SMT Data Line EMI Filter CCDLF

- See our PDLF series for 4, 3 and 2-line EMI filters and CDF for 8-line filters
- Exceptional common mode noise attenuation from 15 MHz to 300 MHz, passes signal line data below 300 MHz with minimal attenuation

Designer’s Kit D303 contains four of each of the CCDLF 10000, DLF, CDF and PDLF filters

Core material Ferrite
Terminations RoHS compliant tin-silver-copper over silver-platinum.
Weight 670 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)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging 1000/13” reel Plastic tape: 16 mm wide, 10.28 mm thick, 12 mm pocket spacing, 5.0 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf

1. When ordering, please specify termination and packaging codes:
CCDLF 8500LD
Termination L = RoHS compliant tin-silver-copper over silver-platinum
Special order: S = non-RoHS tin-lead (63/37).
Packaging D = 13” machine ready reel. EIA-481 embossed plastic tape (1000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

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. Interwinding isolation (hipot) tested for one minute.
6. Current rating is for each line.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Lines</th>
<th>Common mode peak impedance (Ohms)</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>CCDLF 10000L</td>
<td>10</td>
<td>523.54 @ 43 MHz</td>
<td>0.043</td>
<td>5</td>
<td>250</td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>

Dimensions are in inches

Recommended Land Pattern

Dot indicates pin 1

Internal code

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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.
CCDLF 10000 Surface Mount Data Line EMI Filter

Attenuation (Ref: 50 Ohms)

Impedance vs Frequency