



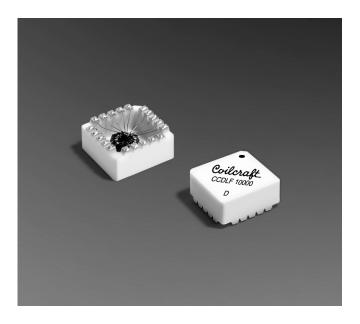








# SMT Data Line EMI Filter CCDLF



- 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)³	DCR max <sup>4</sup> (mOhms)	Isolation⁵ (Vrms)	Current <sup>6</sup> (mAdc)
CCDLF 10000L_	10	523.54 @ 43 MHz	0.043	5	250	300	100

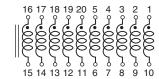
1. When ordering, please specify termination and packaging codes:

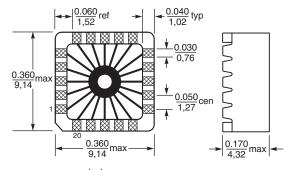
#### CCDLF 8500LD

Termination L = RoHS compliant tin-silver-copper over silver-platinum Special order: S = non-RoHS tin-lead (63/37).

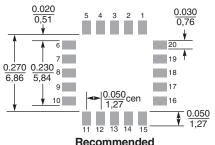
- Packaging D= 13" machine ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).
  - B= Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.
- 2. Frequency at which the differential mode attenuation equals -3 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.

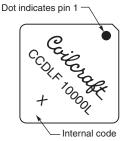




Dimensions are in inches



Recommended **Land Pattern** 



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com UK +44-1236-730595 sales@coilcraft-europe.com Taiwan +886-2-2264 3646 sales@coilcraft.com.tw **China** +86-21-6218 8074 sales@coilcraft.com.cn Singapore + 65-6484 8412 sales@coilcraft.com.sg Document 511-1 Revised 12/14/16

© Coilcraft Inc. 2017

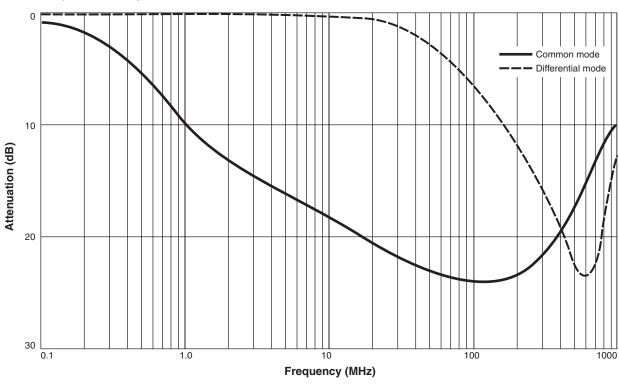
This product may not be used in medical or high risk applications without prior Coilcraft approval Specification subject to change without notice.

Please check web site for latest information.

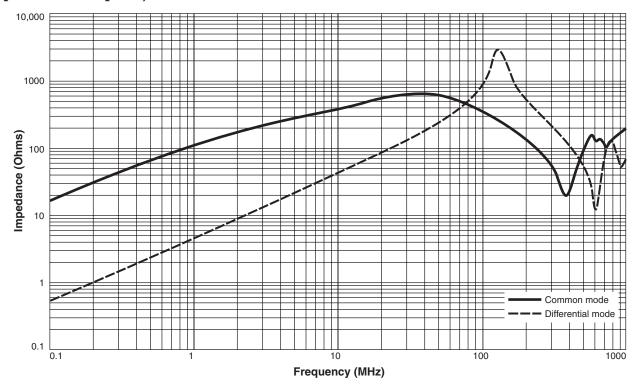


# CCDLF 10000 Surface Mount Data Line EMI Filter

Attenuation (Ref: 50 Ohms)



### **Impedance vs Frequency**





US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

#### Document 511-2 Revised 12/14/16

© Coilcraft Inc. 2017
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.

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### Coilcraft:

CCDLF10000LD CCDLF10000LB CCDLF8500LB CCDLF8000LB CCDLF8500LD CCDLF8000LD