

Coaxial Cavity Notch Filter 1.91GHz-2.17GHz



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

Product Description

RNFL2040K is a coaxial cavity notch filter with a frequency range of 1.91 to 2.17GHz.

The peak power of this notch filter is 50W. The insertion loss is 2.0dB with a typical rejection of 55dB.

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

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

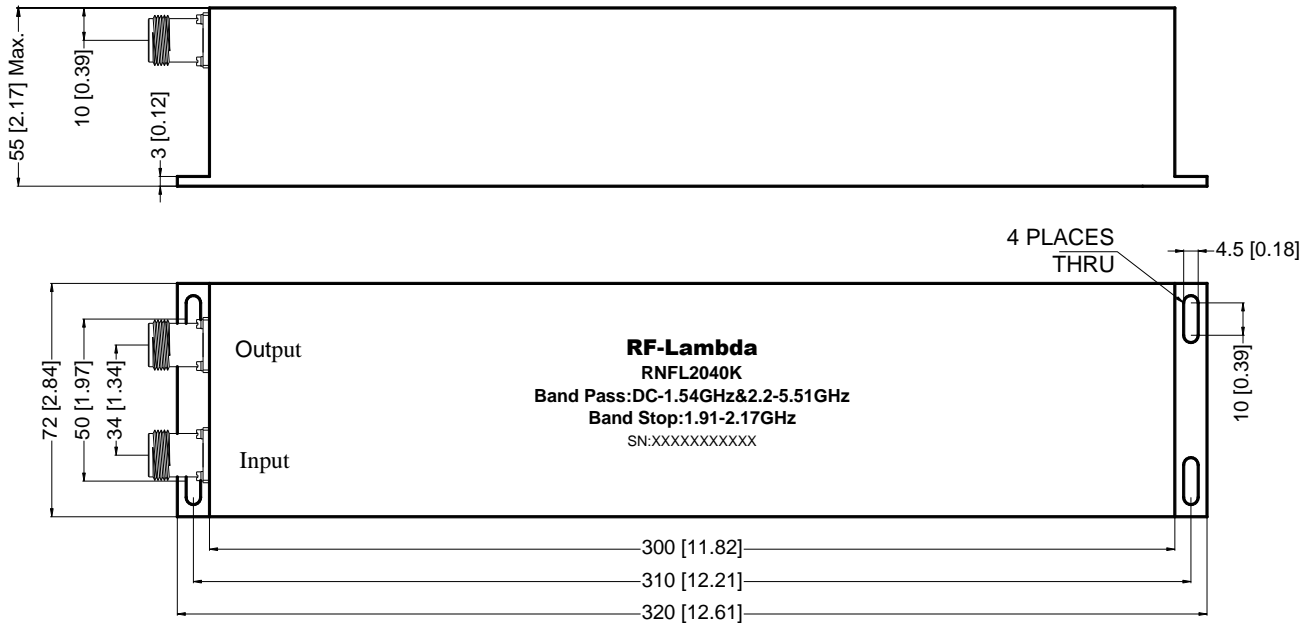
Parameter	Min	Typ	Max	Units
Pass Band Frequency		DC-1.54 & 2.2-5.51		GHz
Band Stop frequency	1.91		2.17	GHz
Pass Band Insertion Loss			2.0	dB
Pass Band VSWR			1.8	: 1
Band Stop Rejection	50	55		dB
Power (CW)			50	W
Weight		/Max.		lbs
Impedance		50		Ω
Input / Output Connectors		N-Female(Input) – N-Female(Output)		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

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
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)

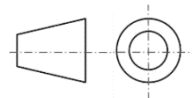
**For vibration testing details please see additional information section.

Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: 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
RNFL2040K	Standard	1.91GHz-2.17GHz Notch Filter

Important Notice

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