

4 Section Bandpass Filter With SMA Female Connectors Operating From 1.565 GHz to 1.585 GHz With a 20 MHz Passband

PE8703



Features

- Pass band of 20 MHz
- 1.565 GHz to 1.585 GHz
- Four section
- Combine filter design
- 50 dB rejection at 1.475 GHz and 1.675 GHz (about 90 MHz from band edge)
- Typical insertion loss of 1.5 dB
- Female SMA connectors

Applications

- RF laboratory test and measurement
- System integration prototyping
- RF development and evaluation

Description

The PE8703 is a four section band pass filter that is useful for filtering for GPS L1 uses. The pass band is 20 MHz, or 1.565 to 1.585 GHz. Implementing a combine design, the filter has excellent rejection of 50 dB at 1.475 GHz and 1.675 GHz, or about 90 MHz from the band edges. It has a typical insertion loss of 1.5 dB. The PE8703 has SMA female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Passband Frequency	1.565		1.585	GHz
Passband Center Frequency		1.575		GHz
Impedance		50		Ohms
Insertion Loss		1.5	1.5	dB
Passband VSWR		1.5:1		
Rejection at 1.475 GHz	50			dB
Rejection at 1.675 GHz	50			dB
Input Power, CW			5	Watts

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

Mechanical Specifications

Size

Length	1.55 in [39.37 mm]
Width	2.25 in [57.15 mm]
Height	0.53 in [13.46 mm]
Weight	0.1795 lbs [81.42 g]
Finish	Black

Configuration

Design	Combine
Number of Sections	4
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

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Environmental Specifications

Temperature

Operating Range

-55 to +85 deg C

Environmental Specification Notes:

Designed for commercial RF applications, laboratory test environments, and system integration prototyping. For additional environmental specifications, please call us at (866) 485-0817 or email sales@pasternack.com

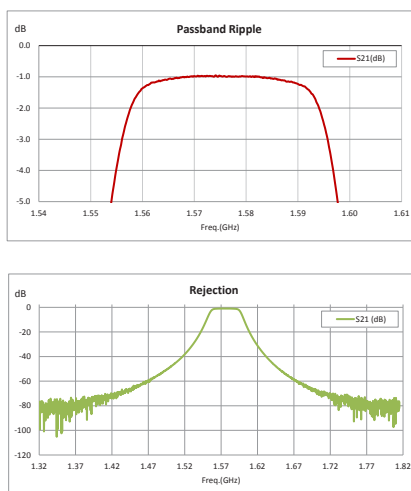
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

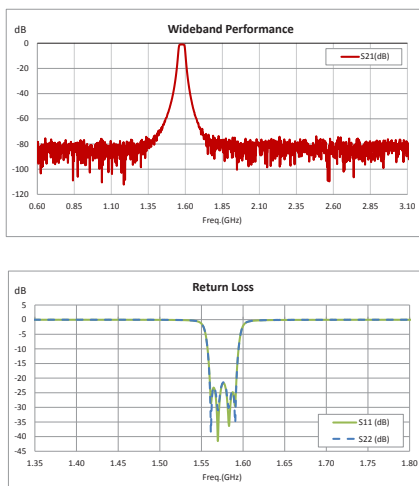
Values at 25°C, sea level.

Typical Performance Data



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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: [4 Section Bandpass Filter With SMA Female Connectors Operating From 1.565 GHz to 1.585 GHz With a 20 MHz Passband PE8703](https://www.pasternack.com/4-section-band-pass-filter-1.565-1.585-ghz-passband-20-mhz-pe8703-p.aspx)

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PE8703 CAD Drawing

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