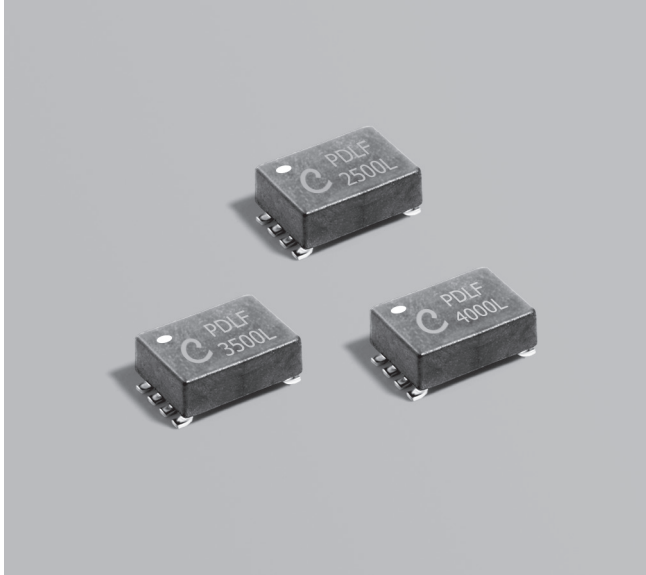




# SMT Data Line EMI Filters – PDLF



- 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)

| Part number <sup>1</sup> | Lines | Common mode peak impedance (kOhms) | Cutoff frequency <sup>2</sup> (GHz) | Inductance min (μH) <sup>3</sup> | DCR max <sup>4</sup> (mOhms) | Isolation <sup>5</sup> (Vrms) | Current <sup>6</sup> (mA <sub>dc</sub> ) |
|--------------------------|-------|------------------------------------|-------------------------------------|----------------------------------|------------------------------|-------------------------------|------------------------------------------|
| PDLF4000L_               | 4     | 0.949 @ 210 MHz                    | 1.1                                 | 5.0                              | 250                          | 300                           | 100                                      |
| PDLF4500L_               | 4     | 0.848 @ 200 MHz                    | 0.88                                | 5.0                              | 200                          | 300                           | 500                                      |
| PDLF3000L_               | 3     | 0.901 @ 280 MHz                    | 1.4                                 | 5.0                              | 250                          | 300                           | 100                                      |
| PDLF3500L_               | 3     | 0.910 @ 210 MHz                    | 1.1                                 | 5.0                              | 200                          | 300                           | 500                                      |
| PDLF2000L_               | 2     | 0.958 @ 280 MHz                    | 1.3                                 | 5.0                              | 250                          | 300                           | 100                                      |
| PDLF2500L_               | 2     | 0.929 @ 250 MHz                    | 1.2                                 | 5.0                              | 200                          | 300                           | 500                                      |

1. When ordering, please specify **packaging** code:

**PDLF4500LC**

**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 Interwinding 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.

**Designer's 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](#).



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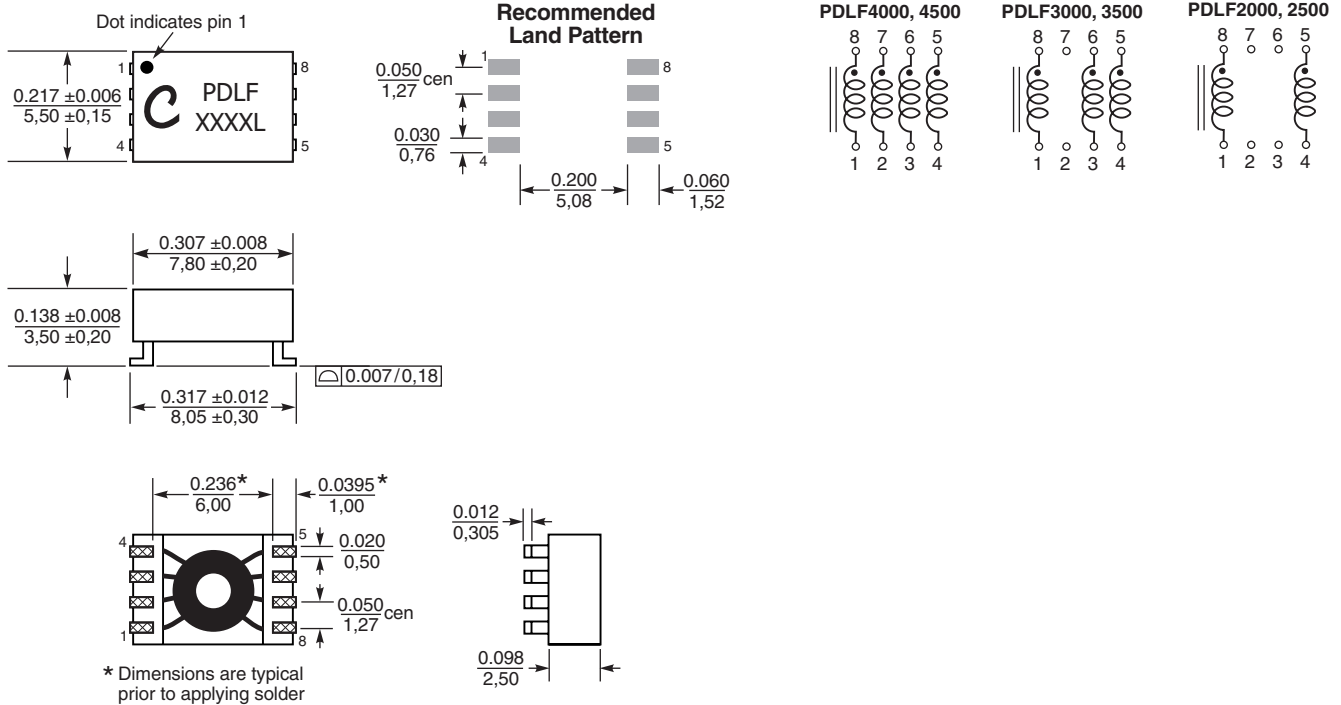
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

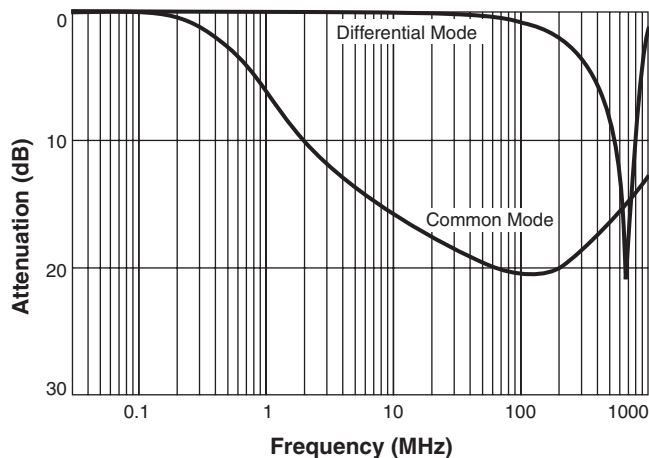


# PDLF Surface Mount Data Line EMI Filters



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

## Typical Response\*



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

## Typical Impedance

