Coaxial Cavity Notch Filter
2.225GHz–2.375GHz

Product Description

RNFL2225K is a coaxial cavity notch filter with a frequency range of 2.225 to 2.375GHz.

The power handling is 50W. The insertion loss is 3.0dB with a typical rejection of 50dB.

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

Features

- High Rejection
- Low Insertion Loss
- Excellent Temperature Stability
- Compact Size

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, TA = +25°C

Parameter	Min	Typ	Max	Units
Band Stop frequency		2.225-2.375		GHz
Pass Band Frequency		DC-2.15GHz & 2.45-3.5GHz		GHz
Pass Band Insertion Loss			3.0	dB
VSWR			1.8	:1
Band Stop Rejection	50			dB
Power			50	W
Weight		0.55 Max.		lbs
Impedance		50		Ω
Input / Output Connectors		SMA-Female(Input) – SMA-Female(Output)		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

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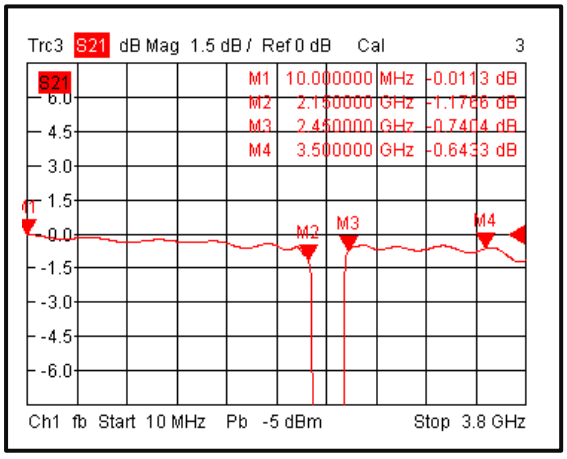
Environmental Specifications and Test Standards

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

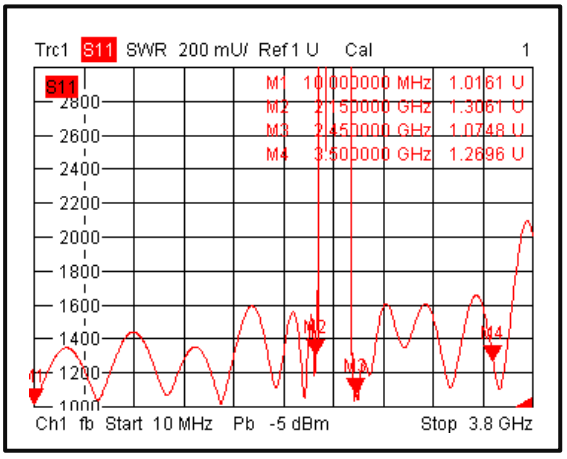
**For vibration testing details please see additional information section.

Typical Performance Plots

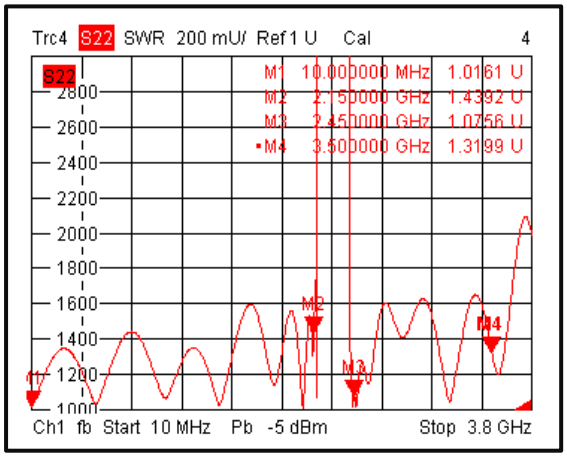
Insertion Loss



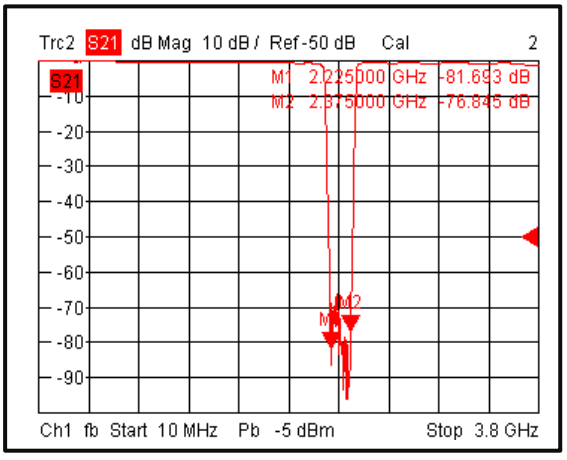
VSWR



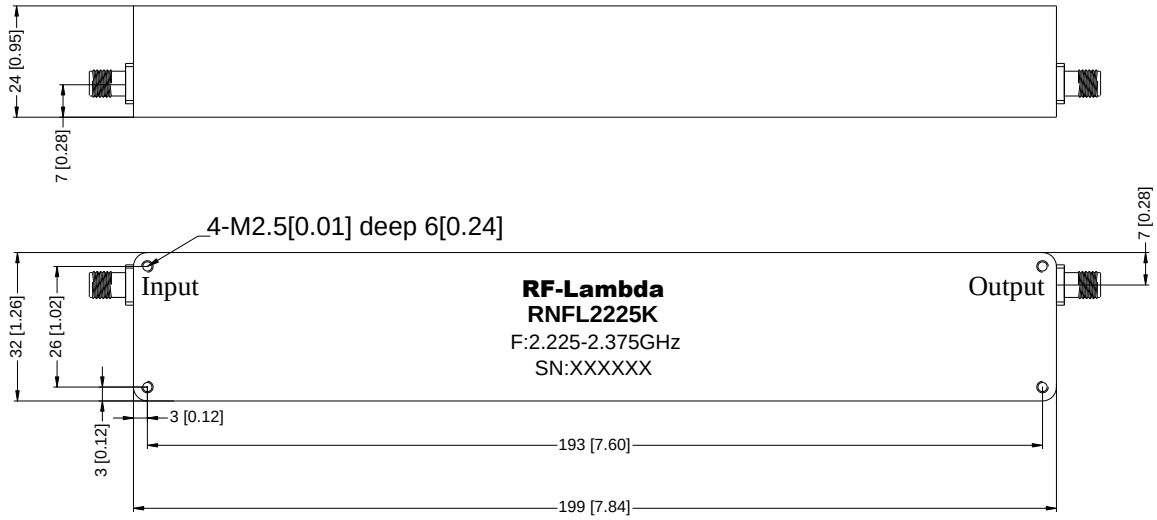
VSWR



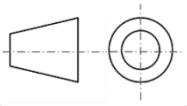
Rejection



Outline Drawing



Notes:
1. Package Material: Aluminum
2. Finish: Blue Paint
3. All dimensions are in millimeters [inches].
4. Outline Tolerances ±0.5 [0.02], Mounting Hole Tolerances ±0.2 [0.008] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
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
RNFL2225K	Standard	2.225GHz-2.375GHz Notch Filter

Important Notice

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