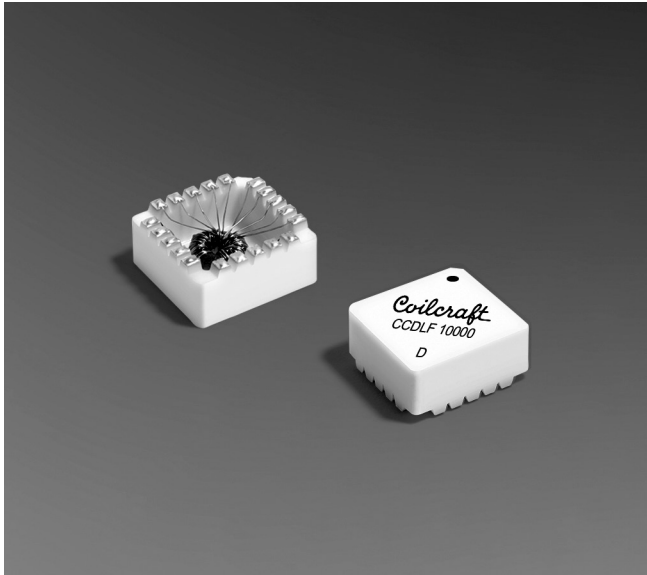


# SMT Data Line EMI Filter CCDLF



- 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 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](#).

Part number <sup>1</sup>	Lines	Common mode peak impedance (Ohms)	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> (mAdc)
CCDLF 10000L_	10	523.54 @ 43 MHz	0.043	5	250	300	100

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).

**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

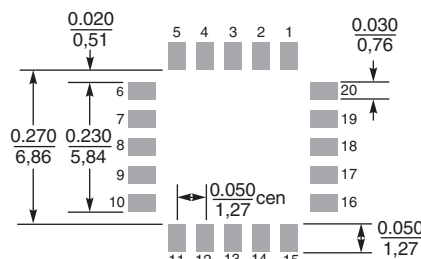
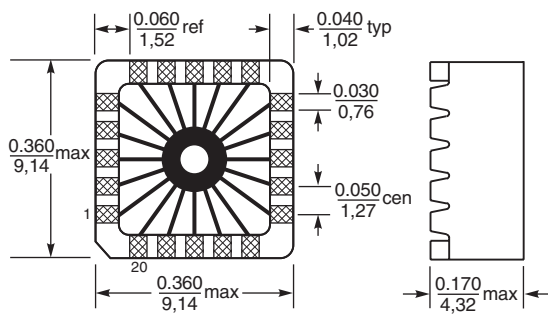
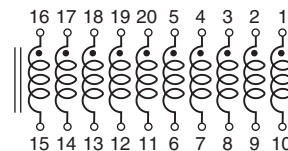
3. Inductance shown for each winding, measured at 1 MHz

4. DCR is for each winding.

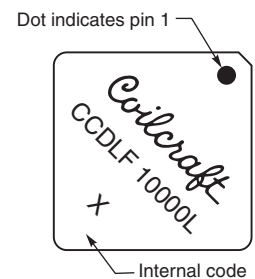
5. Interwinding isolation (hipot) tested for one minute.

6. Current rating is for each line.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



**Recommended Land Pattern**



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



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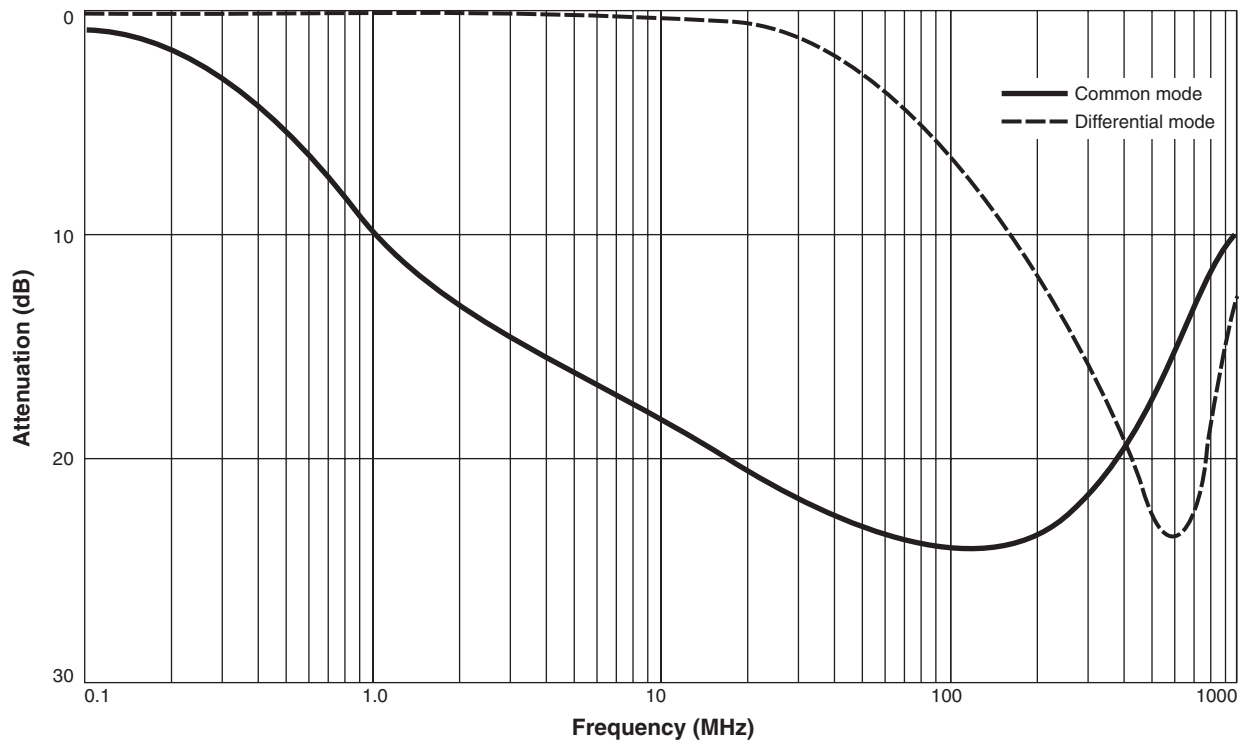
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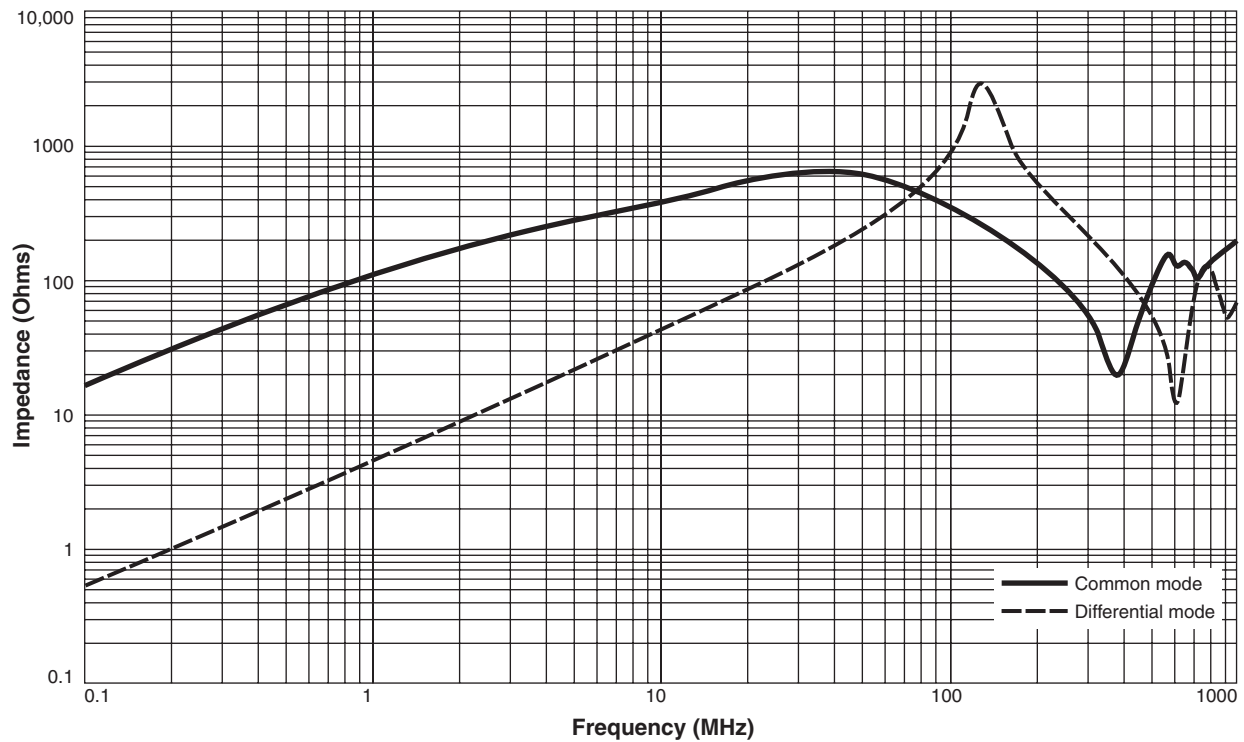


# CCDLF 10000 Surface Mount Data Line EMI Filter

Attenuation (Ref: 50 Ohms)



## Impedance vs Frequency



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