



6 Section Bandpass Filter With SMA Female Connectors Operating From 10.7 GHz to 12.2 GHz With a 1.5 GHz Passband

Bandpass Filters Technical Data Sheet

PE87FL1003

Features

- Pass band of 1500 MHz
- 10.7 GHz to 12.2 GHz
- Six section
- Combine filter design
- 50 dB rejection at 8.45 GHz and 14.45 GHz (3 GHz from band center)
- Typical insertion loss of 1 dB
- Female SMA connectors

Applications

- Satellite communications

Description

The PE87FL1003 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 1500 MHz wide, from 10.7 GHz to 12.2 GHz. Implemented using a Combine design, the filter has excellent rejection of 50 dB at 8.45 GHz and 14.45 GHz, or ± 3 GHz from mid band. It has a maximum insertion loss of 1 dB. The PE87FL1003 has SMA female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	10.7		12.2	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Passband VSWR		1.4:1		
Rejection at 8.45 GHz	50			dB
Rejection at 14.45 GHz	50			dB
Input Power, CW			2	Watts

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

Mechanical Specifications

Size

Length	1.44 in [36.58 mm]
Width	0.5 in [12.7 mm]
Height	0.47 in [11.94 mm]

Configuration

Design	Combine
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 10.7 GHz to 12.2 GHz With a 1.5 GHz Passband PE87FL1003](#)



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Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant
REACH Compliant

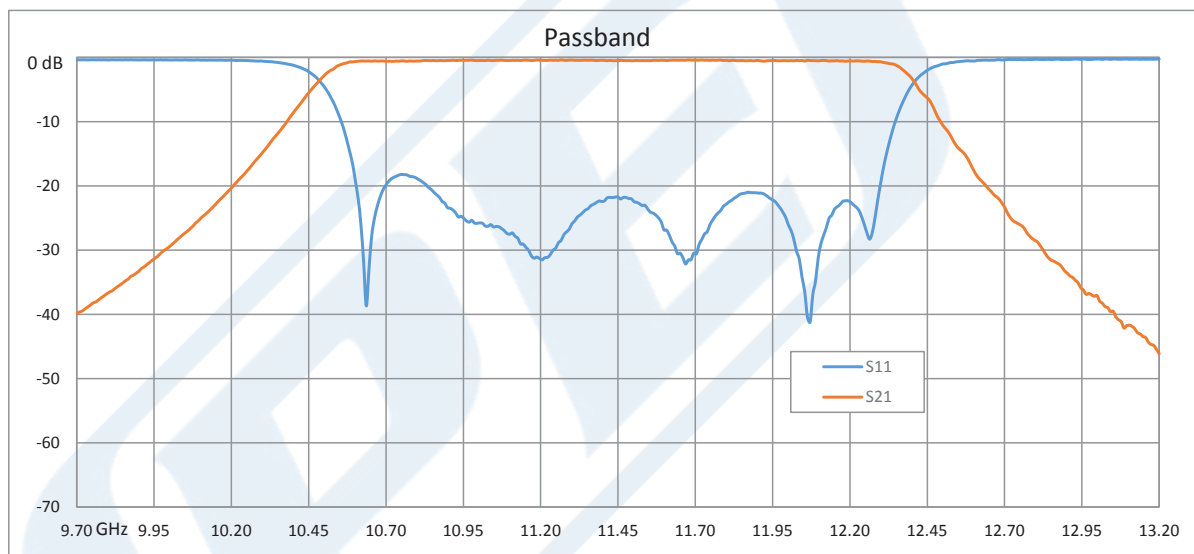
06/14/2014

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



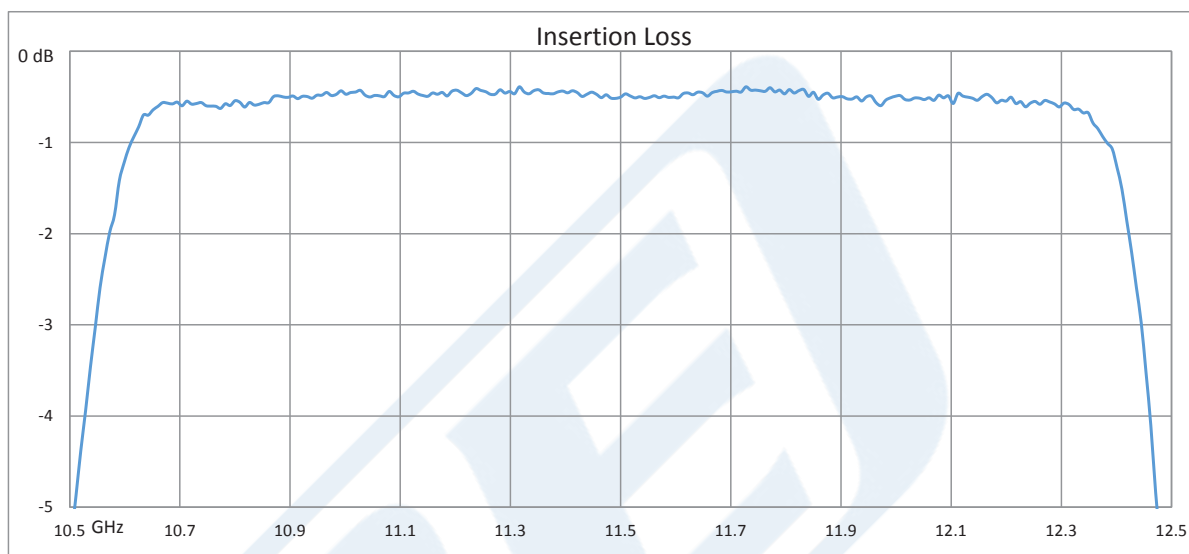
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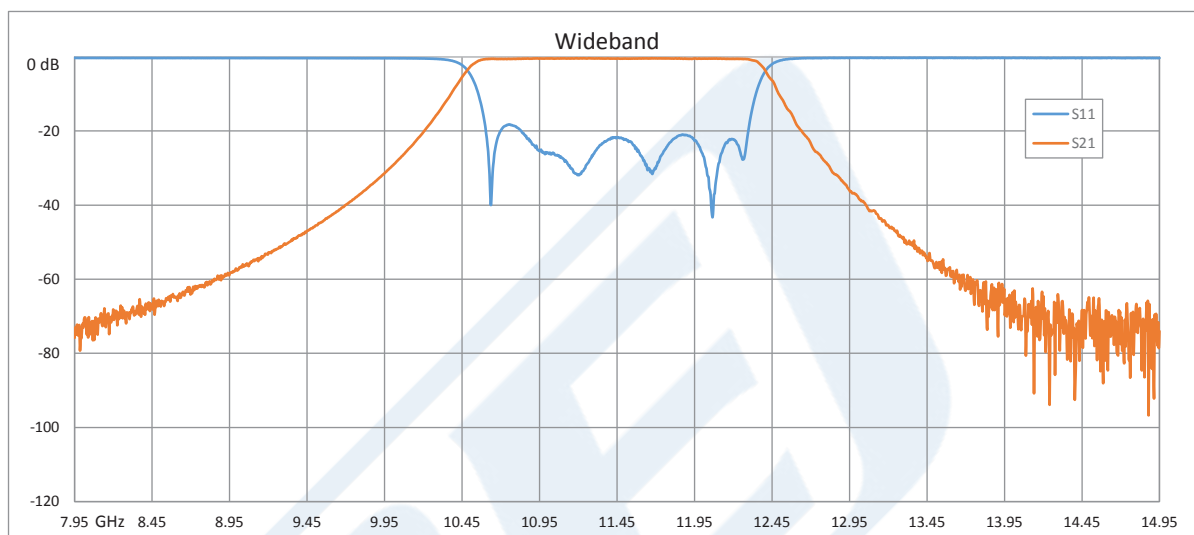
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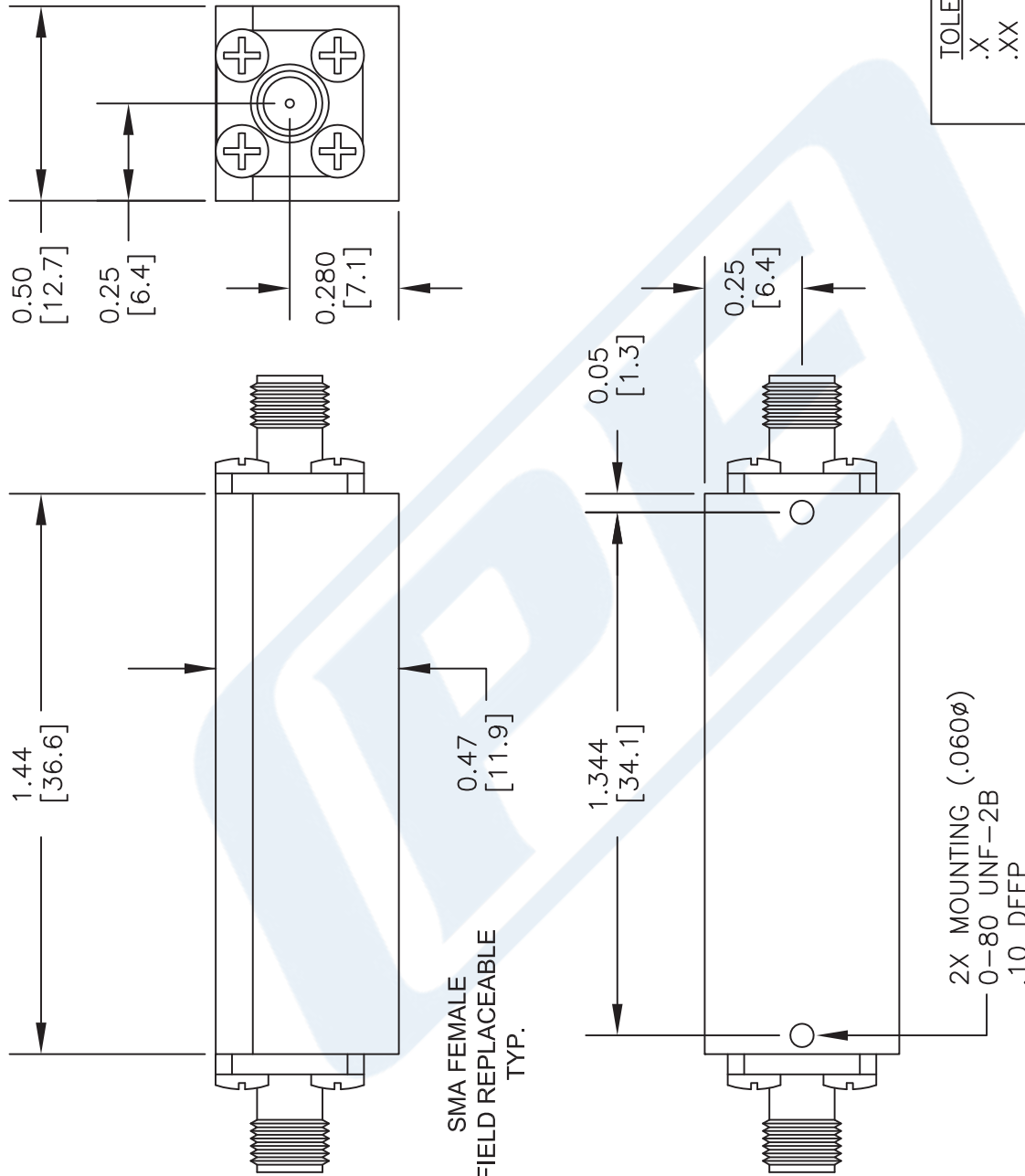
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [6 Section Bandpass Filter With SMA Female Connectors Operating From 10.7 GHz to 12.2 GHz With a 1.5 GHz Passband PE87FL1003](http://www.pasternack.com/6-section-band-pass-filter-10.7-12.2-ghz-passband-1.5-ghz-pe87fl1003-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.

PE87FL1003 CAD Drawing

6 Section Bandpass Filter With SMA Female Connectors Operating
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SMA FEMALE
FIELD REPLACEABLE
TYP.

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

PE87FL1003

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FSCM NO. 53919

CAD FILE 120415

SCALE N/A

SIZE A

2233