



Absorptive Voltage Control Attenuator 20 - 50GHz



Features

- Wide Band Operation 20-50GHz
- Wide Attenuation Range 30dB
- Series-Shunt Reflective Topology
- Single Control Operation
- Customization available upon request

Electrical Specifications, TA = +25 °C

Description	PN:RFVAT2050A30									
	Absorptive Voltage Attenuator									
Parameters	Min	Typ.	Max	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	20-27			27-35			35-50			GHz
Attenuation Range		30			35			40		dB
Insertion Loss		3.5	4		4	4.5		4.6	5	dB
Insertion Loss Temperature Coefficient		0.05			0.05			0.05		dB/ °C
Input VSWR		1.5	2		1.7	2		1.7	2	:1
Output VSWR		1.5	2		1.7	2		1.7	2	:1
0.1dB Compression Point (Po.1dB)		24			24			24		dBm
Input Ip3		32			32			32		dBm
Control Voltage	-3		0	-3		0	-3		0	V
Weight	0.35									Ounces
Impedance	50									Ω
current	30									mA
Input / Output Connectors	2.4mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									

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Absolute Maximum Ratings

Control Voltage (Vctrl)	-5-0V
RF Input power	+24dBm

Ordering Information

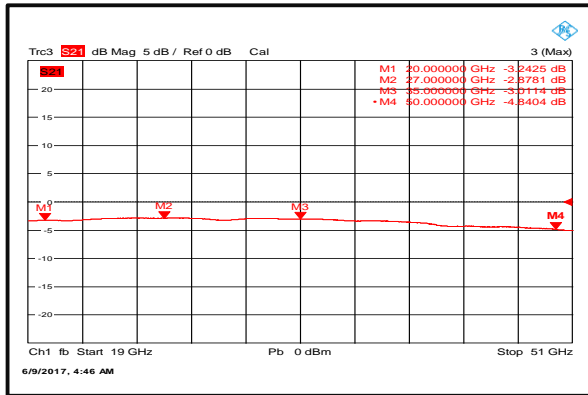
Part No.	ECCN	Description
RFVAT2050A30	EAR99	20-50GHz Voltage Control Attenuator

Environmental Specifications

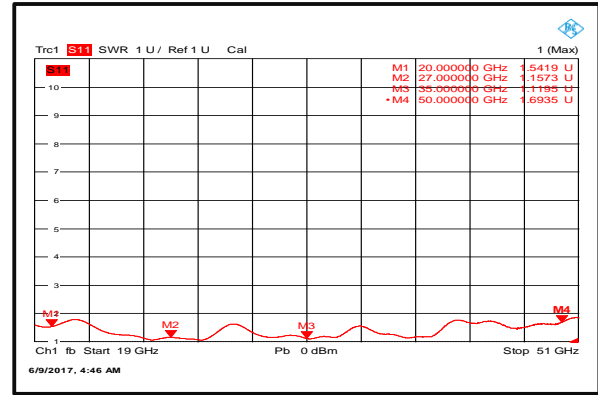
Operational Temperature (°C)	-45°C~+85°C
Storage Temperature (°C)	-55°C~+125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Typical Performance Plots

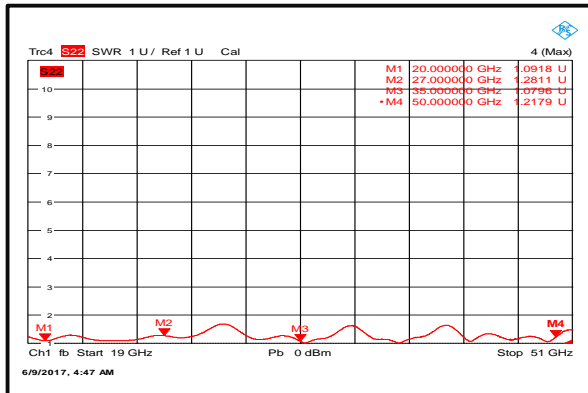
Insertion Loss @+25°C



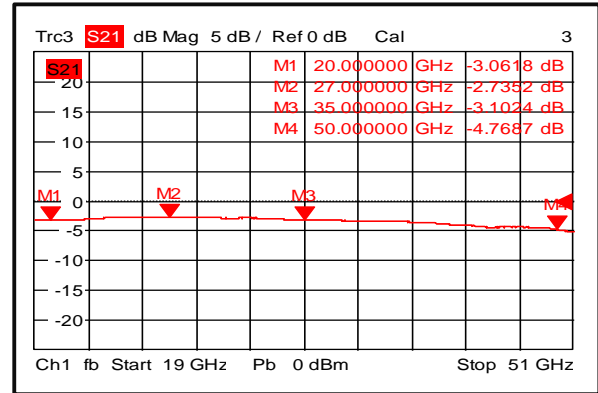
Input VSWR @+25°C



Output VSWR @+25°C

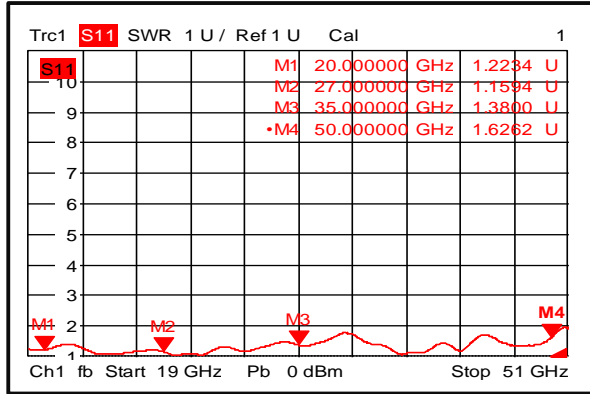


Insertion Loss @-45°C

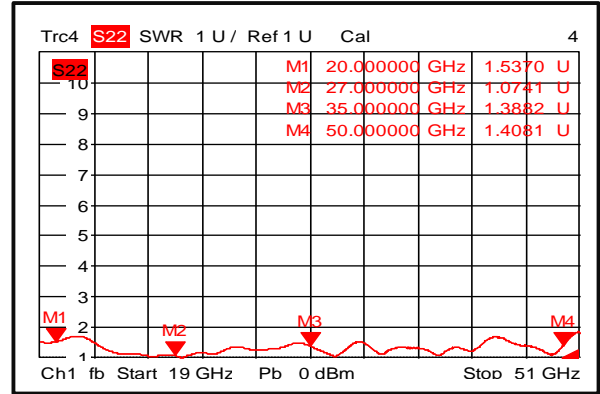




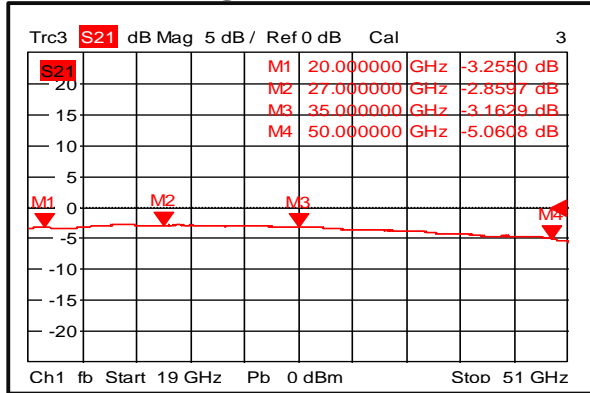
Input VSWR @-45°C



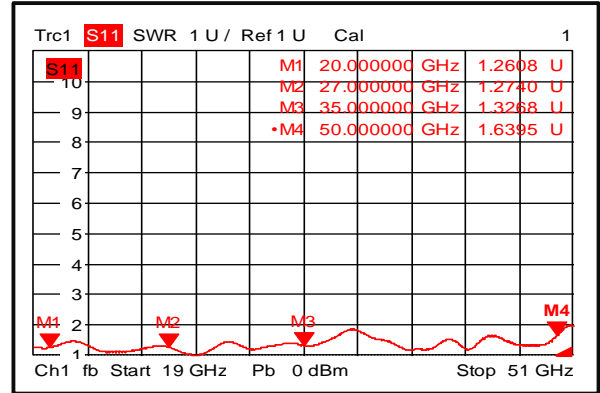
Output VSWR @-45°C



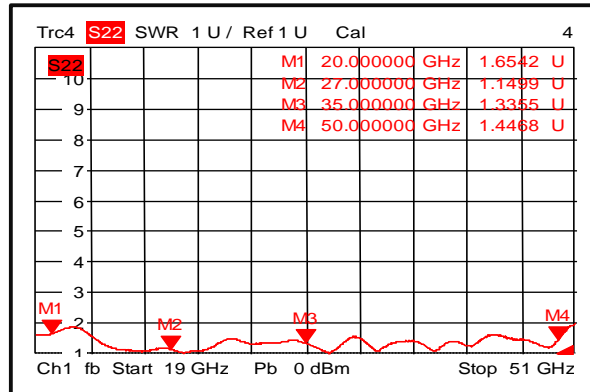
Insertion Loss @+85°C



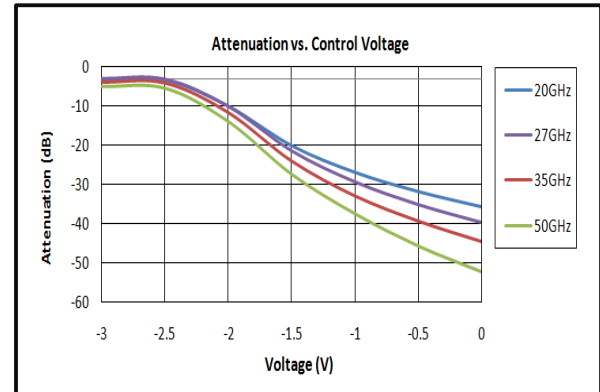
Input VSWR @+85°C



Output VSWR @+85°C



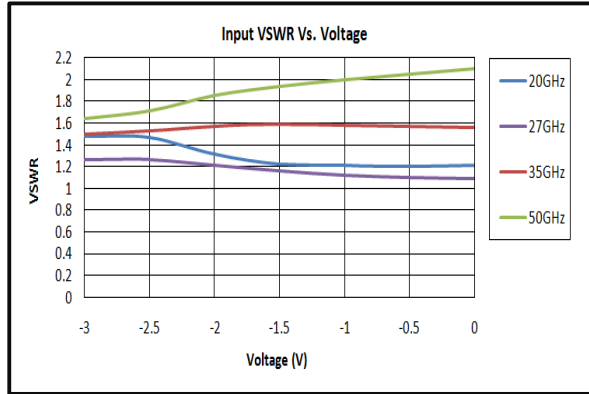
Attenuation vs. Control Voltage



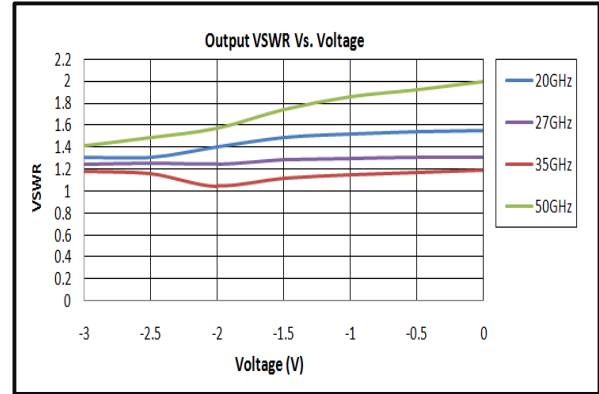
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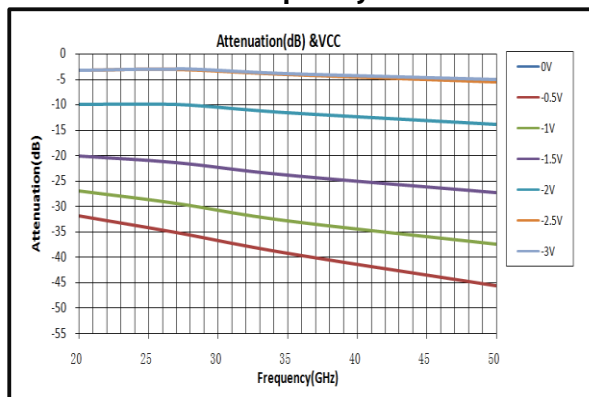
Input VSWR vs. Voltage



Output VSWR vs. Voltage



Attenuation vs. Frequency





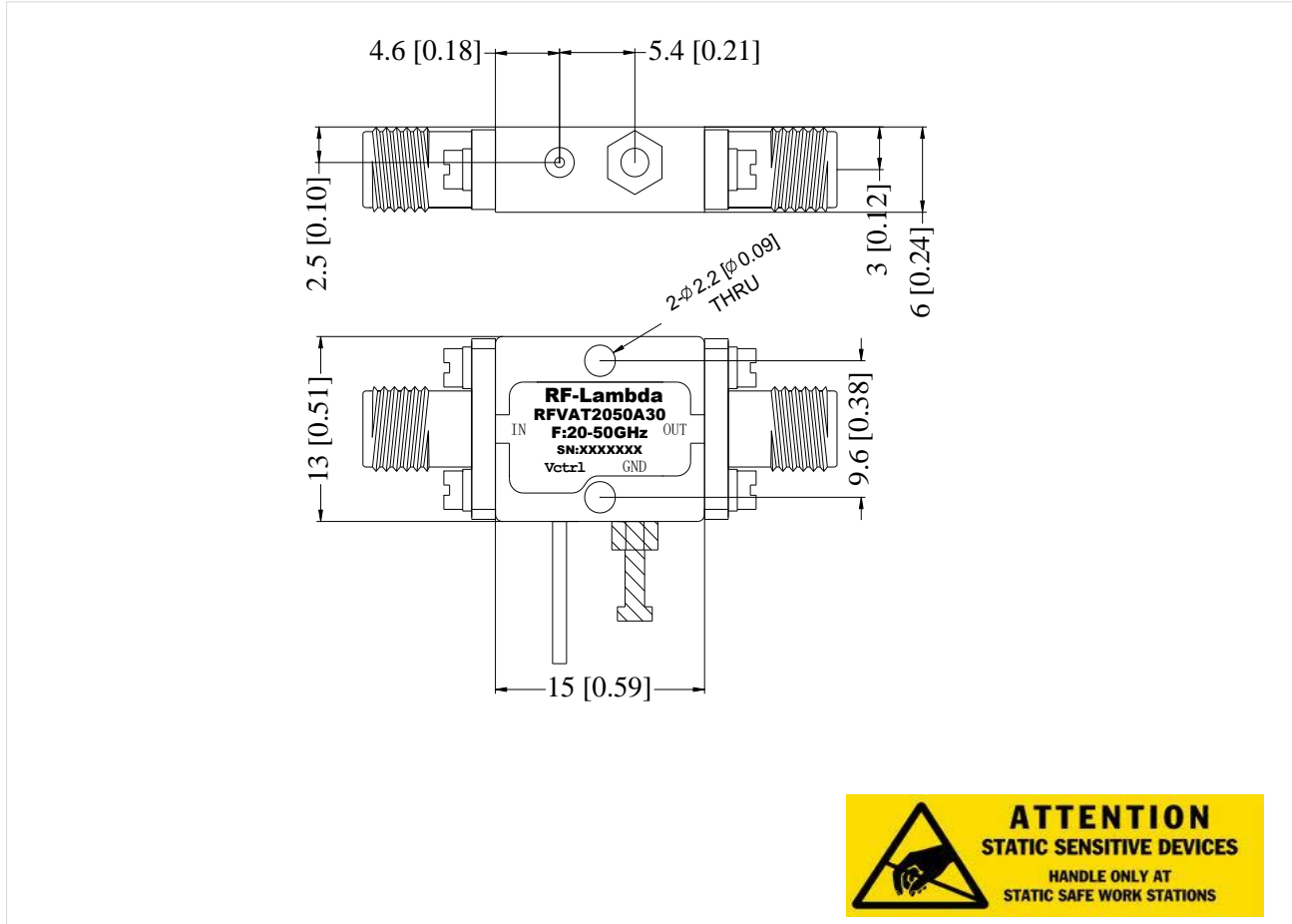
RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFVAT2050A30

Outline Drawing:

All Dimensions in mm [inches]



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