

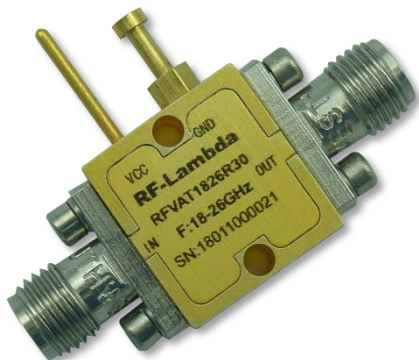


RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFVAT1826R30

Reflective Voltage Control Attenuator 18-26GHz



Features

- Wide Band Operation 18-26GHz
- Wide Attenuation Range 30dB
- Reflective Topology
- Single Voltage Control Operation
- Customization available upon request

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

Description	PN: RFVAT1826R30			
	Reflective Voltage Control Attenuator			
Parameters	Min	Typ	Max	Units
Frequency Range	18-26			GHz
Attenuation Range		30		dB
Insertion Loss		1.5	2.2	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Input VSWR		1.8	2	: 1
Output VSWR		1.8	2	: 1
Input Power			30	dBm
0.1dB Compression Point $P_{0.1dB}$		30		dBm
Input I_{p3}		43		dBm
Switching Speed			2.5	us
Control Voltage	0	10		V
Weight	0.35			ounces
Impedance	50			Ω
Bias Current	20			mA
Input / Output Connectors	SMA - Female			
Finish	Gold Plated			
Material	Copper			
Sealing	Hermetically Sealed (Optional)			

Reflective Voltage Control Attenuator 18-26GHz



Absolute Maximum Ratings

Control Voltage	0 ~ 13V
RF Input power	+30dBm

Ordering Information

Part No.	ECCN	Description
RFVAT1826R30	EAR99	18-26GHz 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)



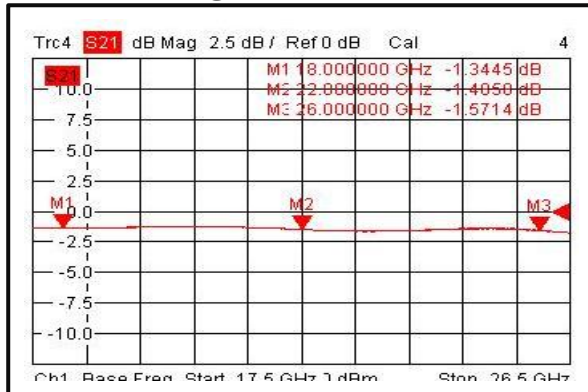
RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

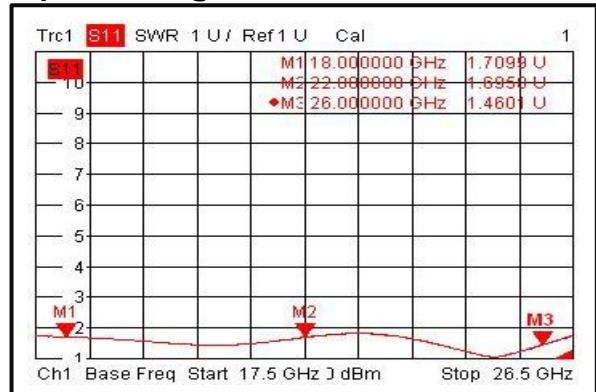
RFVAT1826R30

Typical Performance Plots

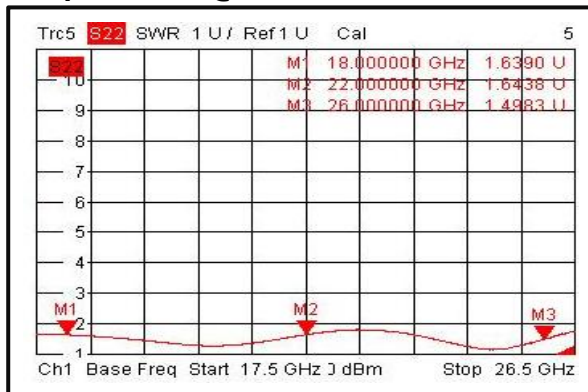
Insertion Loss@+25°C



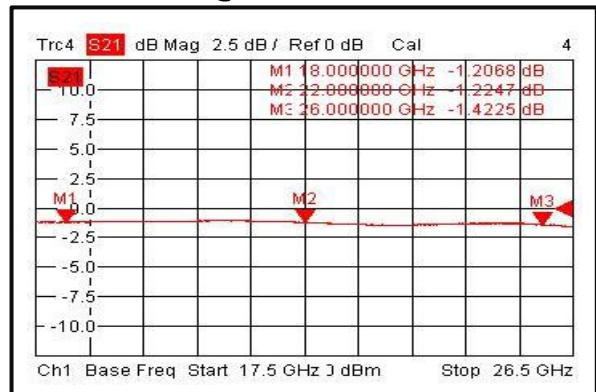
Input VSWR @+25°C



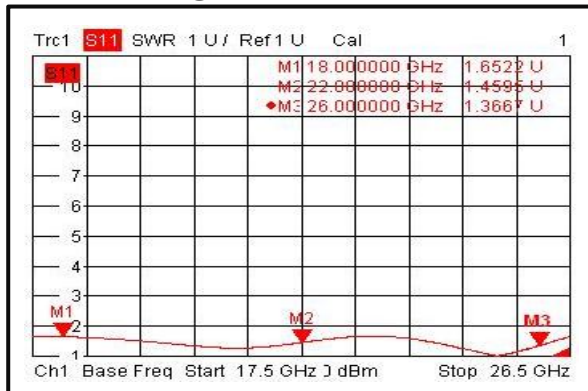
Output VSWR @+25°C



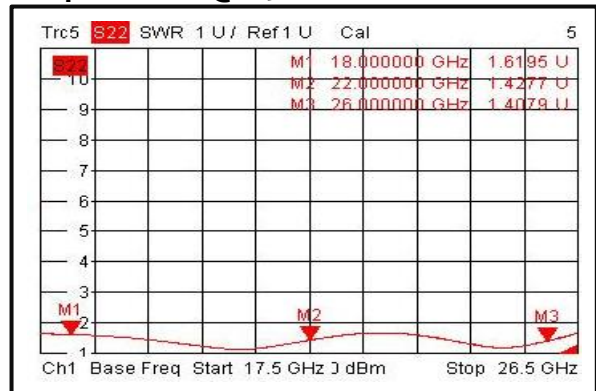
Insertion Loss @-45°C



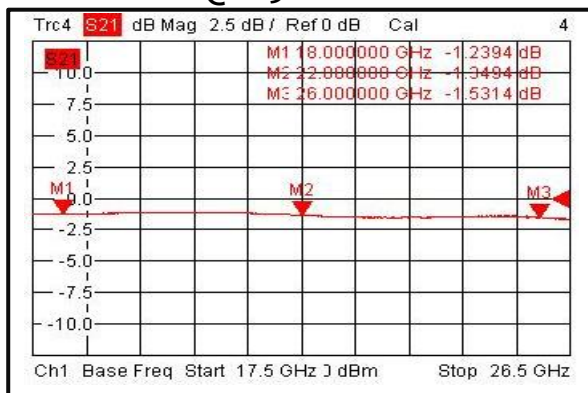
Input VSWR @-45°C



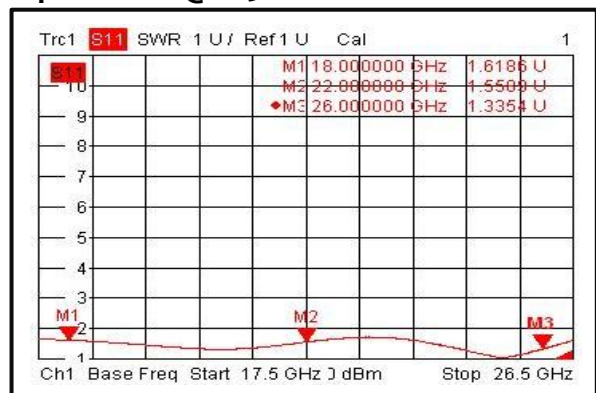
Output VSWR @-45°C



Insertion Loss@+85°C



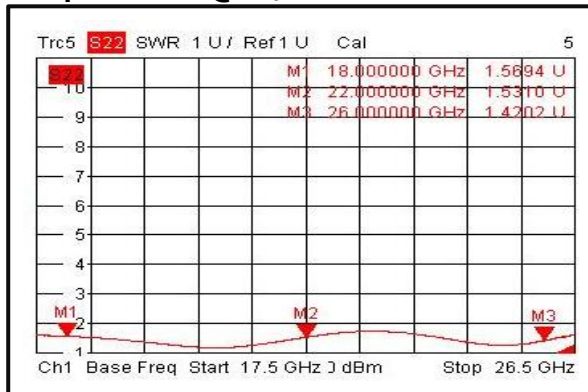
Input VSWR @+85°C



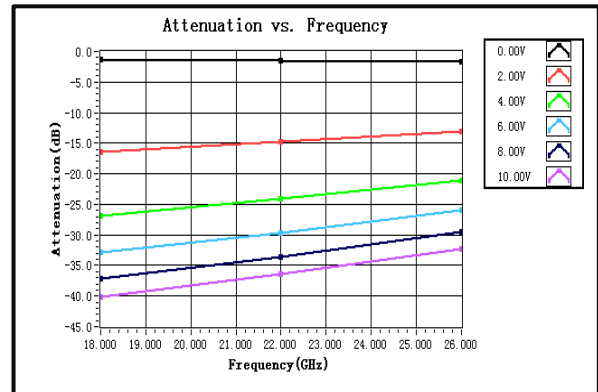
Reflective Voltage Control Attenuator 18-26GHz



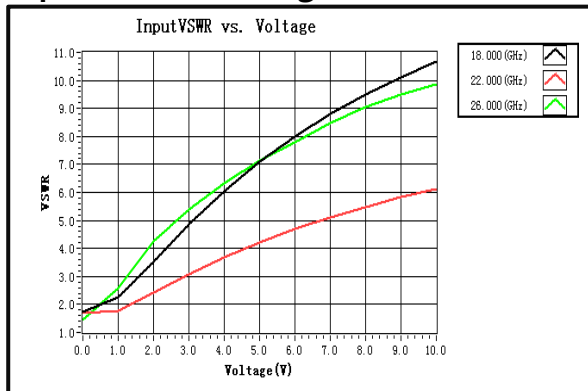
Output VSWR @+85°C



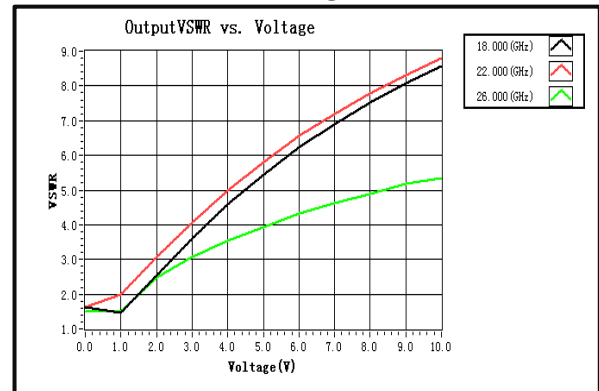
Attenuation vs. Frequency



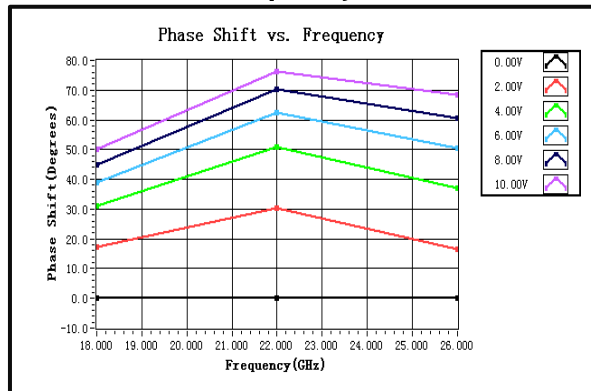
Input VSWR vs. Voltage



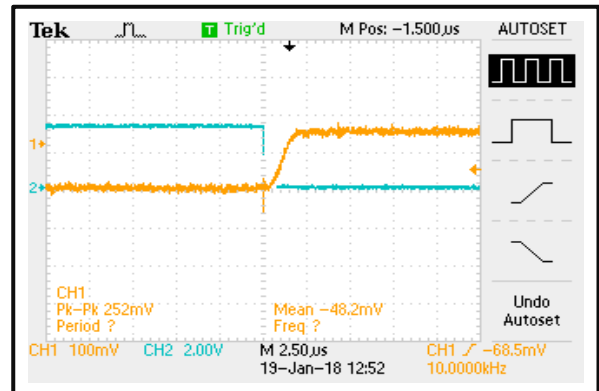
Output VSWR vs. Voltage



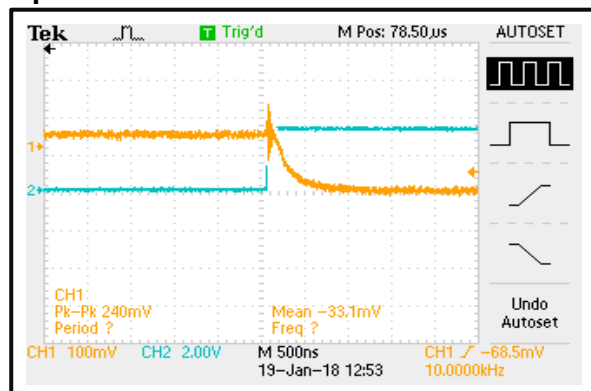
Phase Shift vs. Frequency



Speed



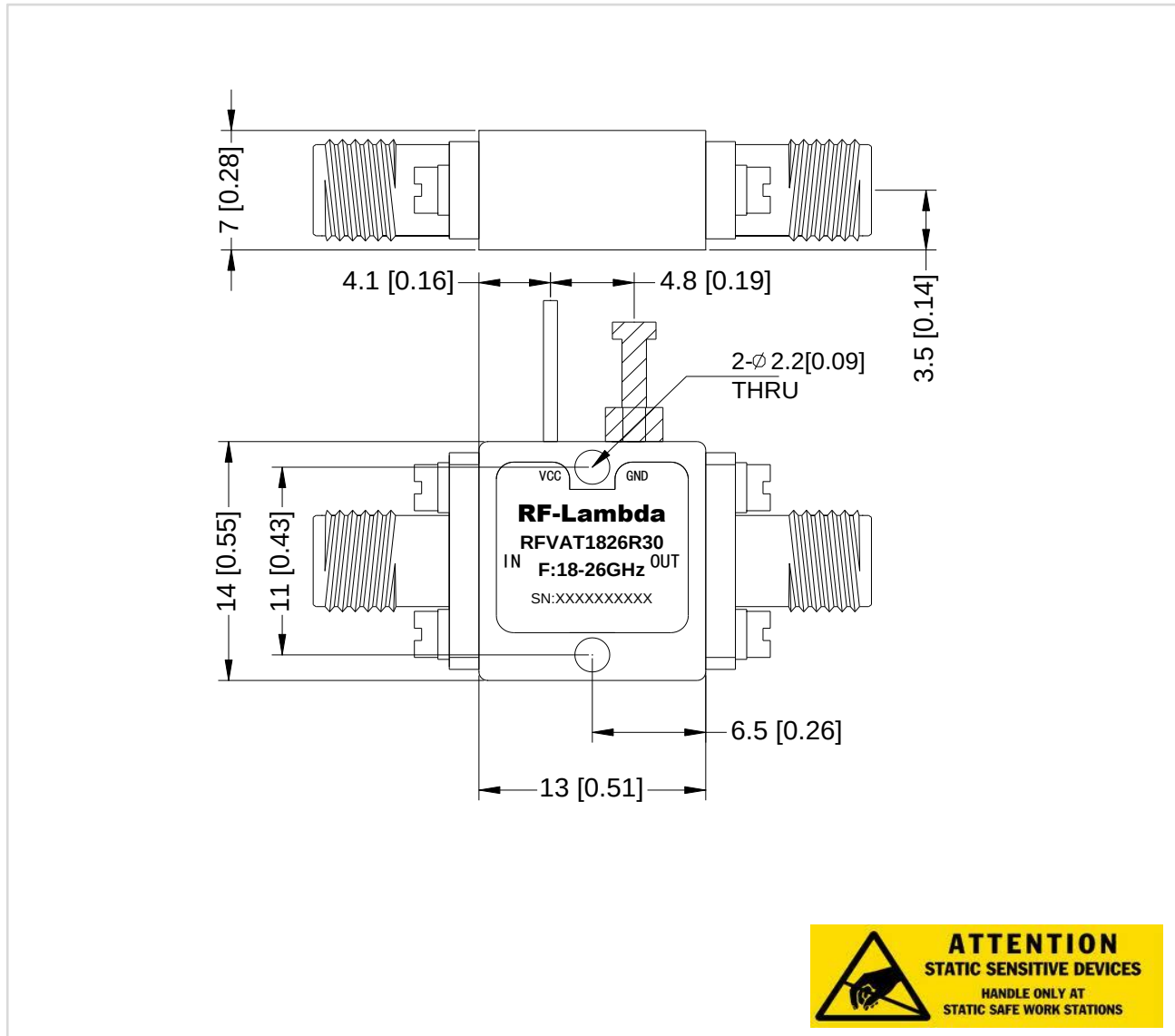
Speed





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.