

Coaxial Cavity Notch Filter 9.55GHz-9.75GHz



Product Description

RNFL9650K is a coaxial cavity notch filter with a frequency range of 9.55 to 9.75GHz.

The peak power of this notch filter is 50W. The insertion loss is 2.0dB with a typical rejection of 60dB.

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-9.23 & 10.07-18.0		GHz
Band Stop frequency	9.55		9.75	GHz
Pass Band Insertion Loss			2.0	dB
Pass Band VSWR			1.8	: 1
Band Stop Rejection	60			dB
Power (CW)			50	W
Weight		0.22 Max.		lbs
Impedance		50		Ω
Input / Output Connectors	SMA-Female(Input) – SMA-Female(Output)			
Package	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

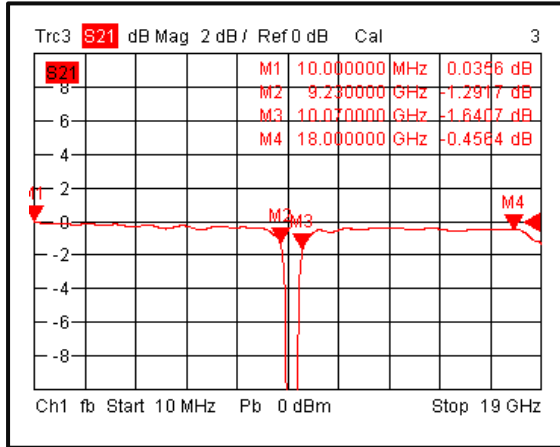
Environmental Specifications and Test Standards

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)

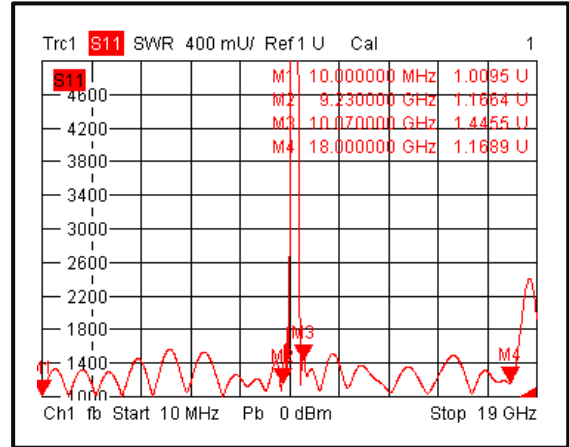
**For vibration testing details please see additional information section.

Typical Performance Plots

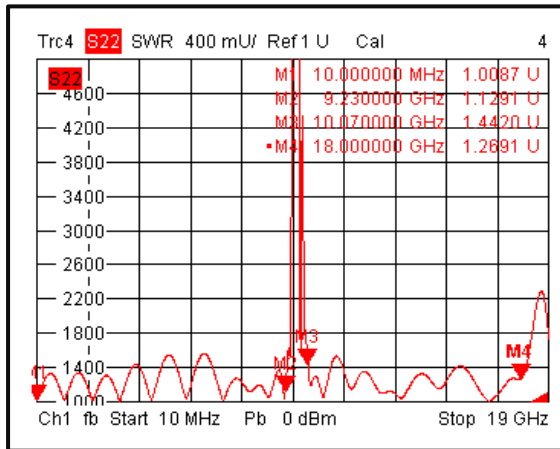
Insertion Loss



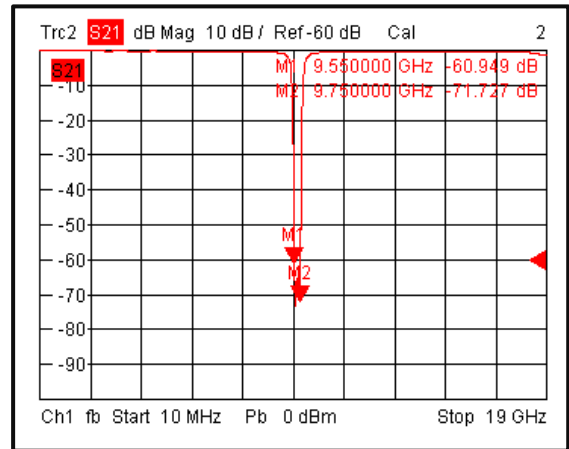
VSWR



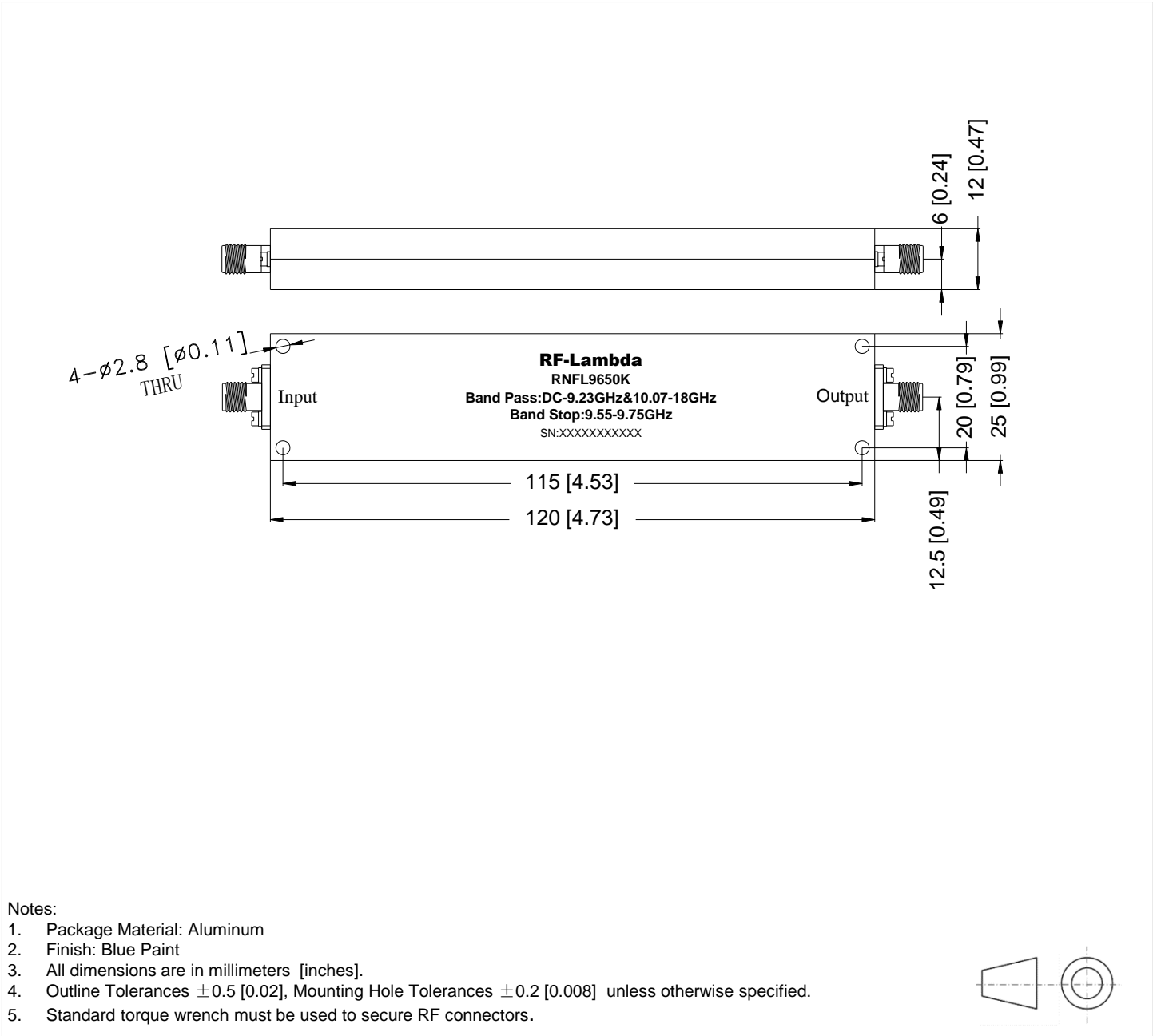
VSWR



Rejection



Outline Drawing



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
RNFL9650K	Standard	9.55GHz-9.75GHz Notch Filter

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