



## 7 Section Bandpass Filter With SMA Female Connectors Operating From 11.7 GHz to 12.8 GHz With a 1.1 GHz Passband

### Bandpass Filters Technical Data Sheet

PE87FL1002

#### Features

- Pass band of 1100 MHz
- 11.7 GHz to 12.8 GHz
- Seven section
- Combine filter design
- 50 dB rejection at 9.75 GHz and 14.750 GHz (2.5 GHz from band center)
- Typical insertion loss of 1.25 dB
- Female SMA connectors

#### Applications

- Satellite communications

#### Description

The PE87FL1002 is a seven section band pass filter. It is part of a family of filters that is useful for satellite communications. The pass band is 1100 MHz wide, from 11.7 GHz to 12.8 GHz. Implemented using a Combine design, the filter has excellent rejection of 50 dB at 9.75 GHz and 14.75 GHz, or  $\pm 2.5$  GHz from mid band. It has a maximum insertion loss of 1.25 dB. The PE87FL1002 has SMA female connectors.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	11.7		12.8	GHz
Impedance		50		Ohms
Insertion Loss			1.25	dB
Passband VSWR		1.4:1		
Rejection at 9.75 GHz	50			dB
Rejection at 14.75 GHz	50			dB
Input Power, CW			2	Watts

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

#### Mechanical Specifications

##### Size

Length	2.49 in [63.25 mm]
Width	0.5 in [12.7 mm]
Height	0.47 in [11.94 mm]

##### Configuration

Design	Combine
Number of Sections	7
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: [7 Section Bandpass Filter With SMA Female Connectors Operating From 11.7 GHz to 12.8 GHz With a 1.1 GHz Passband PE87FL1002](#)



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

RoHS Compliant

REACH Compliant

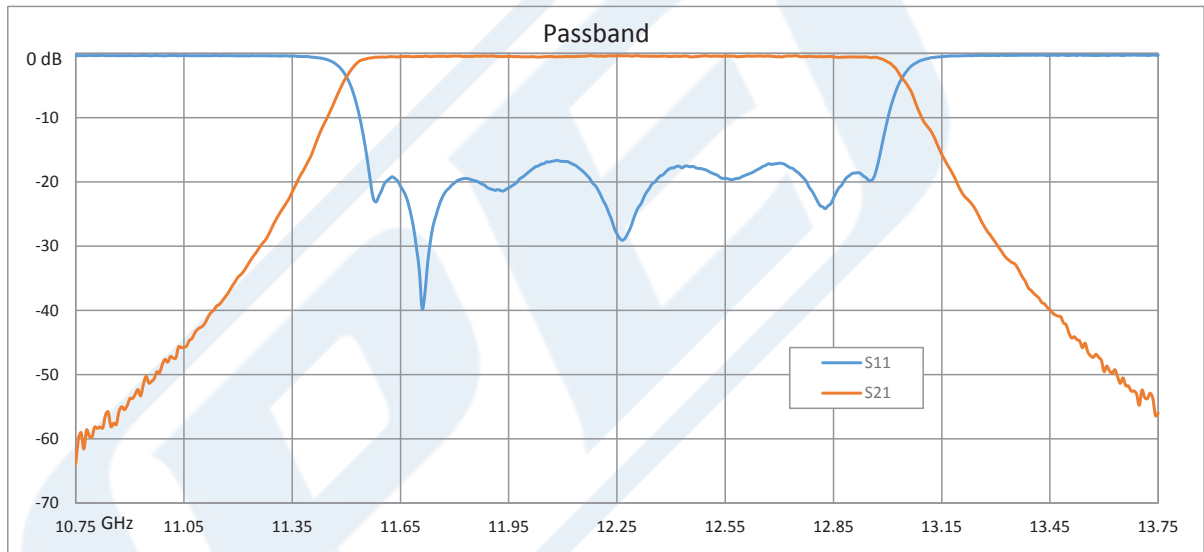
06/14/2014

#### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

#### Typical Performance Data



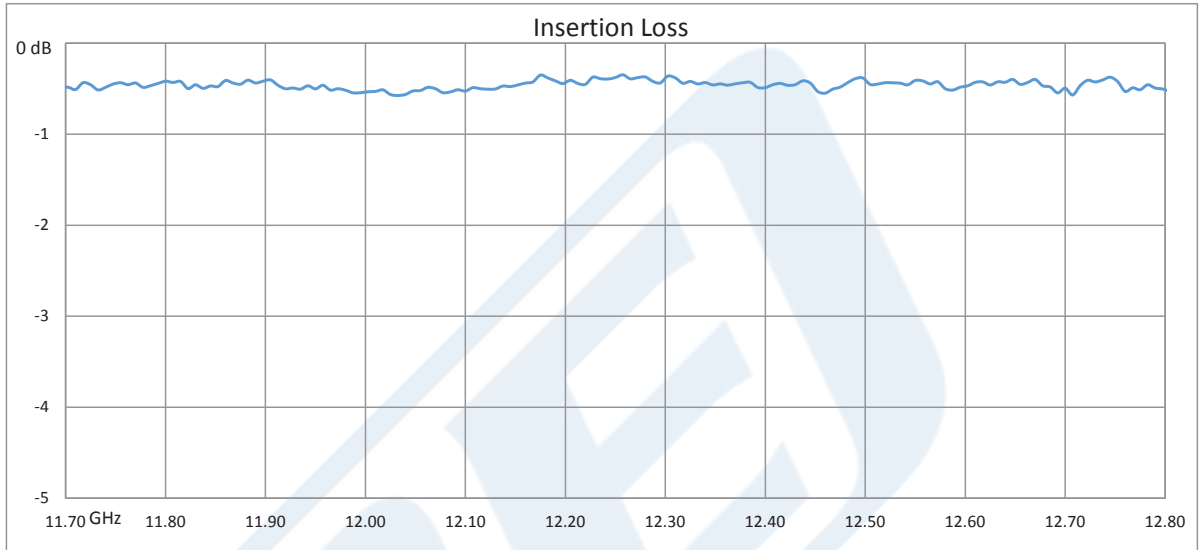
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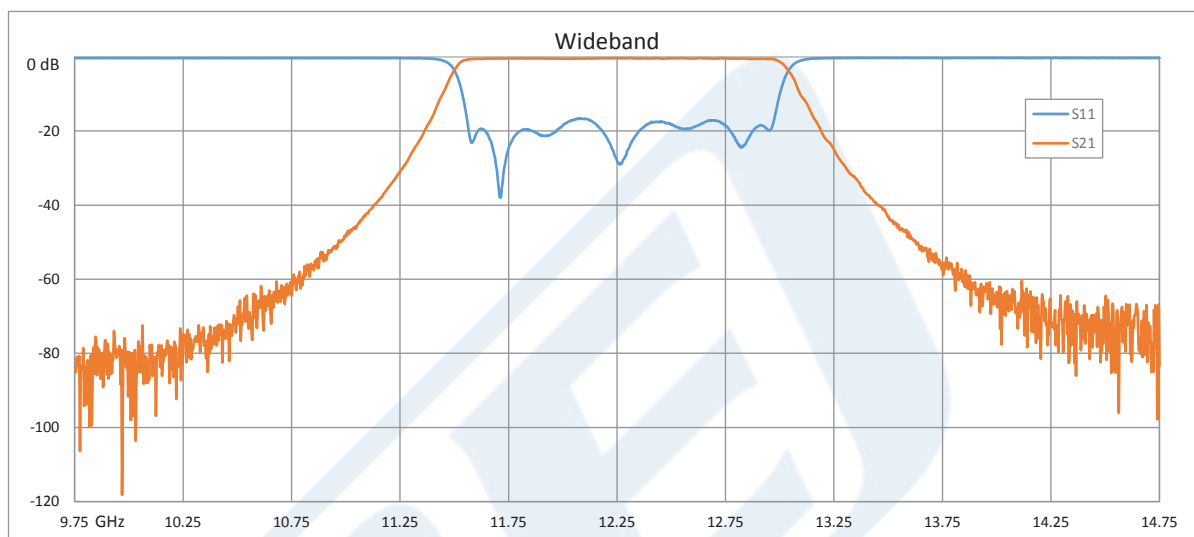




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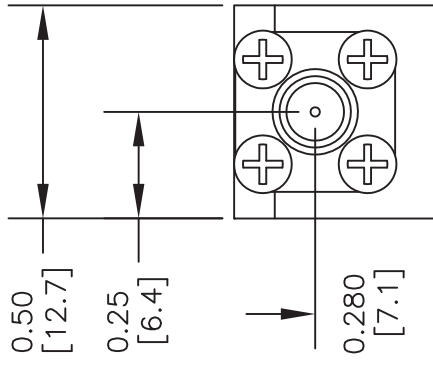
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7 Section Bandpass Filter With SMA Female Connectors Operating From 11.7 GHz to 12.8 GHz With a 1.1 GHz Passband PE87FL1002](http://www.pasternack.com/7-section-band-pass-filter-11.7-12.8-ghz-passband-1.1-ghz-pe87fl1002-p.aspx)

URL: <http://www.pasternack.com/7-section-band-pass-filter-11.7-12.8-ghz-passband-1.1-ghz-pe87fl1002-p.aspx>

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.

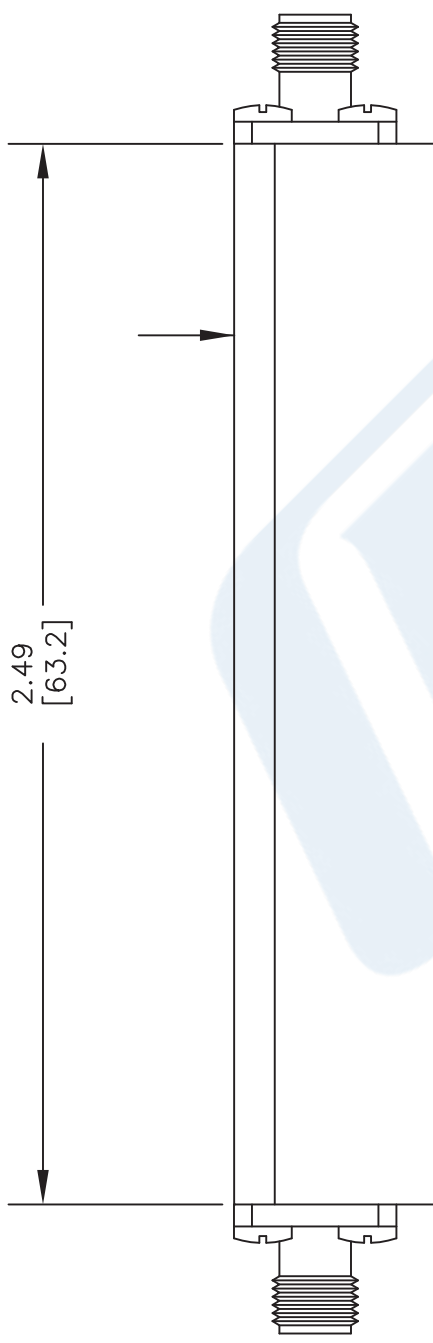
# PE87FL1002 CAD Drawing

7 Section Bandpass Filter With SMA Female Connectors Operating  
From 11.7 GHz to 12.8 GHz With a 1.1 GHz Passband

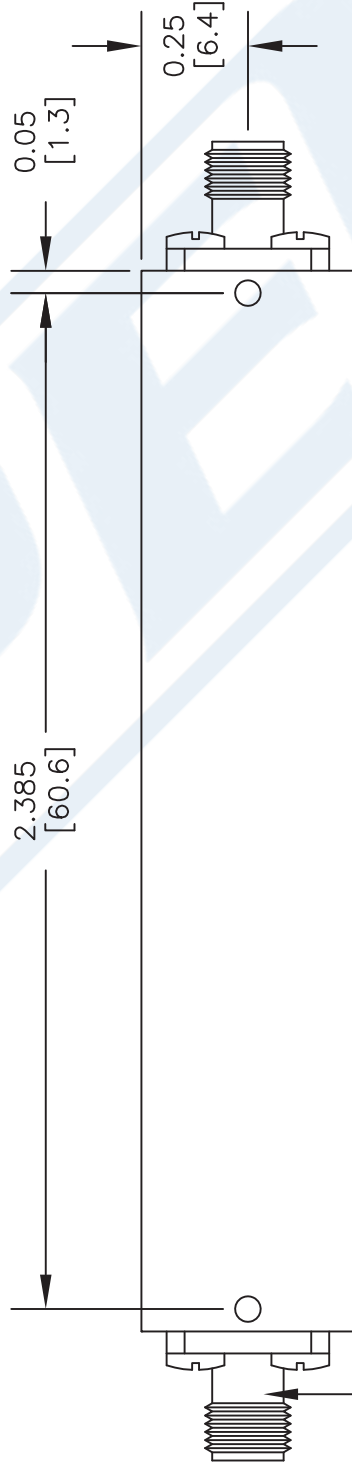


TOLERANCE	
.X	± .1
.XX	± .01
.XXX	± .005
.XXXX	± .0010

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



SMA FEMALE  
FIELD REPLACEABLE  
TYP.



2X MOUNTING (.060φ)  
0-80 UNF-2B  
.10 DEEP

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	<b>PE87FL1002</b>		
FSCM NO.	53919	CAD FILE	120415
SCALE	N/A	SIZE	A
			2233

**PE PASTERNAK®**  
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