Bandpass Filter with SMA Female Connectors Operating at 8 GHz with a 40 MHz Passband Bandwidth



PE87FL1024

Features

- Passband Bandwidth of 40 MHz
- High Rejection
- Cavity filter design
- Min rejection 70 dB at 0.5 GHz to 7.5 GHz
- Min rejection 70 dB at 8.5 GHz to 11 GHz
- Maximum insertion loss of 1.5 dB
- Female SMA connectors
- Very high Q factor and high selectivity

Applications

- Test and Measurement
- Lab Instrumentation
- Antenna Systems

Description

The PE87FL1024 is a four section band pass filter that is used for filtering for test and measurement, lab instrumentation, and antenna systems uses. The passband bandwidth is 40 MHz. Implementing a cavity design, the filter has excellent rejection of 70 dB at 7.5 GHz and 8.5 GHz. It has a maximum insertion loss of 1.5 dB. The PE87FL1024 has SMA female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Passband Center Frequency		8		GHz
Impedance		50		Ohms
Insertion Loss		0.9	1.5	dB
Passband VSWR		1.2:1	1.3:1	
Rejection at 7.5 GHz	70	80		dB
Rejection at 8.5 GHz	70	80		dB
Input Power, CW			50	Watts
Input Power, Peak			200	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size

Length	2.29 in [58.17 mm]
Width	0.47 in [11.94 mm]
Height	0.83 in [21.08 mm]
Weight	0.1 lbs [45.36 g]
Body Material and Plating	Aluminum
Finish	Grey Paint

Configuration

Number of Sections	4
Connector 1	SMA Female
Connector 2	SMA Female

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+1 (866) 558-2786 | sales@pasternack.com | pasternack.com

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Environmental Specifications

Temperature

Operating Range	-20 to +70 deg C
Storage Range	-40 to +85 deg C

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Environment

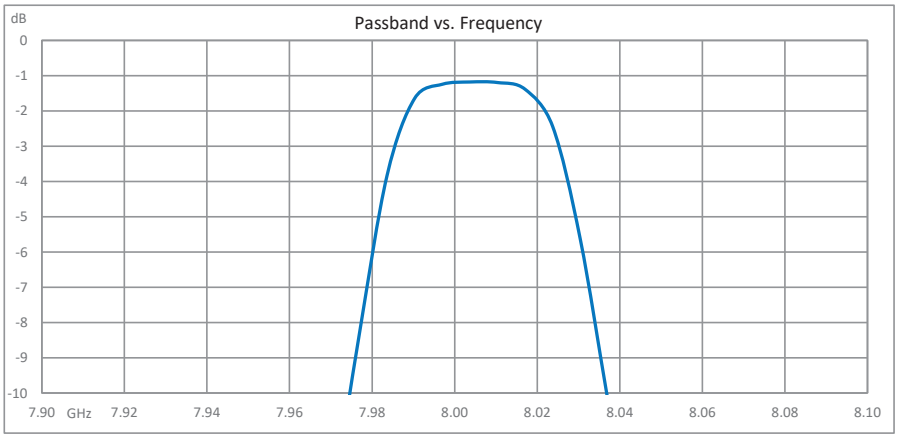
Humidity	100% RH at 35°C, 95% RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude	30,000 ft. (Epoxy Sealed Controlled Environment)

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
Values at 25°C, sea level.

Typical Performance Data



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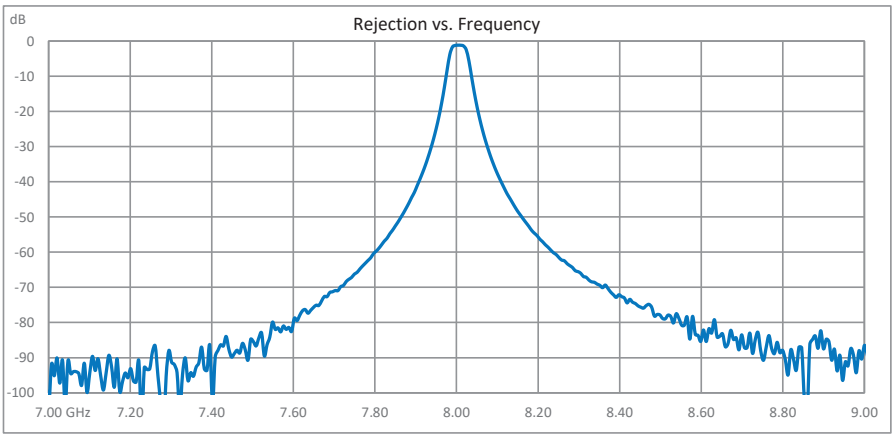

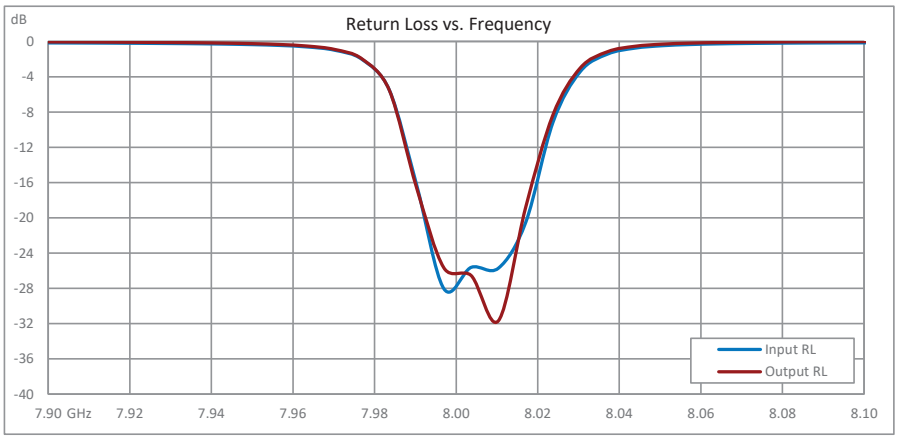

Bandpass Filter with SMA Female Connectors Operating at 8 GHz with a 40 MHz Passband Bandwidth from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Bandpass Filter with SMA Female Connectors Operating at 8 GHz with a 40 MHz Passband Bandwidth PE87FL1024

URL: https://www.pasternack.com/band-pass-filter-8-ghz-passband-40-mhz-pe87fl1021-p.aspx

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PE87FL1024 CAD Drawing

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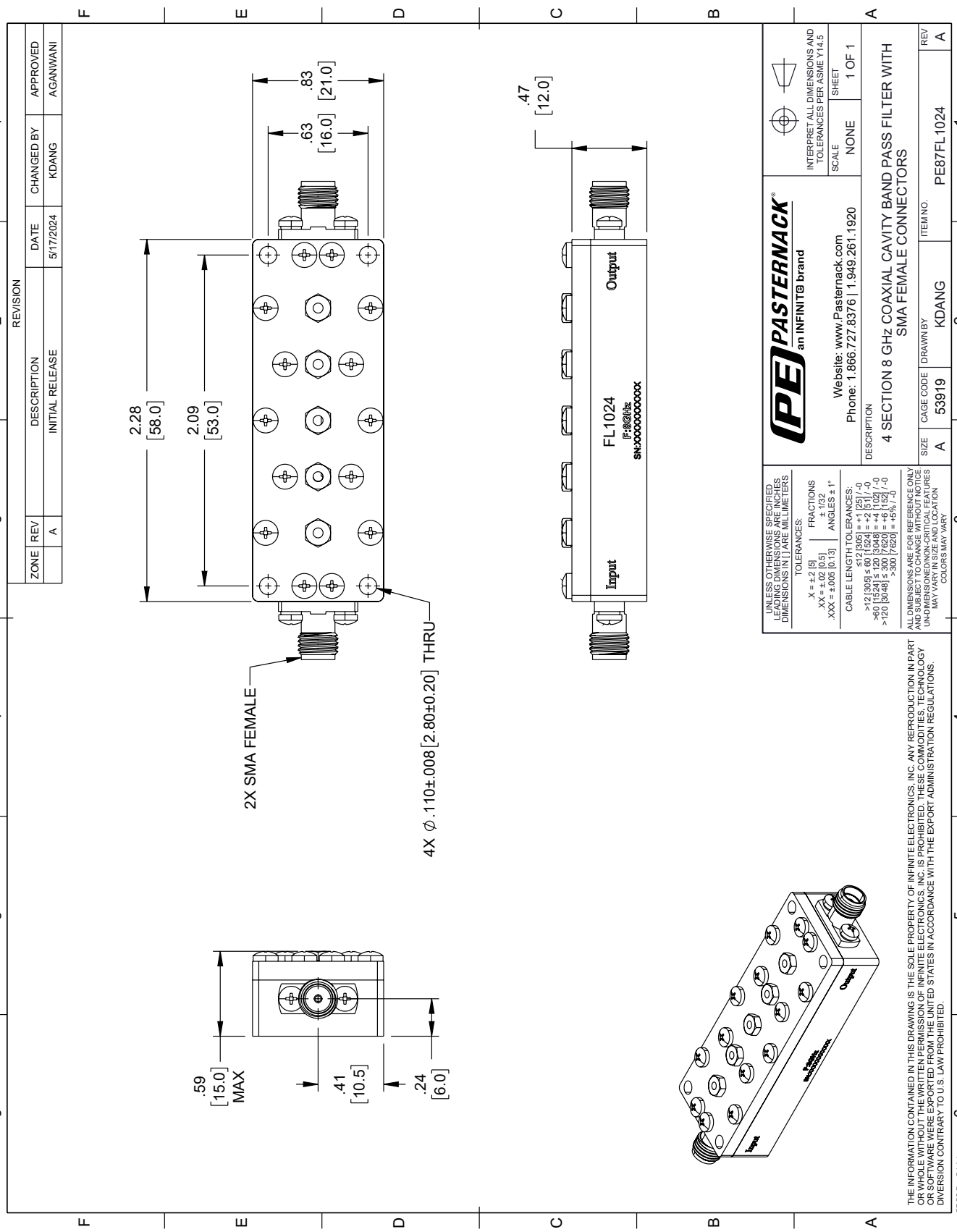

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