



## 6 Section Bandpass Filter With SMA Female Connectors Operating From 19.2 GHz to 20.2 GHz With a 1,000 MHz Passband

### Bandpass Filters Technical Data Sheet

**PE87FL1010**

#### Features

- Pass band of 1000 MHz
- 19.2 GHz to 20.2 GHz
- Six section
- Combine filter design
- 35 dB rejection at 18.2 GHz and 21.2 GHz (1.5 GHz from band center)
- Typical insertion loss of 1.5 dB
- Female SMA connectors

#### Applications

- Satellite communications

#### Description

The PE87FL1010 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 1000 MHz wide, from 19.2 GHz to 20.2 GHz. Implemented using a Combine design, the filter has excellent rejection of 35 dB at 18.2 GHz and 21.2 GHz, or  $\pm 1.5$  GHz from mid band. It has a maximum insertion loss of 1.5 dB. The PE87FL1010 has SMA female connectors.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	19.2		20.2	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Passband VSWR		1.4:1		
Rejection at 18.2 GHz	35			dB
Rejection at 21.2 GHz	35			dB
Input Power, CW			2	Watts

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

#### Mechanical Specifications

##### Size

Length	1.55 in [39.37 mm]
Width	0.45 in [11.43 mm]
Height	0.4 in [10.16 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 19.2 GHz to 20.2 GHz With a 1,000 MHz Passband PE87FL1010](#)



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

RoHS Compliant  
REACH Compliant

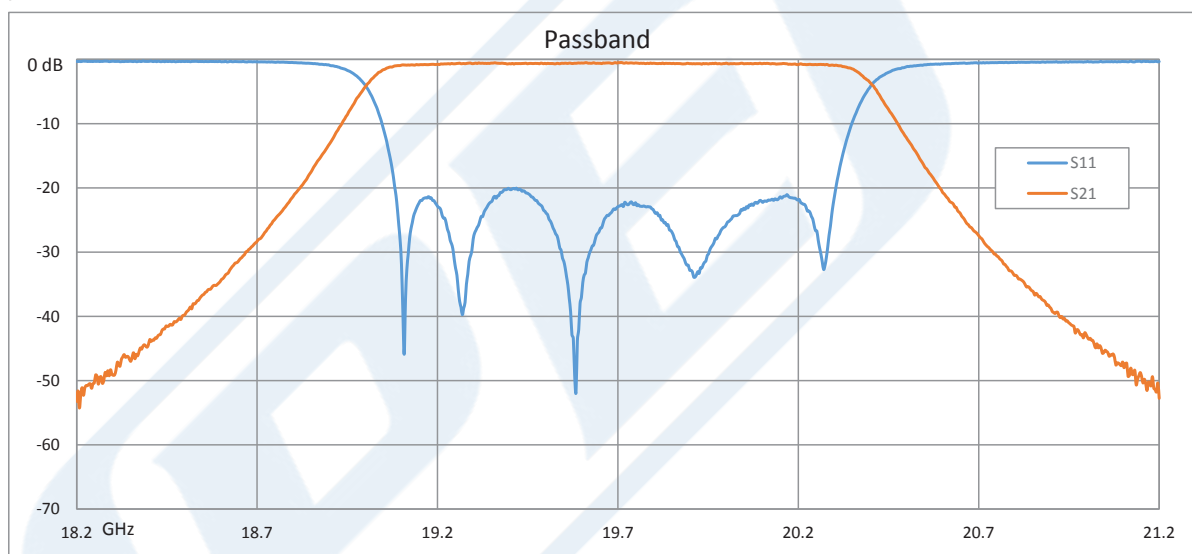
06/14/2014

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**Typical Performance Data**



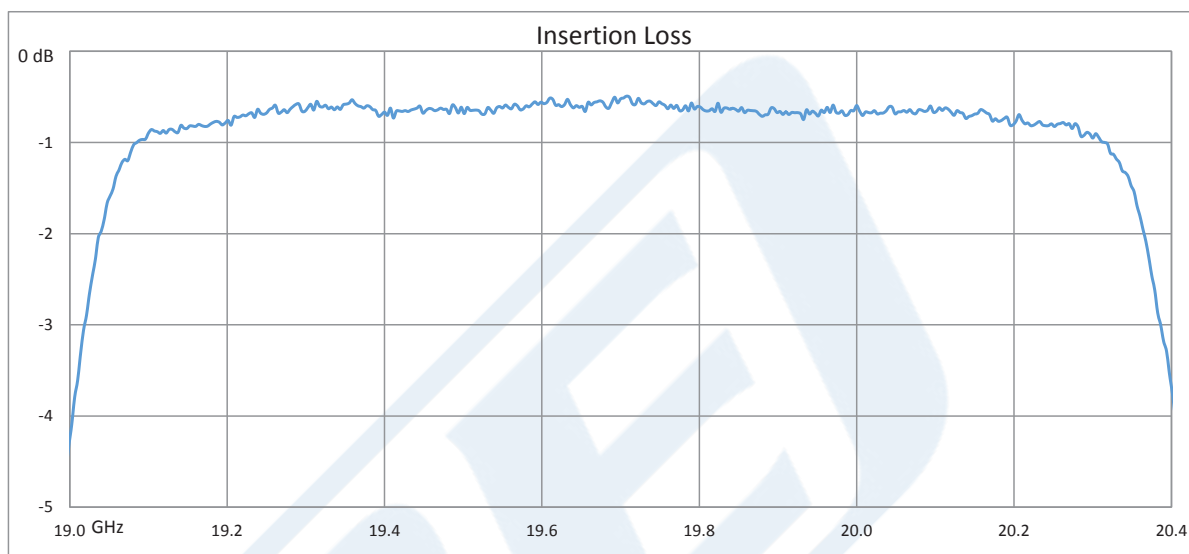
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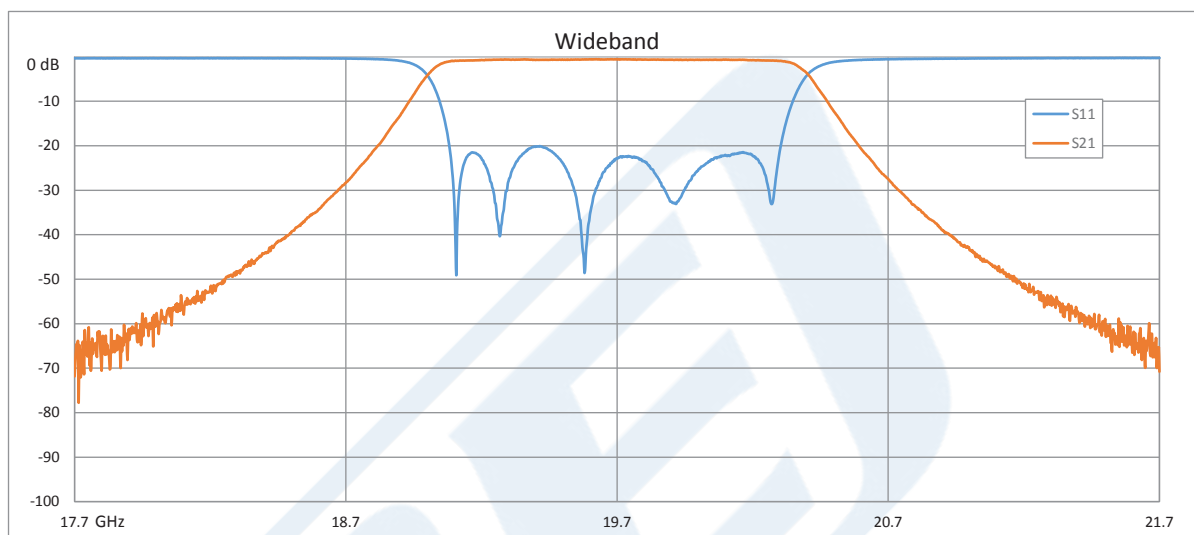
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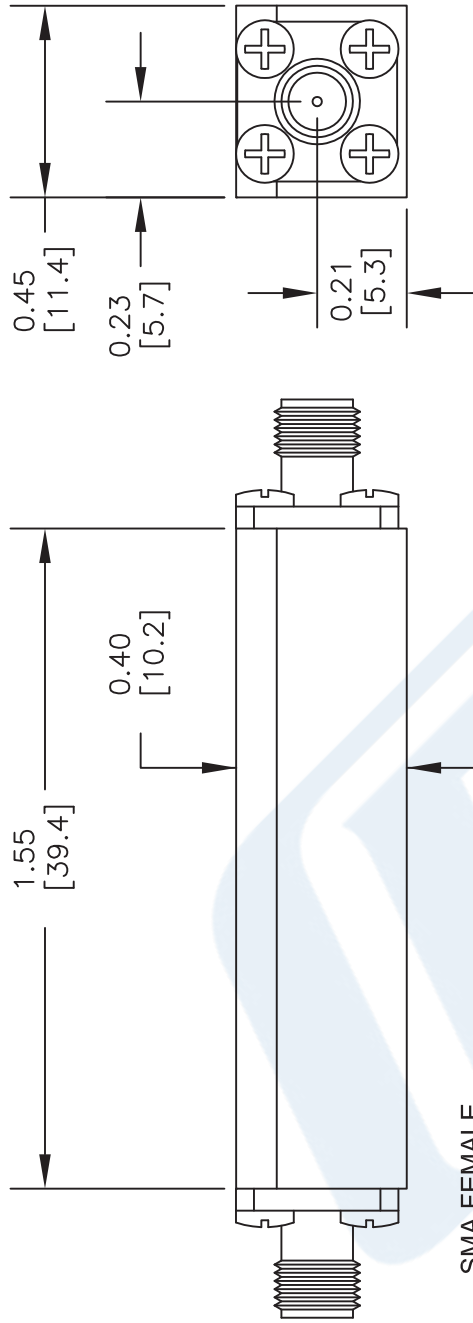
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [6 Section Bandpass Filter With SMA Female Connectors Operating From 19.2 GHz to 20.2 GHz With a 1,000 MHz Passband PE87FL1010](http://www.pasternack.com/6-section-band-pass-filter-19.2-20.2-ghz-passband-1000-mhz-pe87fl1010-p.aspx)

URL: <http://www.pasternack.com/6-section-band-pass-filter-19.2-20.2-ghz-passband-1000-mhz-pe87fl1010-p.aspx>

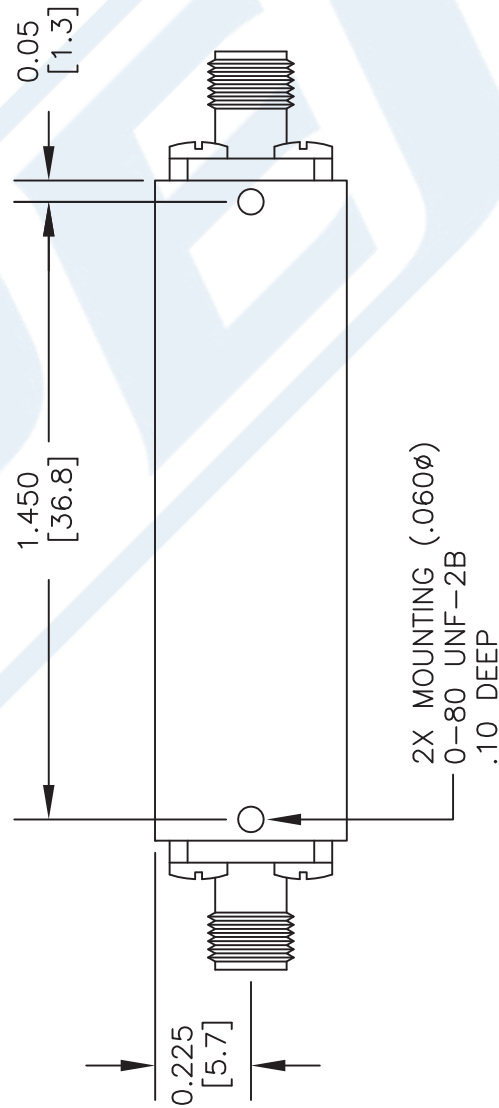
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# PE87FL1010 CAD Drawing

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

**PE87FL1010**

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE

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FSCM NO. 53919

CAD FILE 120415

SCALE N/A

SIZE A

2233