The SF24251 is a three section band pass filter that is useful for filtering for ISM uses. The pass band is 100 MHz, or 2.4 to 2.5 GHz. Implementing a combline design, the filter has excellent rejection of 55 dB minimum at 2 GHz and 2.9 GHz, or about 400 MHz from the band edges. It has a maximum insertion loss of 1 dB. The SF24251 has SMA Female connectors.

### Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passband Frequency</td>
<td>2.4</td>
<td></td>
<td>2.5</td>
<td>GHz</td>
</tr>
<tr>
<td>Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ohms</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td></td>
<td>1</td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Passband VSWR</td>
<td></td>
<td>1.5:1</td>
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<td></td>
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<tr>
<td>Rejection at 2 GHz</td>
<td>55</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Rejection at 2.9 GHz</td>
<td>55</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Input Power, CW</td>
<td></td>
<td>5</td>
<td></td>
<td>Watts</td>
</tr>
</tbody>
</table>

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

### Mechanical Specifications

**Size**
- Length: 1.8 in [45.72 mm]
- Width: 1.06 in [26.92 mm]
- Height: 0.53 in [13.46 mm]
- Weight: 0.197 lbs [89.36 g]

**Configuration**
- Design: Combline
- Number of Sections: 3
- Package Style: Connectorized Module
- Connector 1: SMA Female
- Connector 2: SMA Female

### Environmental Specifications

**Temperature**
- Operating Range: -55 to +120 deg C

### Compliance Certifications
(visit www.FairviewMicrowave.com for current document)
- RoHS Compliant: Yes
- REACH Compliant: 12/17/2015

### Applications
- ISM
Typical Performance Data

Bandpass Cavity Filter Operating From 2.4 GHz to 2.5 GHz With SMA Female Connectors from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Bandpass Cavity Filter Operating From 2.4 GHz to 2.5 GHz With SMA Female Connectors SF24251


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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.