MAFL-011027

CATV Diplex Filter
5 - 85/102 - 1002MHz

Features

- 75 Ohm
- Vertical Plug-in Unit
- RoHs Compliant
- Lead Free

Description

- M/A-COM’s MAFL-011027 is a vertical plug-in Di- plex Filter unit designed for CATV applications.

Recommended Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>DC Current</td>
<td>30mA</td>
</tr>
<tr>
<td>RF Power</td>
<td>250mW</td>
</tr>
</tbody>
</table>

Electrical Specifications: $T_A = 25°C$, $Z_0 = 75W$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Typ</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss 85MHz</td>
<td>dB</td>
<td>1.2</td>
<td>-</td>
<td>1.5</td>
</tr>
<tr>
<td>Insertion Loss 102MHz</td>
<td>dB</td>
<td>1.3</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>Insertion Loss 770MHz</td>
<td>dB</td>
<td>0.3</td>
<td>-</td>
<td>0.6</td>
</tr>
<tr>
<td>Insertion Loss 862MHz</td>
<td>dB</td>
<td>0.4</td>
<td>-</td>
<td>0.6</td>
</tr>
<tr>
<td>Insertion Loss 1002MHz</td>
<td>dB</td>
<td>0.5</td>
<td>-</td>
<td>1.0</td>
</tr>
<tr>
<td>Input Return Loss</td>
<td>dB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 50MHz</td>
<td></td>
<td>22</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>50 - 85MHz</td>
<td></td>
<td>18</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>102 - 140MHz</td>
<td></td>
<td>23</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>140 - 1002MHz</td>
<td></td>
<td>19.5</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Isolation</td>
<td>dB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 85MHz</td>
<td></td>
<td>53</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>85 - 105MHz</td>
<td></td>
<td>31.5</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td>102 - 195MHz</td>
<td></td>
<td>52</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>195 - 600MHz</td>
<td></td>
<td>48</td>
<td>44</td>
<td>-</td>
</tr>
<tr>
<td>600 - 770MHz</td>
<td></td>
<td>41</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>770 - 1002MHz</td>
<td></td>
<td>36</td>
<td>30</td>
<td>-</td>
</tr>
</tbody>
</table>

Pin Configuration

<table>
<thead>
<tr>
<th>Function</th>
<th>Pin Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Port</td>
<td>6</td>
</tr>
<tr>
<td>Low Pass Output Port</td>
<td>1</td>
</tr>
<tr>
<td>High Pass Output Port</td>
<td>11</td>
</tr>
<tr>
<td>Ground</td>
<td>2-5, 7-10</td>
</tr>
<tr>
<td>Not connected</td>
<td>-</td>
</tr>
</tbody>
</table>

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.
Visit www.macomtech.com for additional data sheets and product information.
Dimensional Data (mm):
Tolerance: +/- 0.2mm
Typical Performance Curves at +25°C

Low Pass Insertion Loss

High Pass Insertion Loss

Return Loss

Isolation
MAFL-011027

CATV Diplex Filter
5 - 85/ 102 - 1002MHz

Packaging Tray Information

Ordering Information

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFL-011027</td>
<td>960 Pieces/Box</td>
</tr>
</tbody>
</table>