



## 6 Section Bandpass Filter With SMA Female Connectors Operating From 14 GHz to 14.8 GHz With a 800 MHz Passband

### Bandpass Filters Technical Data Sheet

PE87FL1005

#### Features

- Pass band of 800 MHz
- 14 GHz to 14.8 GHz
- Six section
- Combine filter design
- 50 dB rejection at 12.85 GHz and 15.95 GHz (1.55 GHz from band center)
- Typical insertion loss of 1.5 dB
- Female SMA connectors

#### Applications

- Satellite communications

#### Description

The PE87FL1005 is a six section band pass filter. It is part of a family of filters that is useful for satellite communications. The pass band is 800 MHz wide, from 14 GHz to 14.8 GHz. Implemented using a Comblines design, the filter has excellent rejection of 50 dB at 12.85 GHz and 15.95 GHz, or  $\pm 1.55$  GHz from mid band. It has a maximum insertion loss of 1.5 dB. The PE87FL1005 has SMA female connectors.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	14		14.8	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Passband VSWR		1.4:1		
Rejection at 12.85 GHz	50			dB
Rejection at 15.95 GHz	50			dB
Input Power, CW			2	Watts

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

#### Mechanical Specifications

##### Size

Length	1.85 in [46.99 mm]
Width	0.5 in [12.7 mm]
Height	0.47 in [11.94 mm]

##### Configuration

Design	Comblines
Number of Sections	6
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: [6 Section Bandpass Filter With SMA Female Connectors Operating From 14 GHz to 14.8 GHz With a 800 MHz Passband PE87FL1005](#)



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

RoHS Compliant

REACH Compliant

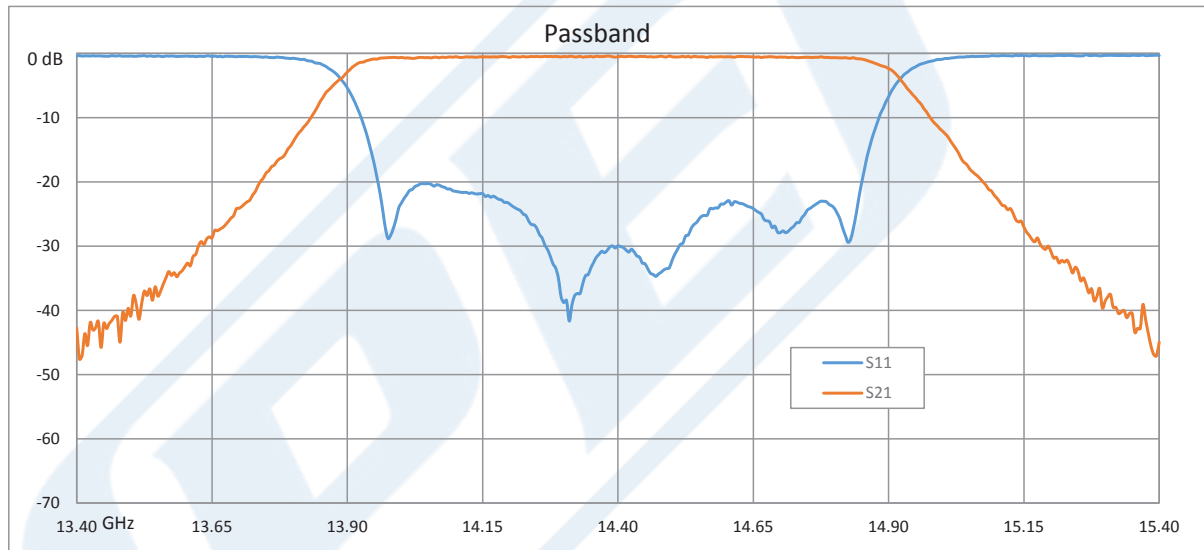
06/14/2014

#### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

#### Typical Performance Data



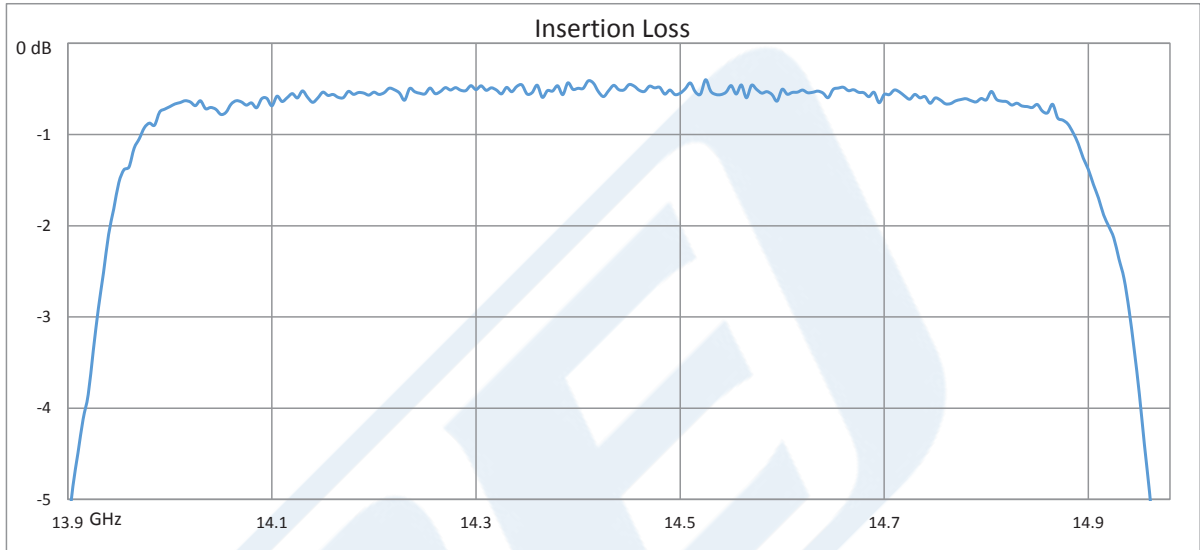
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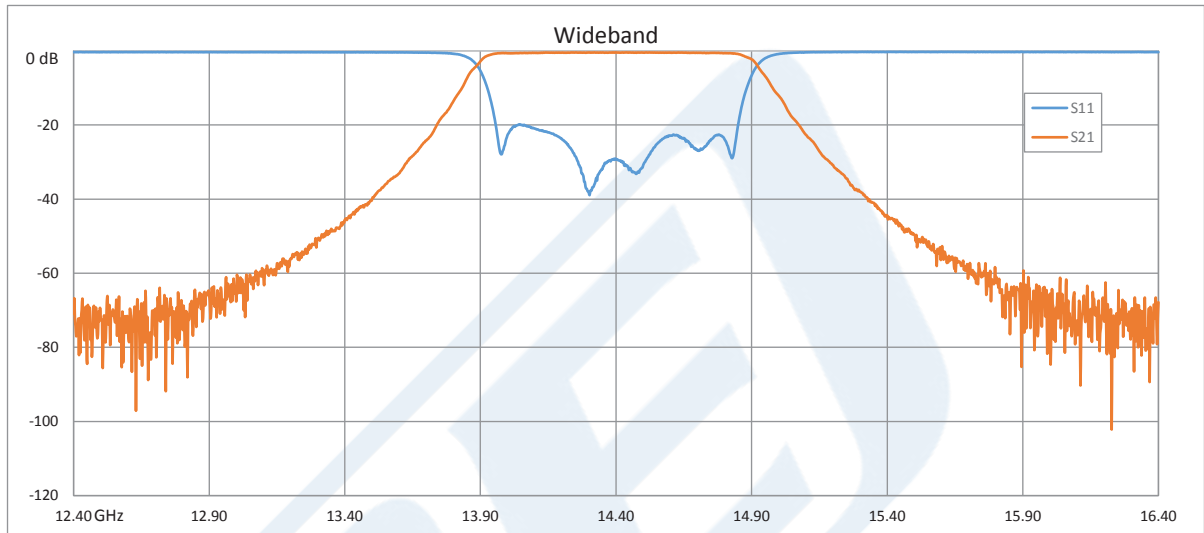




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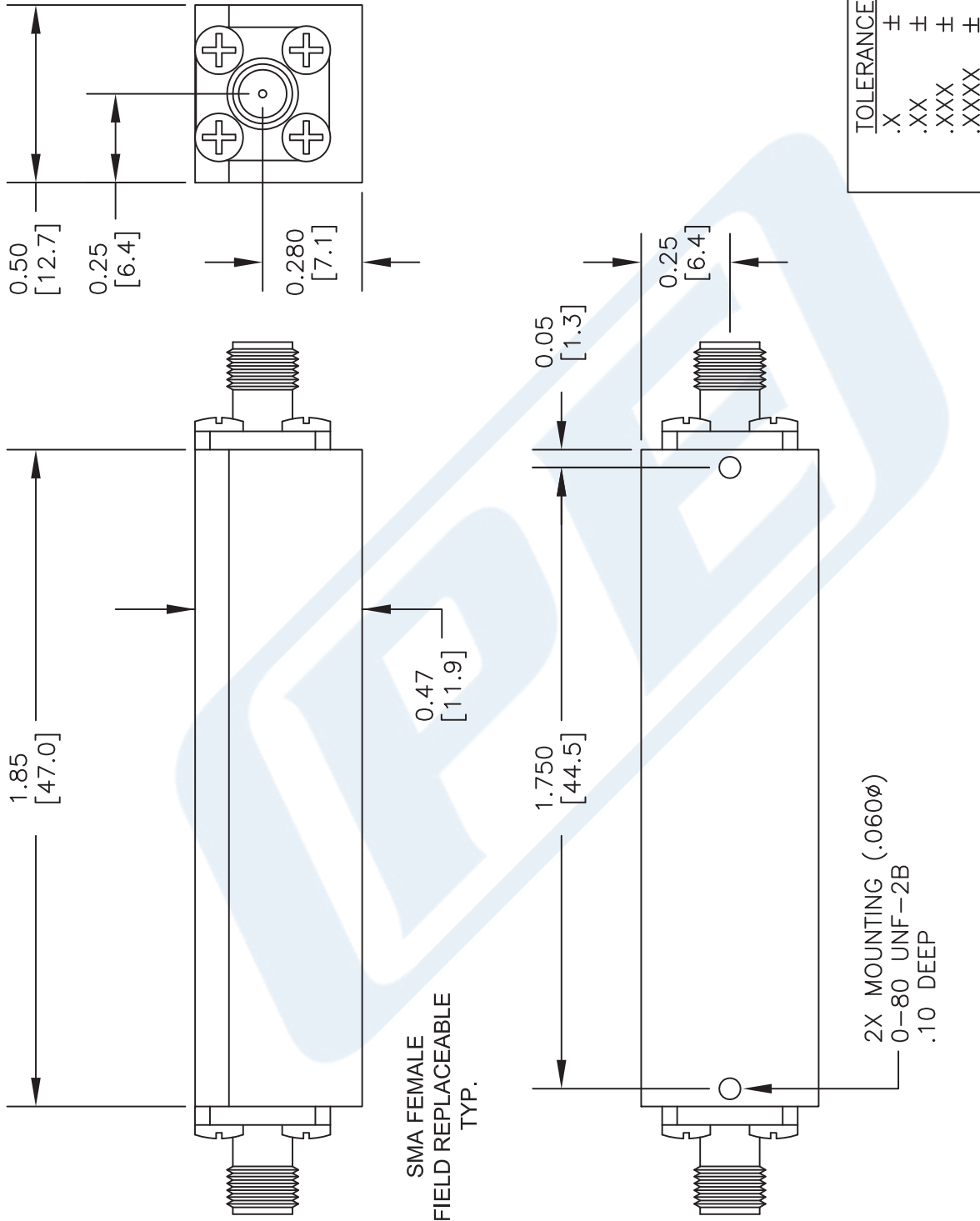
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE87FL1005 CAD Drawing

6 Section Bandpass Filter With SMA Female Connectors Operating From 14 GHz to 14.8 GHz With a 800 MHz Passband



\* 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

**PE87FL1005**

FSCM NO. 53919

CAD FILE 120415

SCALE N/A

SIZE A

2233



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