SMT Data Line EMI Filters – PDLF

- Available in 4, 3 and 2-line versions
- See our CCDLF series for 10 and 8-line EMI filters
- Exceptional common mode noise attenuation from 15 MHz to 300 MHz; passes signal line data below 300 MHz with minimal attenuation
- DC current capacity of 500 or 100 mA.
- Excellent electrical isolation (300 Vrms)

<table>
<thead>
<tr>
<th>Part number</th>
<th>Lines</th>
<th>Common mode peak impedance (kOhms)</th>
<th>Cutoff frequency (GHz)</th>
<th>Inductance min (µH)</th>
<th>DCR max (mOhms)</th>
<th>Isolation (Vrms)</th>
<th>Current (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDLF4000L_</td>
<td>4</td>
<td>0.949 @ 210 MHz</td>
<td>1.1</td>
<td>5.0</td>
<td>250</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>PDLF4500L_</td>
<td>4</td>
<td>0.848 @ 200 MHz</td>
<td>0.88</td>
<td>5.0</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>PDLF3000L_</td>
<td>3</td>
<td>0.901 @ 280 MHz</td>
<td>1.4</td>
<td>5.0</td>
<td>250</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>PDLF3500L_</td>
<td>3</td>
<td>0.910 @ 210 MHz</td>
<td>1.1</td>
<td>5.0</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>PDLF2000L_</td>
<td>2</td>
<td>0.958 @ 280 MHz</td>
<td>1.3</td>
<td>5.0</td>
<td>250</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>PDLF2500L_</td>
<td>2</td>
<td>0.929 @ 250 MHz</td>
<td>1.2</td>
<td>5.0</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:
   - PDLF4500L_C
   - C = 7” machine ready reel. EIA-481 embossed plastic tape (500 parts per full reel).
   - D = 13” machine ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
   - B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Frequency at which the differential mode attenuation equals −3 dB
3. Inductance shown for each winding, measured at 1 MHz
4. DCR is for each winding.
5. Intervinding isolation (hipot) tested for one minute.
6. Current rating is for each line.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Specimen Kit D303 contains four each of all values plus DLF and CCDLF filters

Core material Ferrite
Terminations RoHS compliant tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 183 – 201 mg

Ambient temperature −40°C to +85°C

Storage temperature Component: −40°C to +85°C. Tape and reel packaging: −40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF) 26,315,789 hours

Packaging 500/7” reel; 2000/13” reel  Plastic tape: 16 mm wide, 0.35 mm thick, 8 mm pocket spacing, 4.4 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.
**PDLF Surface Mount Data Line EMI Filters**

Dot indicates pin 1

**Recommended Land Pattern**

**PDLF4000, 4500**

C

**PDLF3000, 3500**

**PDLF2000, 2500**

*Dimensions are typical prior to applying solder*

Dimensions are in **inches** mm

**Typical Response**

*Measured on HP 8753D network analyzer. Ref: 50 Ohms.*

**Typical Impedance**

*This product may not be used in medical or high-risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.*