



Absorptive Voltage Control Attenuator 200 – 500MHz



Features

- Wide Band Operation 200-500MHz
- Wide Attenuation Range 30dB
- Absorptive Topology
- Single Control Operation
- Customization available upon request

Typical Applications

- Wireless Infrastructure
- RF Microwave & VSAT
- Military & Aerospace

Electrical Specifications, $T_A = +25\text{ }^\circ\text{C}$

Description	PN: RFVAT2M5MA30			
	Absorptive Voltage Attenuator			
Parameters	Min	Typ.	Max	Units
Frequency Range	200-500			MHz
Attenuation Range		30		dB
Insertion Loss		1.8	2.5	dB
Insertion Loss Temperature Coefficient		0.01		dB/°C
Input VSWR		1.5	1.8	:1
Output VSWR		1.5	1.8	:1
0.1dB Compression Point (Po.1dB)		30		dBm
Input Ip3		45		dBm
Switching Speed			2.5	us
Control Voltage	0	10		V
Weight	0.71			ounces
Impedance	50			Ω
current	20			mA
Connectors	SMA-Female			
Finish	Gold plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

Absorptive Voltage Control Attenuator 200 – 500MHz



Absolute Maximum Ratings

Control Voltage	0V~ 15V
RF Input Power	+33dBm

Ordering Information

Part No	ECCN	Description
RFVAT2M5MA30	EAR99	200-500MHz Voltage Control Attenuator

Environmental Specifications and Test Standards

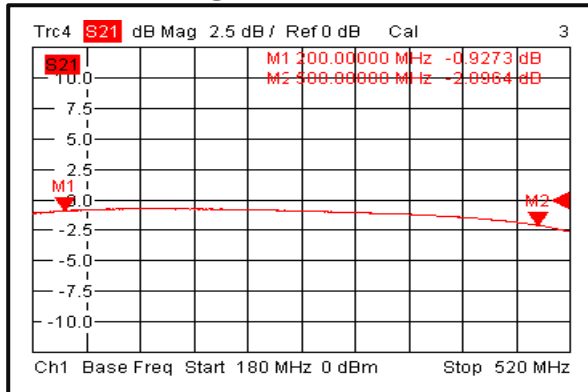
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

Absorptive Voltage Control Attenuator 200 – 500MHZ

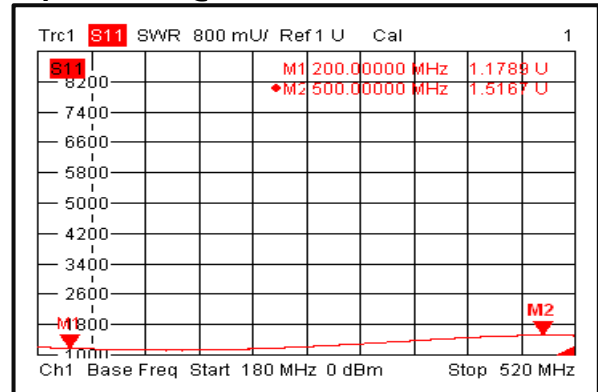


Typical Performance Plots

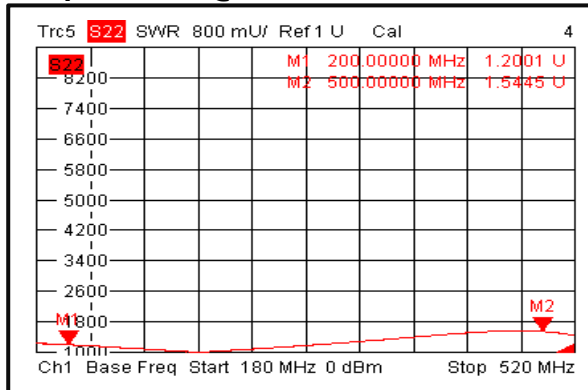
Insertion Loss@+25°C



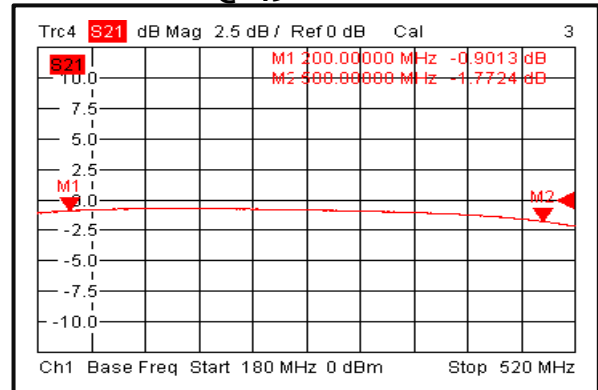
Input VSWR @+25°C



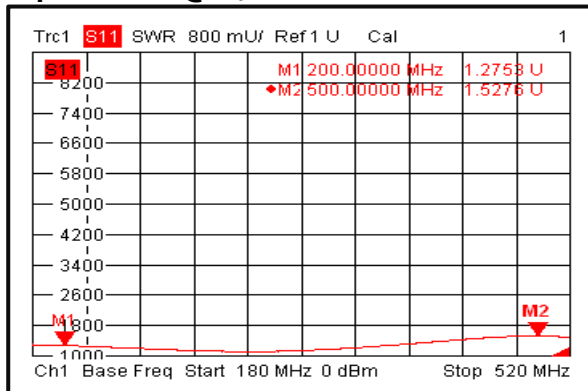
Output VSWR @+25°C



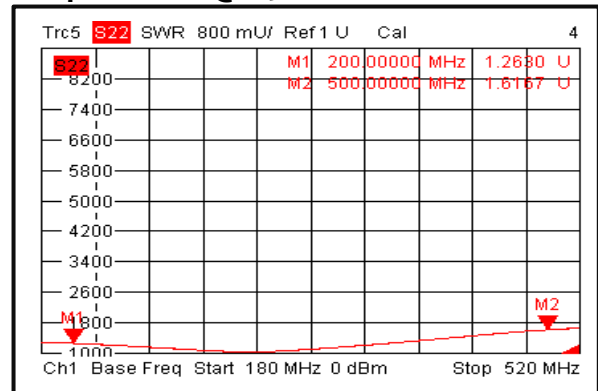
Insertion Loss @-45°C



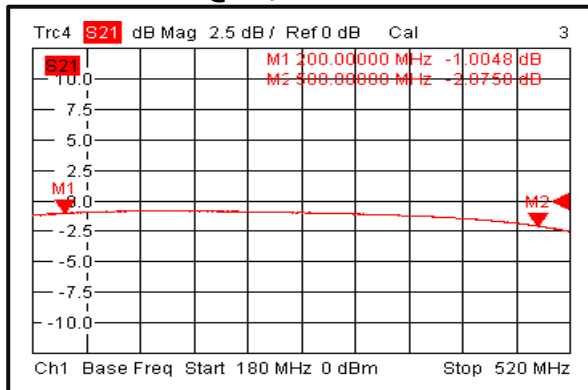
Input VSWR @-45°C



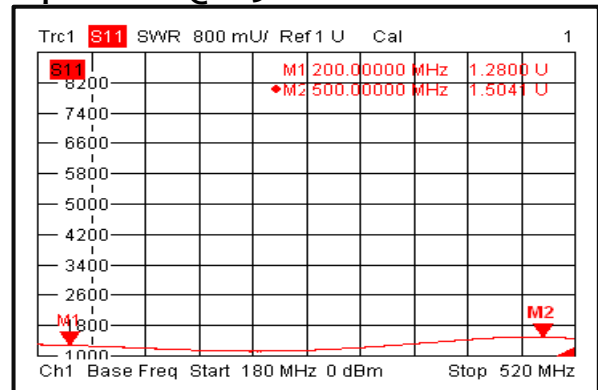
Output VSWR @-45°C



Insertion Loss@+85°C



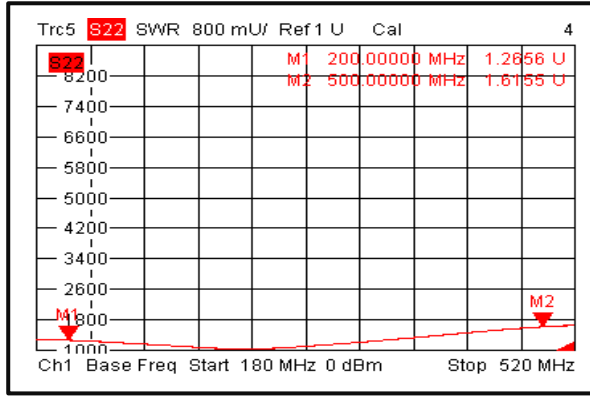
Input VSWR @+85°C



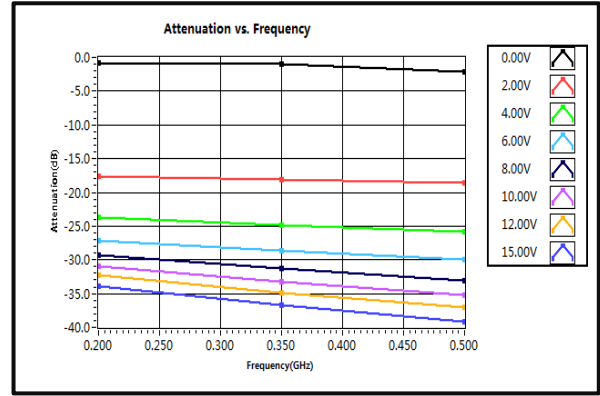
Absorptive Voltage Control Attenuator 200 – 500MHz



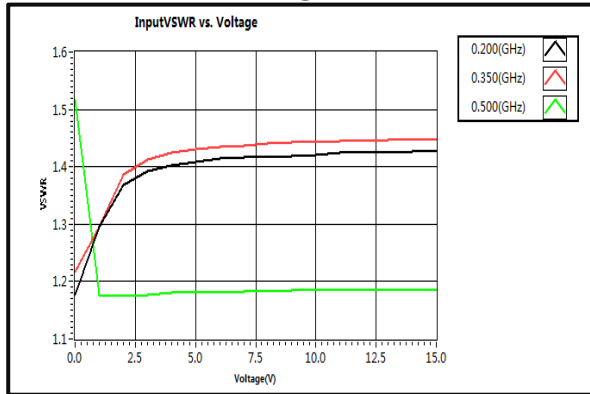
Output VSWR @+85°C



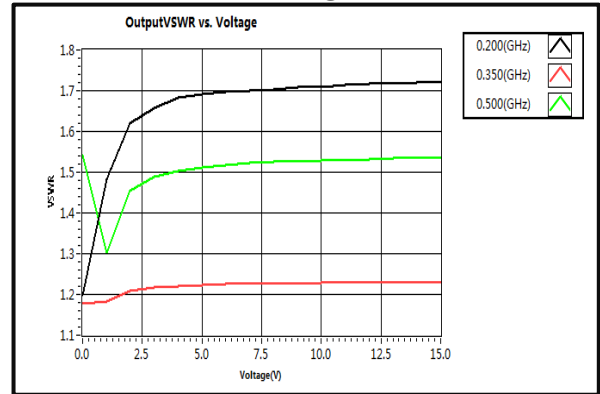
Attenuation vs. Frequency



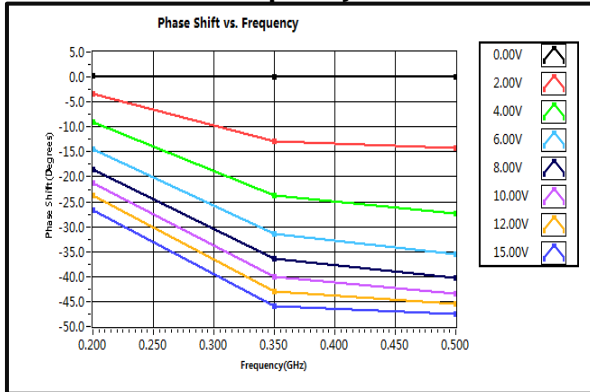
Input VSWR vs. Voltage



Output VSWR vs. Voltage



Phase Shift vs. Frequency



Absorptive Voltage Control Attenuator 200 – 500MHz



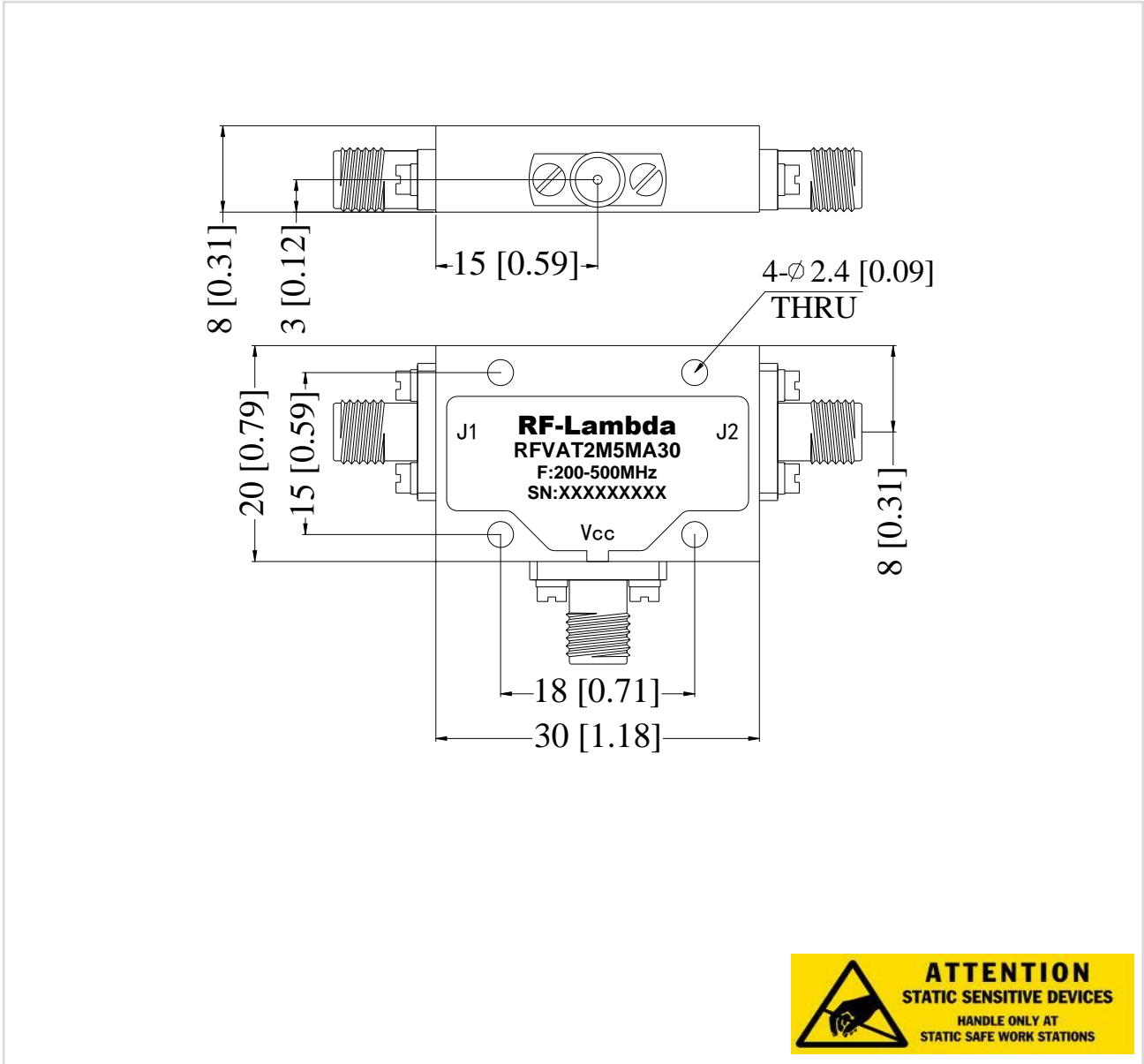
RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFVAT2M5MA30

Outline Drawing:

All Dimensions in mm [inches]



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.

Absorptive Voltage Control Attenuator 200 – 500MHz