



# 11 Section Bandpass Filter With SMA Female Connectors Operating From 1 GHz to 2 GHz With a 1,000 MHz Passband

## Bandpass Filters Technical Data Sheet

PE87FL1012

### Features

- Pass band of 1000 MHz
- 1 GHz to 2 GHz
- Eleven section
- Combine filter design
- 55 dB rejection at 650 MHz and 3 GHz (1.5 GHz from band center)
- Typical insertion loss of 1.5 dB
- Female SMA connectors

### Applications

- Satellite communications

### Description

The PE87FL1012 is an eleven section band pass filter. It is part of a family of filters that is useful for satellite communications. The pass band is 1000 MHz wide, from 1 GHz to 2 GHz. Implemented using a Combine design, the filter has excellent rejection of 55 dB at 650 MHz and 3 GHz, or  $\pm 1.5$  GHz from mid band. It has a maximum insertion loss of 2 dB. The PE87FL1012 has SMA female connectors.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	1		2	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Passband VSWR		1.7:1		
Rejection at 650 MHz	55			dB
Rejection at 3 GHz	55			dB
Input Power, CW			2	Watts

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

### Mechanical Specifications

#### Size

Length	1.6 in [40.64 mm]
Width	0.55 in [13.97 mm]
Height	0.44 in [11.18 mm]

#### Configuration

Design	Combine
Number of Sections	11
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female
Connector Option	Field Replaceable

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [11 Section Bandpass Filter With SMA Female Connectors Operating From 1 GHz to 2 GHz With a 1,000 MHz Passband PE87FL1012](#)



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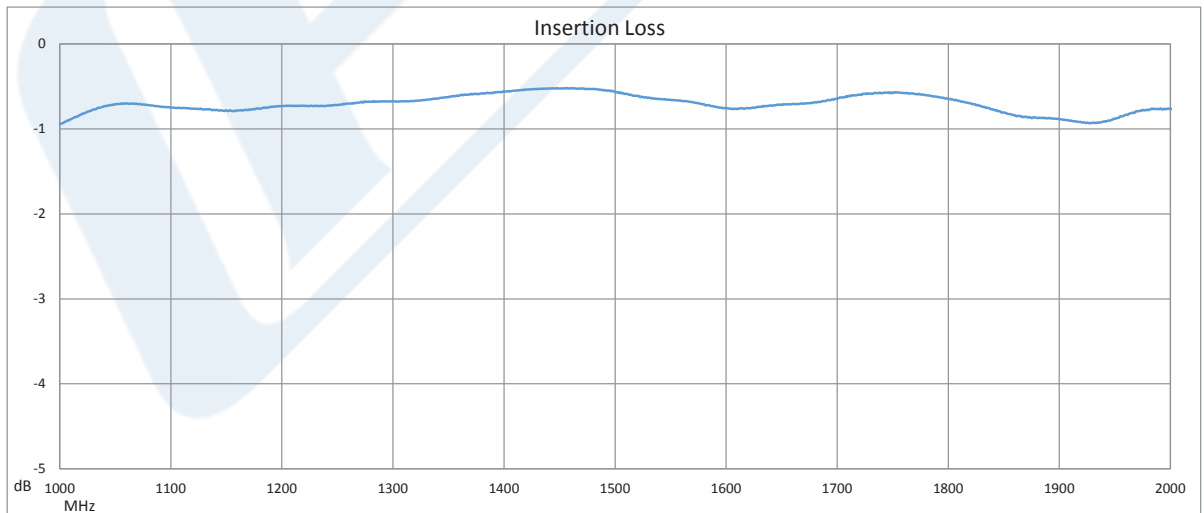
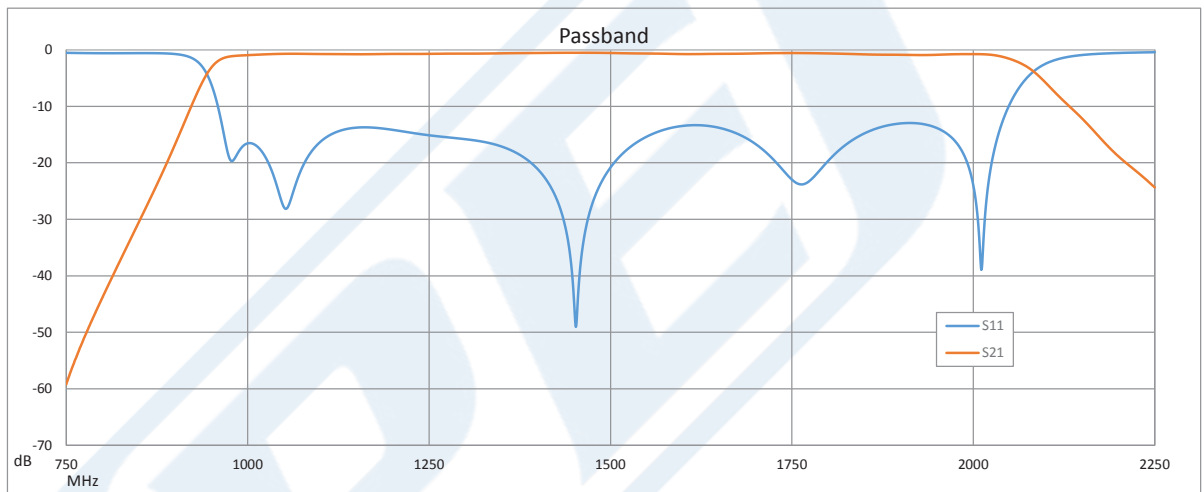
**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)  
RoHS Compliant

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**Typical Performance Data**



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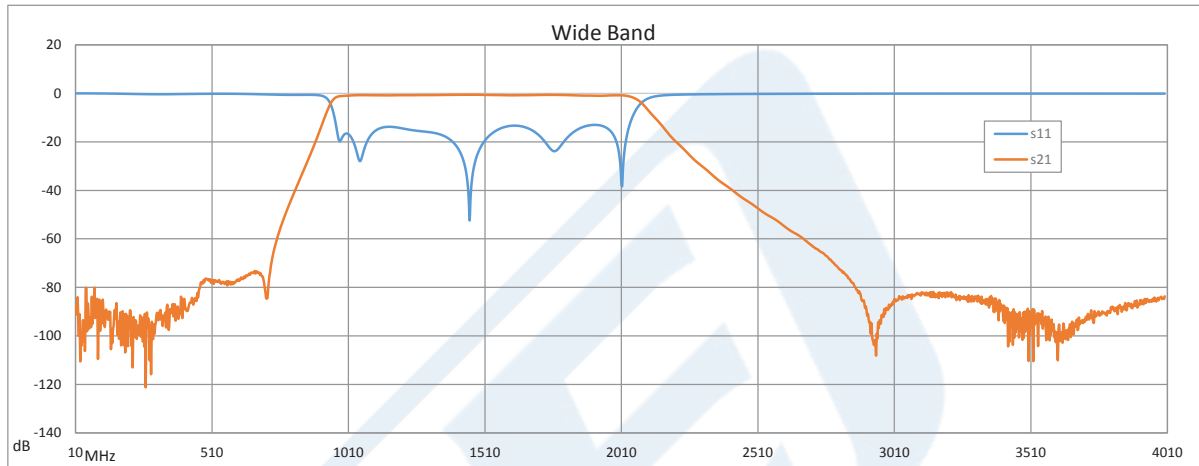




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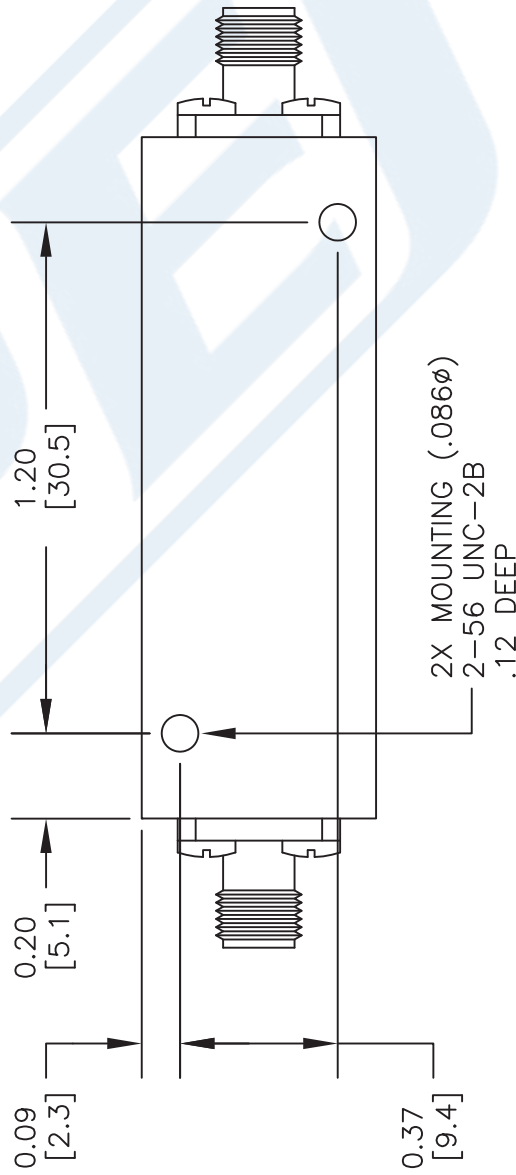
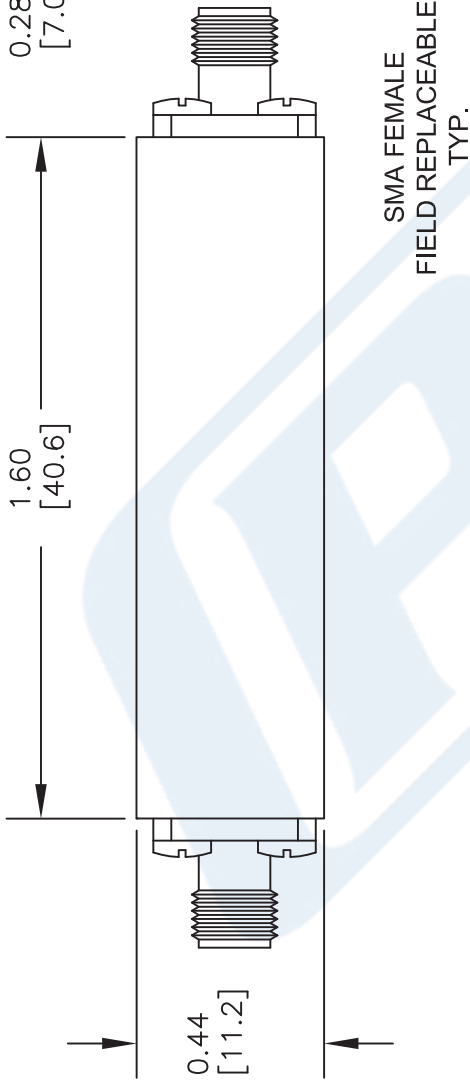
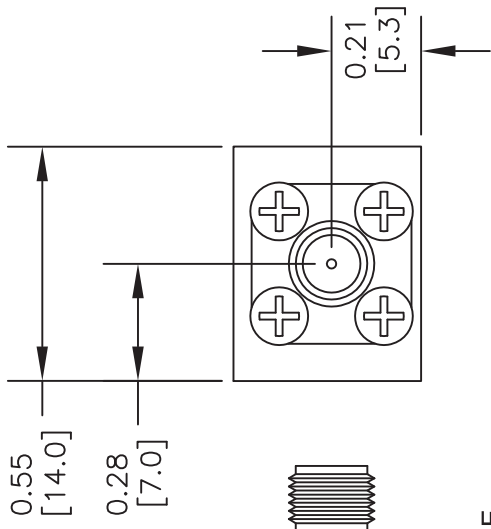
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [11 Section Bandpass Filter With SMA Female Connectors Operating From 1 GHz to 2 GHz With a 1,000 MHz Passband PE87FL1012](http://www.pasternack.com/11-section-band-pass-filter-1-2-ghz-passband-1000-mhz-pe87fl1012-p.aspx)

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE87FL1012 CAD Drawing

11 Section Bandpass Filter With SMA Female Connectors Operating From 1 GHz to 2 GHz With a 1,000 MHz Passband



TOLERANCE	
.X	± .1
.XX	± .01
.XXX	± .005
.XXXX	± .0010

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

**NOTES:**

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE

**PE87FL1012**

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FSCM NO. 53919

CAD FILE 110215

SCALE N/A

SIZE A

2233