



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFVAT2M4MA30W2

Hermetically Sealed 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: RFVAT2M4MA30W2			
	Absorptive Voltage Attenuator			
Parameter	Min	Typ.	Max	Units
Frequency Range	200-500			MHz
Attenuation Range	30	35		dB
Insertion Loss		1.8	2.5	dB
Insertion Loss Temperature Coefficient		0.01		dB/°C
Input VSWR		1.5	2.1	: 1
Output VSWR		1.5	2.1	: 1
Input power			2	W
Input Ip3		45		dBm
Switching Speed			2.5	us
Control Voltage	0	10		V
Weight	0.71			ounces
Impedance	50			Ω
Current	100			mA
Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Laser Welded)			

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Absolute Maximum Ratings

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

Ordering Information

Part No.	ECCN	Description
RFVAT2M4MA30W2	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	MIL-STD-883	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)		MIL-STD-883 (For Hermetically Sealed Units)



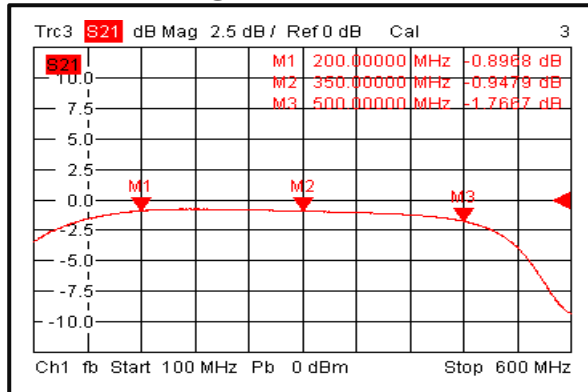
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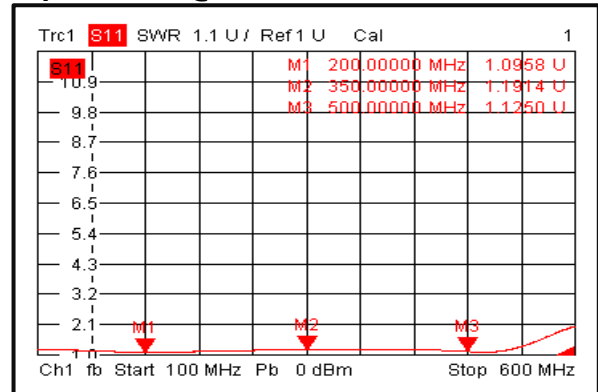
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Typical Performance Plots

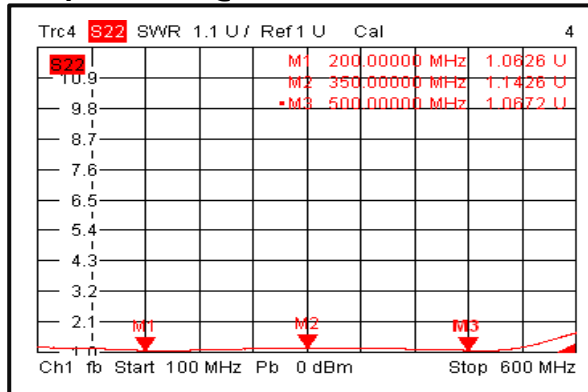
Insertion Loss@+25°C



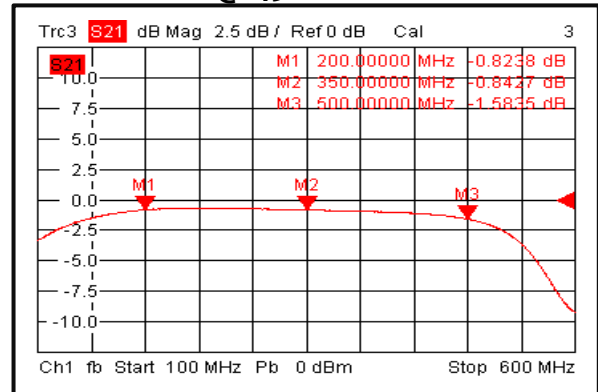
Input VSWR @+25°C



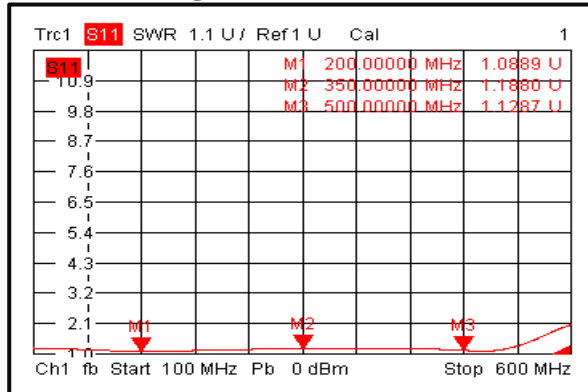
Output VSWR @+25°C



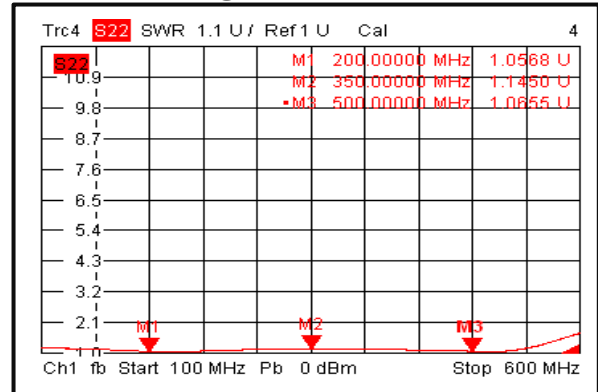
Insertion Loss @-45°C



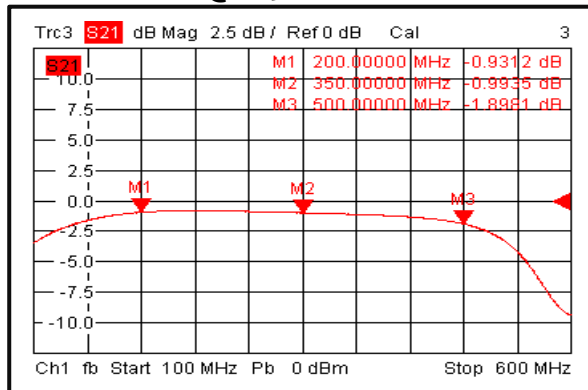
Input VSWR @-45°C



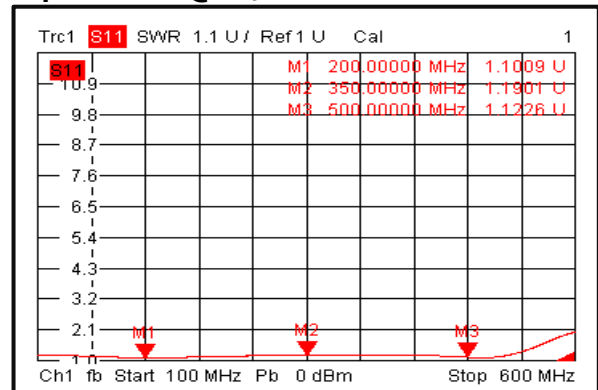
Output VSWR @-45°C



Insertion Loss@+85°C



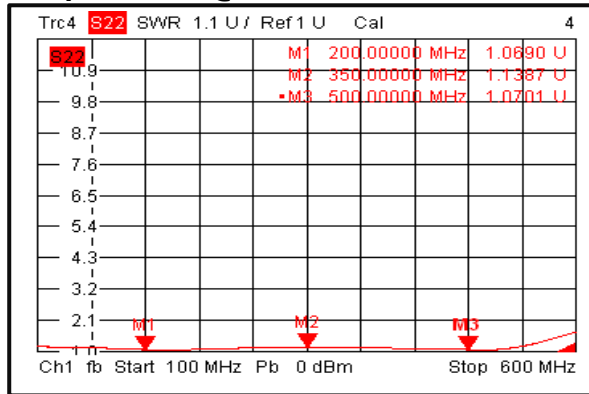
Input VSWR @+85°C



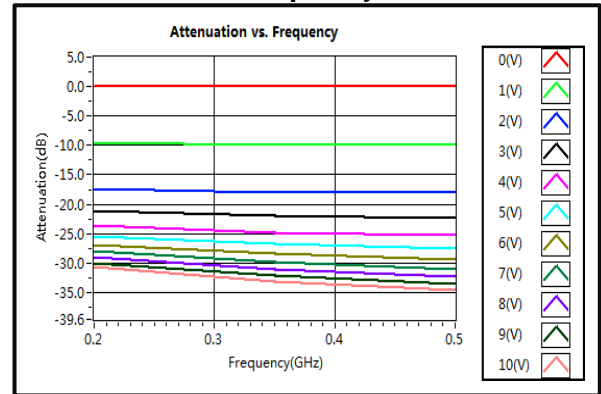
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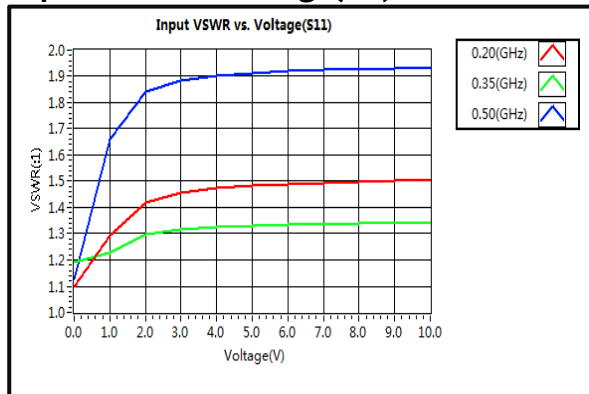
Output VSWR @+85°C



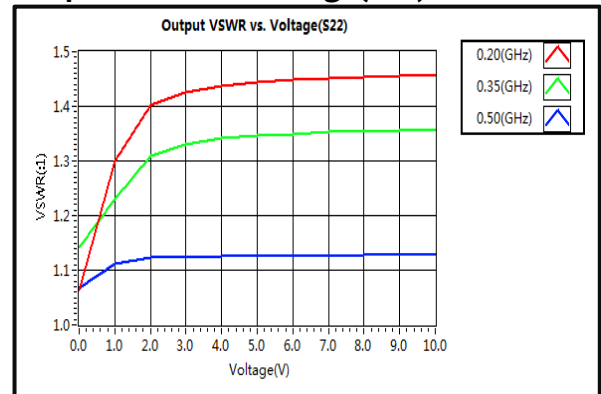
Attenuation vs. Frequency



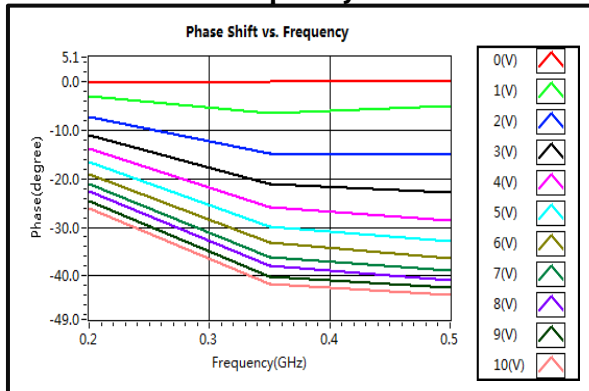
Input VSWR vs. Voltage(S11)



Output VSWR vs. Voltage(S22)



Phase Shift vs. Frequency





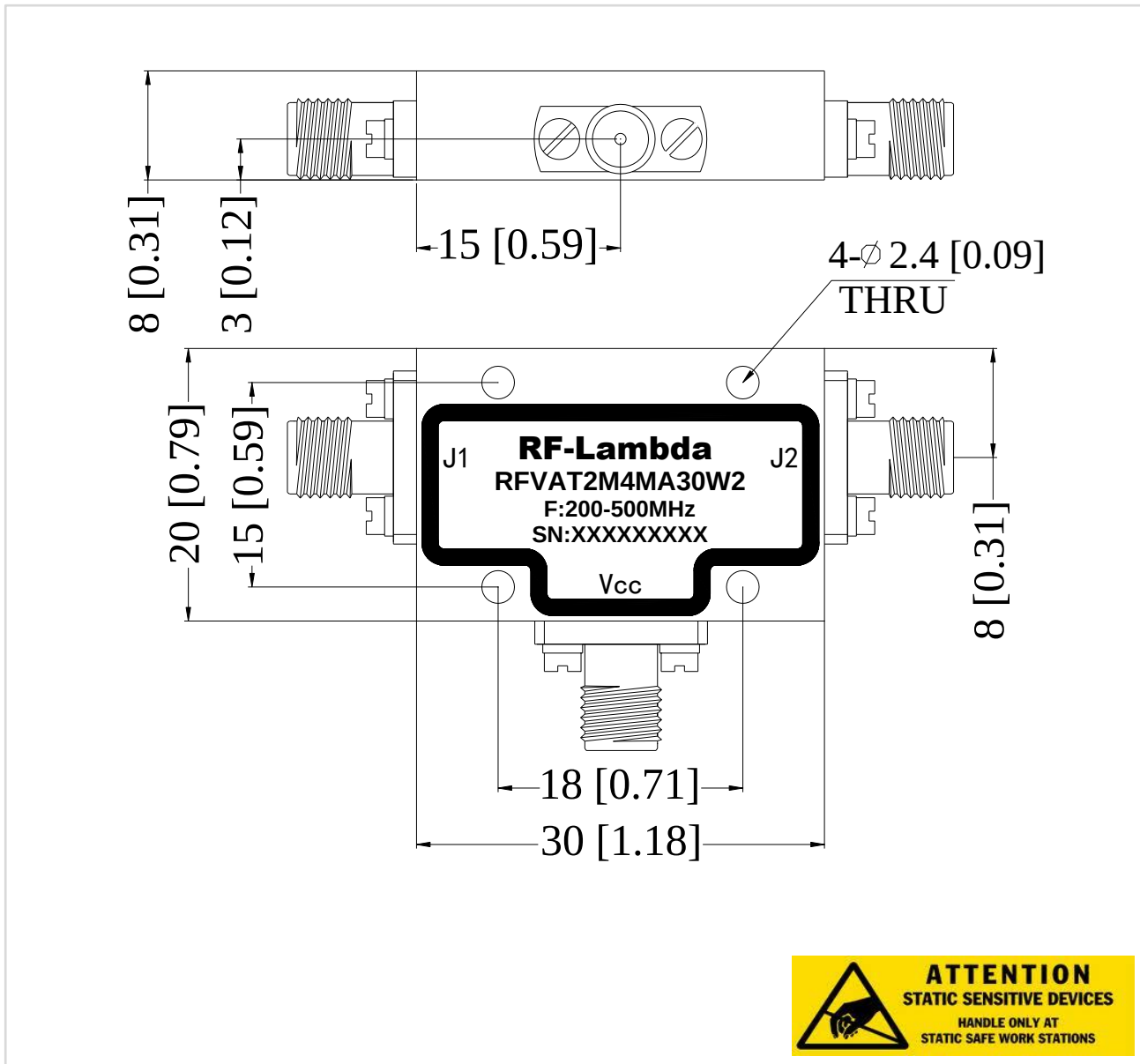
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Outline Drawing:

All Dimensions in mm [inches]



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