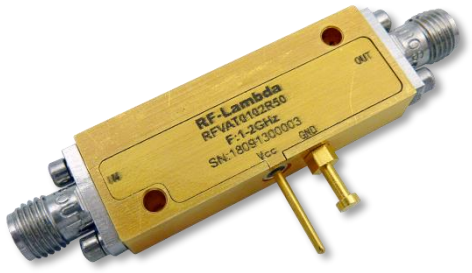
Reflective Voltage Control Attenuator
1 - 2GHz



RoHS Compliant

Features

- Wide Band Operation 1-2GHz
- Wide Attenuation Range 50dB
- Reflective Topology
- Singe Control Operation

Typical Applications

- Wireless Infrastructure
- Military and Aerospace
- Test and Measurement

Electrical Specifications, TA = +25° C

Description	PN: RFVAT0102R50			
	Reflective Voltage Attenuator			
Parameters	Min	Typ.	Max	Units
Frequency Range	1-2			GHz
Attenuation Range	50			dB
Insertion Loss		0.7	0.8	dB
Insertion Loss Temperature Coefficient		0.003		dB/°C
Input VSWR		1.2	1.4	: 1
Output VSWR		1.2	1.4	: 1
0.1dB Compression Point(P0.1dB)			30	dBm
Input Ip3		45		dBm
Switching Speed		10		us
Control Voltage	DC-10			V
Weight	0.35			Ounces
Impedance	50			Ω
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			

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Absolute Maximum Ratings

Control Voltage	DC ~ 13V
RF Input power	+32dBm

Ordering Information

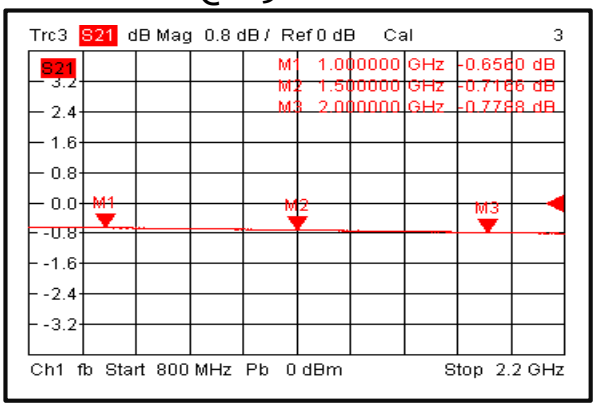
Part No.	ECCN	Description
RFVAT0102R50	EAR99	1-2GHz Voltage Control Attenuator

Environmental Specifications and Test Standards

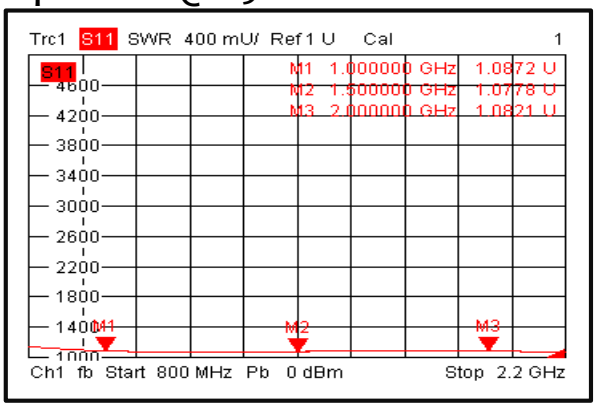
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45℃~+85℃
Storage Temperature		-50℃~+125℃
Thermal Shock		1 Hour@ -45℃ → 1 Hour @ +85℃ (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85℃ for 72 Hours
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)

Typical Performance Plots

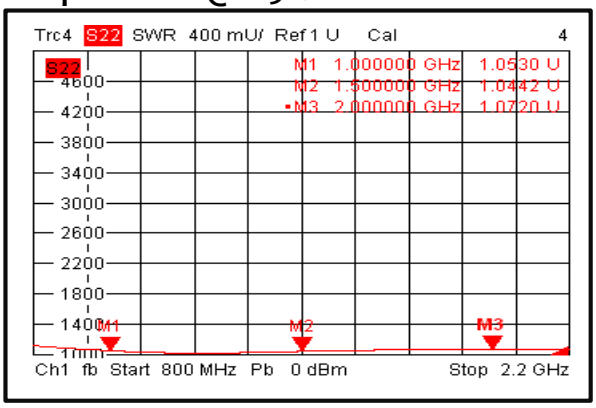
Insertion Loss@+25℃



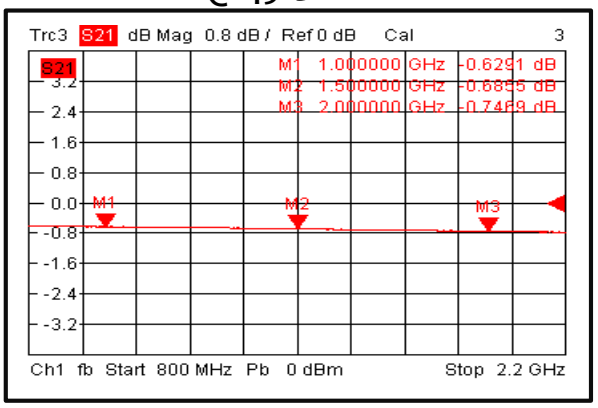
Input VSWR @+25℃



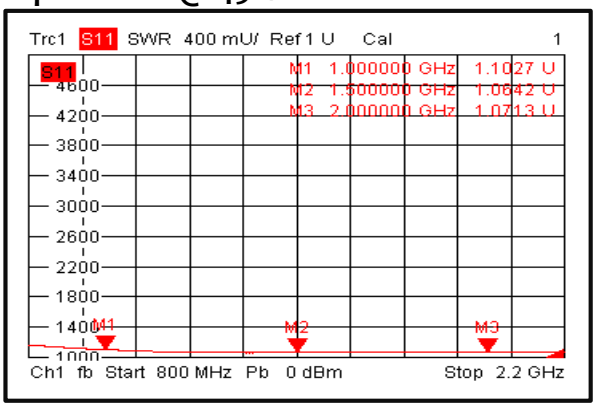
Output VSWR @+25℃



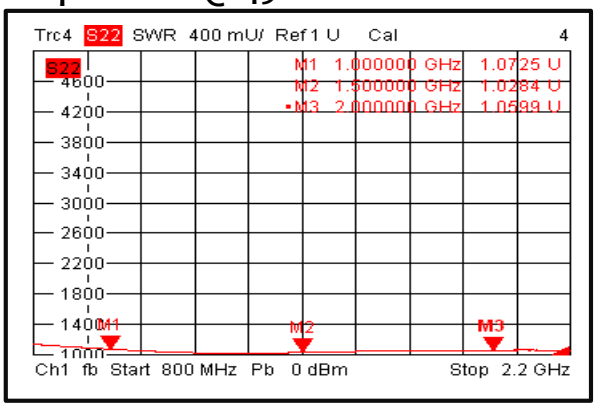
Insertion Loss @-45℃



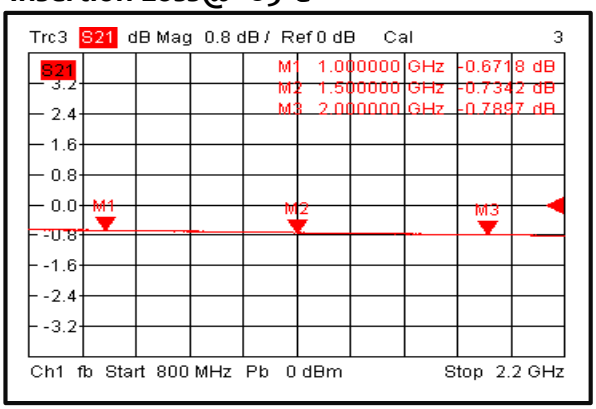
Input VSWR @-45℃



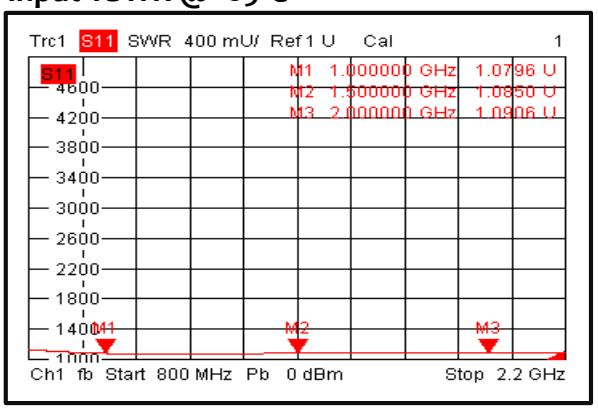
Output VSWR @-45℃



Insertion Loss@+85℃



Input VSWR @+85℃



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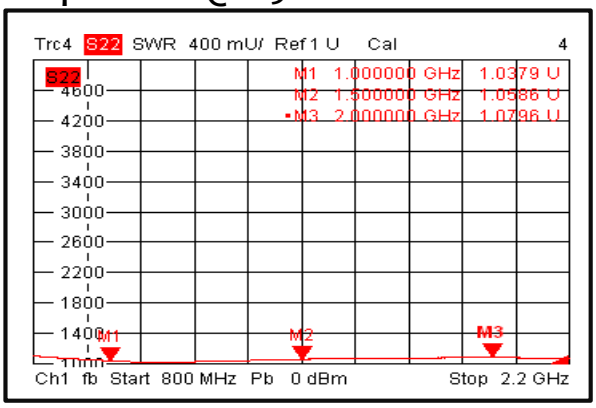
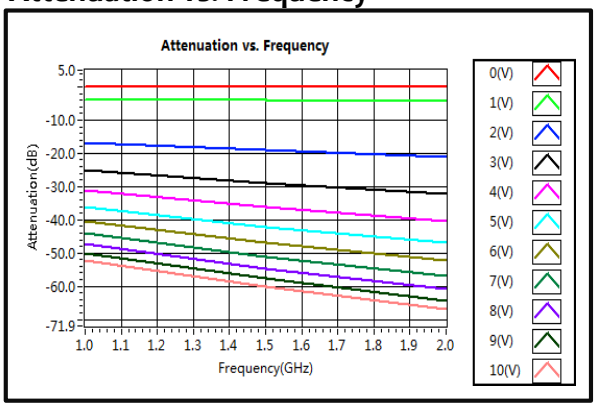
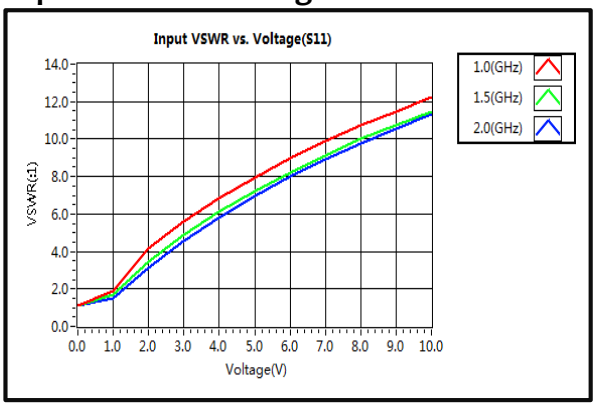
Output VSWR @+85℃



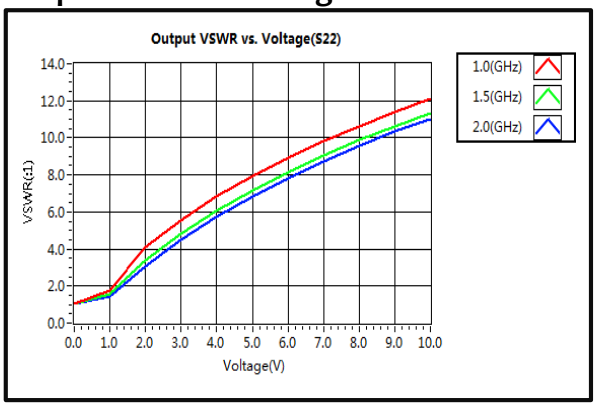
Attenuation vs. Frequency



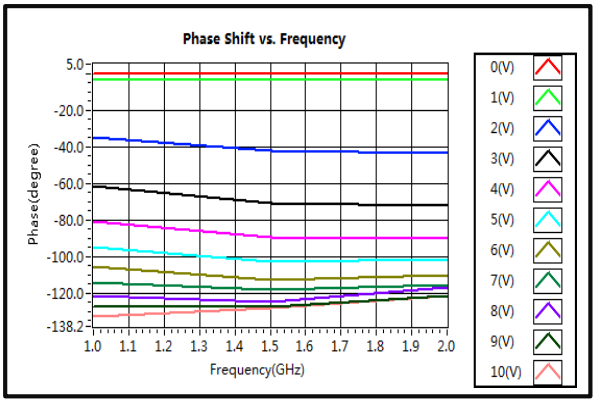
Input VSWR vs. Voltage



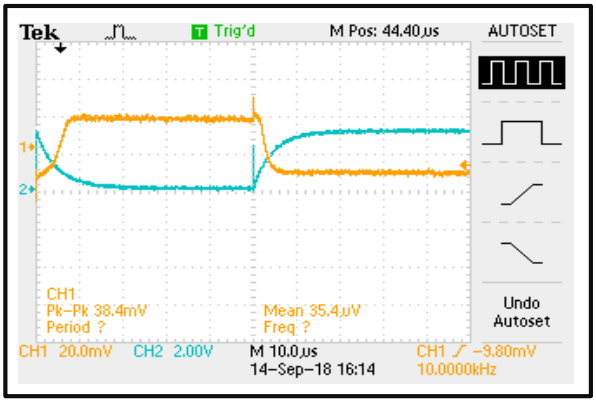
Output VSWR vs. Voltage



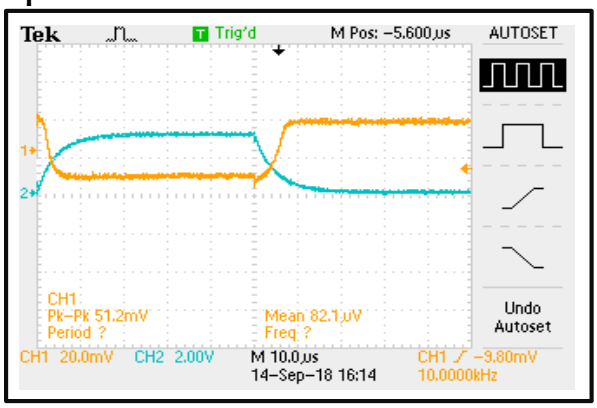
Phase Shift vs. Frequency



Speed



Speed



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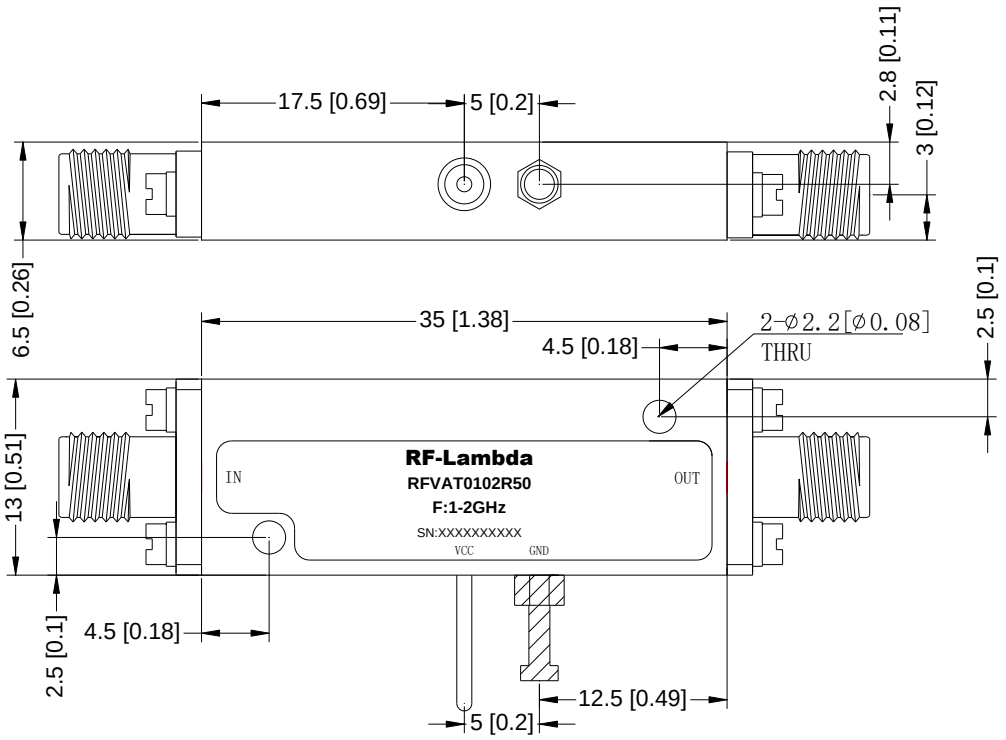
Outline Drawing:

All Dimensions in mm [inches]



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