

Absorptive Voltage Control Attenuator 12GHz-26.5GHz



Note: Photo is for illustration purposes only.
Please refer to outline drawing.

Features

- Absorptive Voltage Control Attenuator
- Wide Attenuation Range 30dB Typical
- Insertion Loss 2.2dB Typical
- Absorptive Topology
- Single Control Operation

Product Description

RFVAT1226A30-M is an absorptive voltage controlled attenuator with a frequency range of 12 to 26.5GHz.

The power input rating of this attenuator is 30dBm. The Insertion Loss is 2.2dB with a typical attenuation range of 30dB.

The working temperature of this product is between -40°C and +85°C.

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications (T_A=+25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		12 – 26.5		GHz
Attenuation Range	30			dB
Insertion Loss		2.2	3.0	dB
Insertion Loss Temperature Coefficient		0.01		dB/ °C
Input VSWR @Insertion Loss state		1.6	2.0	: 1
Output VSWR @Insertion Loss state		1.6	2.0	: 1
0.1dB Compression Point (P0.1dB)		30		dBm
Input IP3		43		dBm
Switching Speed			2.5	us
Control Voltage	0	10		V
Current		40 Max.		mA
Weight		0.02 Max.		lbs.
Impedance		50		Ohms
Input / Output Connectors	SMA-Male (Input) – SMA-Male (Output)			
Package	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

Absolute Maximum Ratings

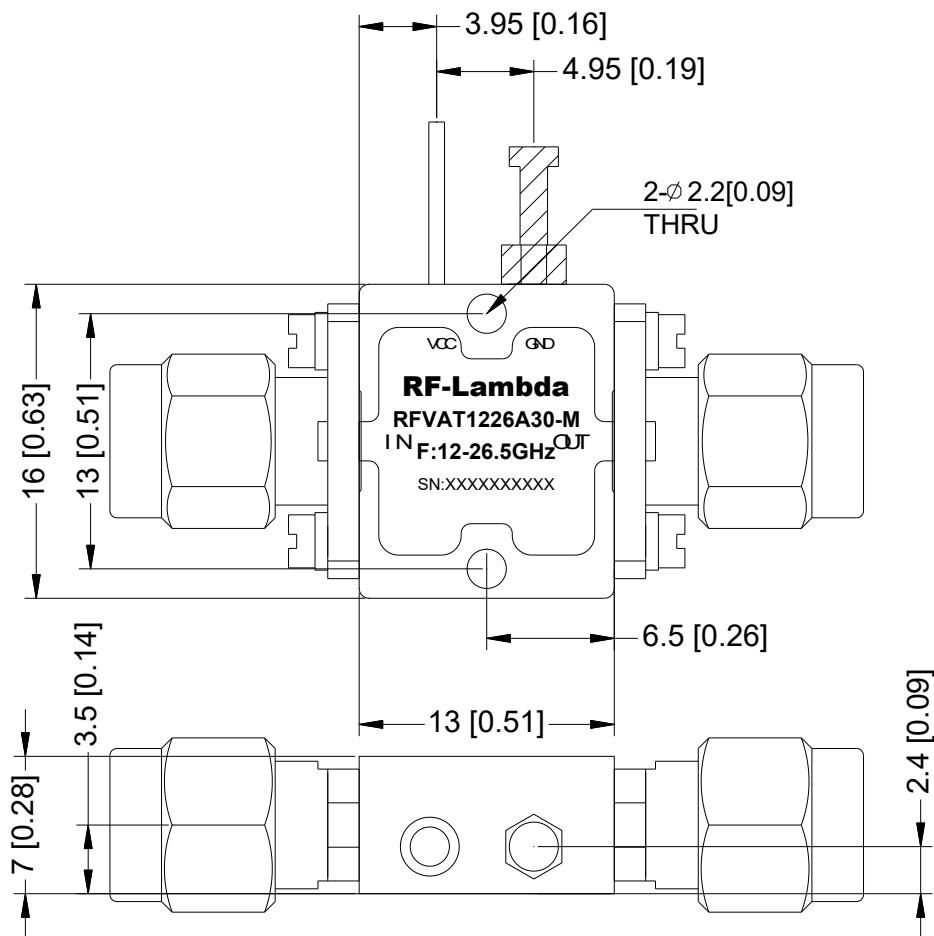
Parameter	Rating
Biasing	0 ~ 15V
RF Input Power	+30dBm

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High 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 (For Hermetically Sealed Units)

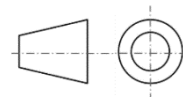
**For vibration testing details please see additional information section.

Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Housing Tolerances ± 0.1 [0.004] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFVAT1226A30-M	Standard	12GHz-26.5GHz Voltage Control Attenuator

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.