9 Section Bandpass Filter With SMA Female Connectors
Operating From 17.7 GHz to 21.2 GHz With a 3.5 GHz Passband

Bandpass Filters Technical Data Sheet

PE8743

Features
- Pass band of 3.5 GHz
- 17.7 to 21.2 GHz
- Nine section
- Chebyshev filter design
- Minimum 50 dB rejection at 16 GHz and 24 GHz
- Maximum insertion loss of 2 dB
- Female SMA connectors

Applications
- VSAT

Description
The PE8743 is a nine section band pass filter that is useful for filtering for VSAT uses. The pass band is 3.5 GHz, or 17.7 to 21.2 GHz. Implementing a Chebyshev design, the filter has excellent minimum rejection of 50 dB at 16 GHz and 24 GHz. It has a maximum insertion loss of 2 dB. The PE8743 has SMA Female connectors.

Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passband Frequency</td>
<td>17.7</td>
<td>21.2</td>
<td></td>
<td>GHz</td>
</tr>
<tr>
<td>Impedance</td>
<td></td>
<td></td>
<td>50</td>
<td>Ohms</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td></td>
<td></td>
<td>2</td>
<td>dB</td>
</tr>
<tr>
<td>Passband VSWR</td>
<td></td>
<td></td>
<td>1.5:1</td>
<td></td>
</tr>
<tr>
<td>Rejection at 16 GHz</td>
<td>50</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Rejection at 24 GHz</td>
<td>50</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Input Power, CW</td>
<td></td>
<td></td>
<td>5</td>
<td>Watts</td>
</tr>
</tbody>
</table>

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

Mechanical Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>1.44 in [36.58 mm]</td>
</tr>
<tr>
<td>Width</td>
<td>0.45 in [11.43 mm]</td>
</tr>
<tr>
<td>Height</td>
<td>0.38 in [9.65 mm]</td>
</tr>
<tr>
<td>Weight</td>
<td>0.064 lbs [29.03 g]</td>
</tr>
</tbody>
</table>

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 9 Section Bandpass Filter With SMA Female Connectors Operating From 17.7 GHz to 21.2 GHz With a 3.5 GHz Passband PE8743

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PE8743 REV 1.2
9 Section Bandpass Filter With SMA Female Connectors
Operating From 17.7 GHz to 21.2 GHz With a 3.5 GHz Passband

Bandpass Filters Technical Data Sheet

Configuration
Design: Bidirectional Chebyshev
Number of Sections: 9
Packet Style: Connectorized Module
Connector 1: SMA Female
Connector 2: SMA Female

Mechanical Specification Notes: Comes with a ruggedized housing.

Compliance Certifications (see product page for current document)

Plotted and Other Data
Notes:

Typical Performance Data

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PE8743 CAD Drawing
9 Section Bandpass Filter With SMA Female Connectors Operating
From 17.7 GHz to 21.2 GHz With a 3.5 GHz Passband

PE8743
P/N: PE8743
17700–21200 MHz

SMA FEMALE TYP.

PASTERNACK

NOTE:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.

LABEL

STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

±0.1
±0.01
±0.005

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