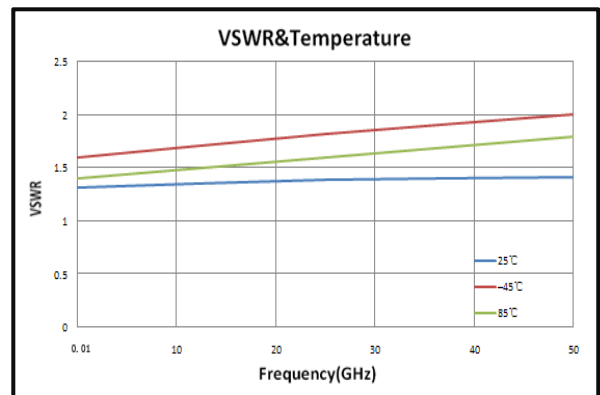
Input VSWR



Output VSWR

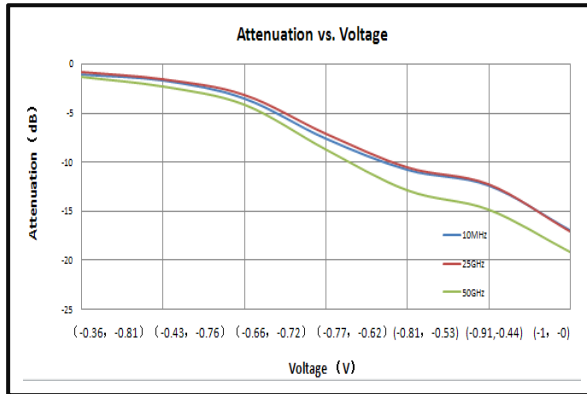


VSWR & Temperature

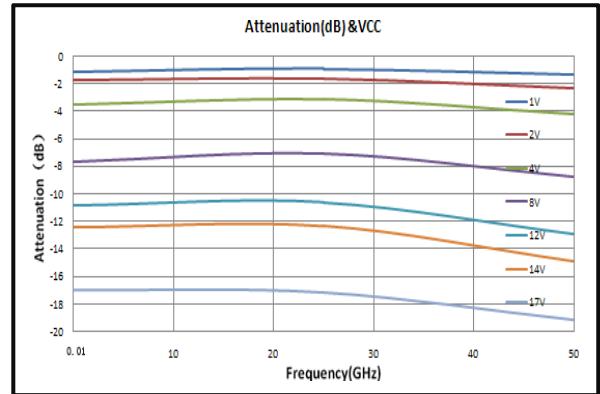




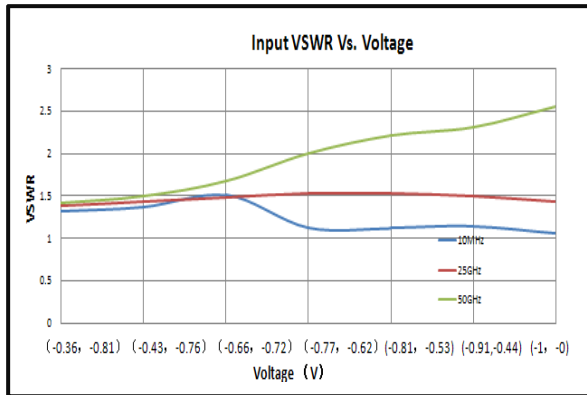
Attenuation vs. Control Voltage



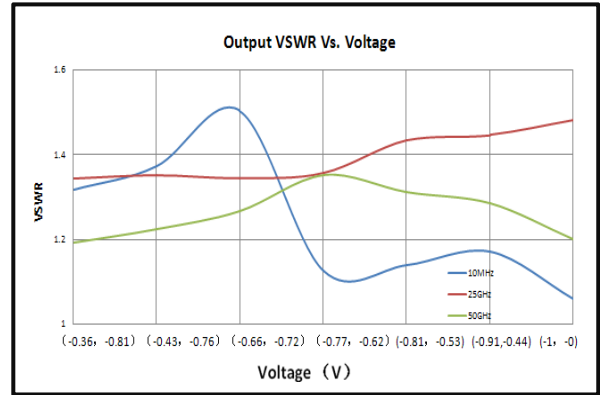
Attenuation vs. Frequency



Input VSWR vs. Voltage



Output VSWR vs. Voltage

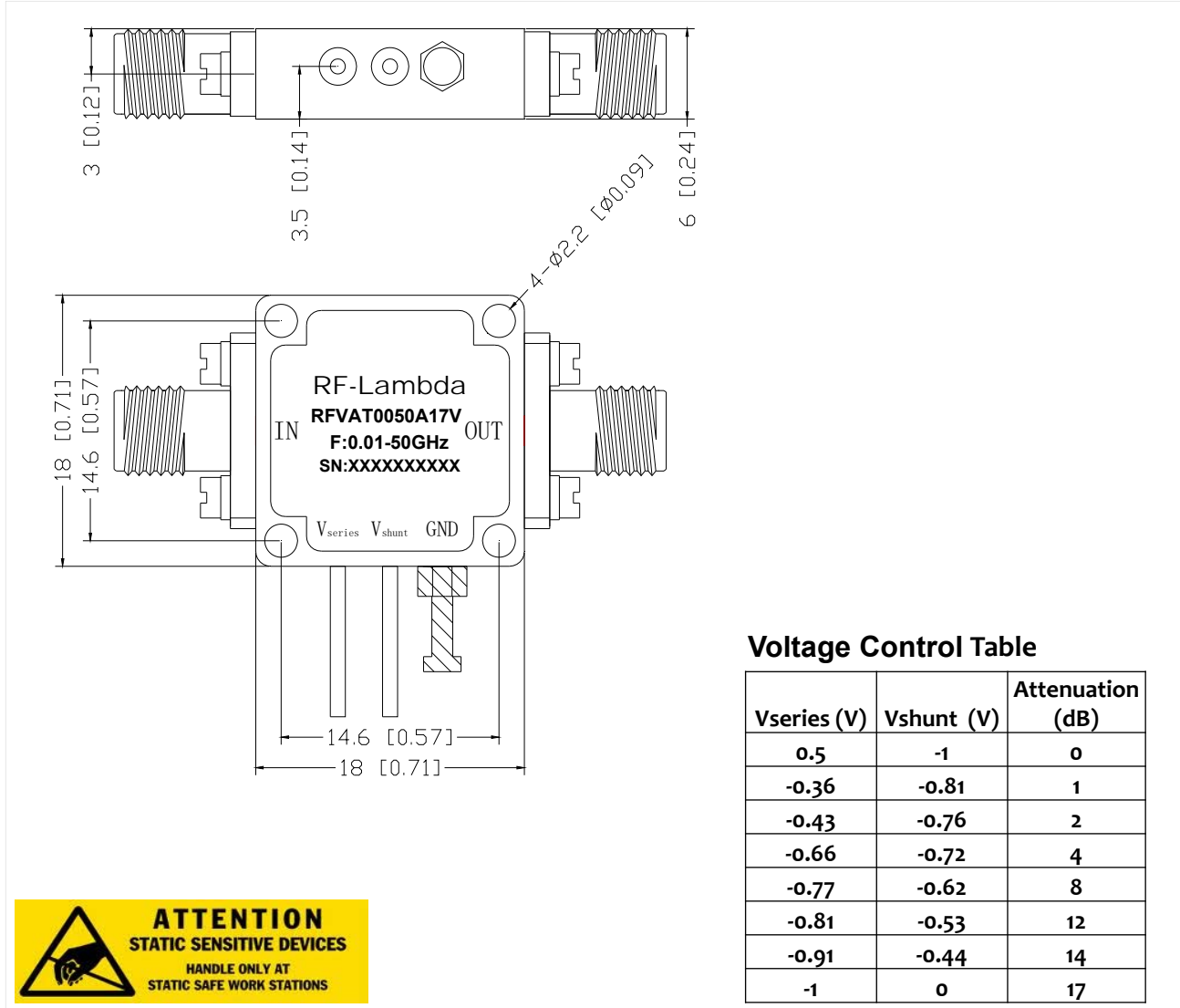


Absorptive Voltage Control Attenuator 0.01-50GHz



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

Absorptive Voltage Control Attenuator 0.01-50GHz

Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.