Ceramic High Pass Filter

HFCN-1320+

50Ω 1400 to 5000 MHz

Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>-55°C to 100°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55°C to 100°C</td>
</tr>
<tr>
<td>RF Power Input*</td>
<td>7W max. at 25°C</td>
</tr>
</tbody>
</table>

* Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit’s applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuit’s standard limited warranty and terms and conditions (collectively, “Standard Terms”); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit’s website at www.minicircuits.com/MCLStore/terms.jsp

Features

- low cost
- small size
- 7 sections
- temperature stable
- hermetically sealed
- LTCC construction
- excellent power handling, 7W

Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use

### Electrical Specifications

#### Typical Frequency Response

- **Graphical Representation:** Image depicting typical frequency response with frequency on the x-axis and insertion loss on the y-axis.

#### Electrical Schematic

- **Image:** Diagram showing electrical schematic with RF IN, RF OUT, and GROUND connections.

#### Typical Performance Data at 25°C

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion Loss (dB)</th>
<th>VSWR (-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>94.16</td>
<td>1737.18</td>
</tr>
<tr>
<td>100.00</td>
<td>69.34</td>
<td>217.15</td>
</tr>
<tr>
<td>880.00</td>
<td>55.96</td>
<td>49.64</td>
</tr>
<tr>
<td>1060.00</td>
<td>27.72</td>
<td>27.59</td>
</tr>
<tr>
<td>1180.00</td>
<td>13.92</td>
<td>12.18</td>
</tr>
<tr>
<td>1260.00</td>
<td>6.40</td>
<td>4.64</td>
</tr>
<tr>
<td>1320.00</td>
<td>2.97</td>
<td>2.12</td>
</tr>
<tr>
<td>1400.00</td>
<td>1.55</td>
<td>1.42</td>
</tr>
<tr>
<td>1700.00</td>
<td>0.75</td>
<td>1.31</td>
</tr>
<tr>
<td>3700.00</td>
<td>0.55</td>
<td>1.41</td>
</tr>
<tr>
<td>3800.00</td>
<td>0.59</td>
<td>1.49</td>
</tr>
<tr>
<td>5000.00</td>
<td>1.76</td>
<td>2.81</td>
</tr>
<tr>
<td>6000.00</td>
<td>3.08</td>
<td>4.13</td>
</tr>
<tr>
<td>8000.00</td>
<td>5.76</td>
<td>7.66</td>
</tr>
</tbody>
</table>

Notes

- Measured on Mini-Circuits Characterization Test Board TB-270.
- In Application where DC voltage is present at either input or output ports, coupling capacitors are required. Alternatively, Mini-Circuits’ “D” suffix version of this model will provide >100 MOhm isolation to ground.

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**Disclaimer:** The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

- **Available Tape and Reel at no extra cost:** Image showing available tape and reel options.
- **Demo Board MCL P/N: TB-270**
- **Suggested PCB Layout (PL-137)**

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**Revision History:**

- REV. K
- M152161
- HFCN-1320+
- EDR-6437/2
- AD/RS/CP/AM
- 160921

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**Mini-Circuits**

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