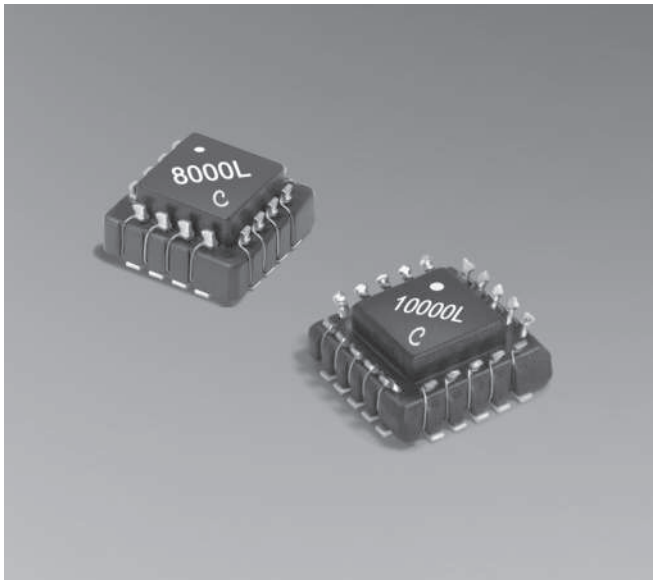
RoHS/ REACH COMPLIANT

SMT Data Line EMI Filters – CDF



- See our PDLF series for 4, 3 and 2-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 for 1 minute

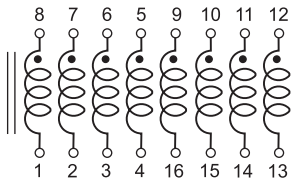
Core material Ferrite
Terminations RoHS compliant tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 330 – 345 mg
Ambient temperature –40°C to +85°C
Storage temperature Component: –40°C to +85°C. Tape and reel packaging: –40°C to +80°C
Resistance 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)
Packaging 1000/13″ reel Plastic tape: 16 mm wide, 0.46 mm thick, 12 mm pocket spacing, 4.5 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number[1]	Lines	Common mode peak impedance (kOhms)	Cutoff frequency[2] (GHz)	Inductance min (µH)[3]	DCR max[4] (mOhms)	Isolation[5] (Vrms)	Current[6] (mAdc)
CDF8000L_	8	0.63 @ 37 MHz	0.053	5.0	250	300	100
CDF8500L_	8	0.52 @ 42 MHz	0.053	5.0	180	300	500
CDF10000L_	10	0.52 @ 43 MHz	0.043	5.0	250	300	100

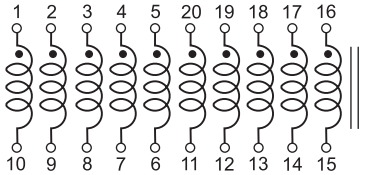
1. When ordering, please specify **termination** and **packaging** codes:
CDF10000LD
Termination L = RoHS compliant tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.
Special order: S = non-RoHS tin-lead (63/37).
Packaging **D** = 13″ machine ready 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.

Schematics

CDF8x00L



CDF10000L



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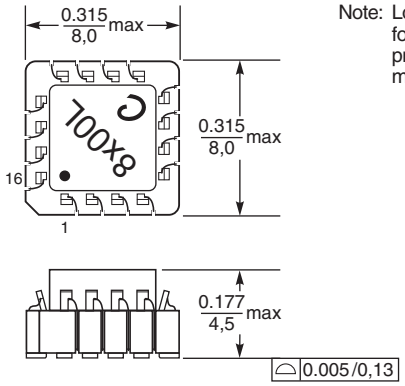
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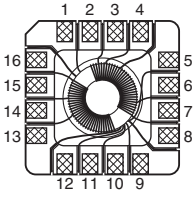
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CDF Surface Mount Data Line EMI Filters

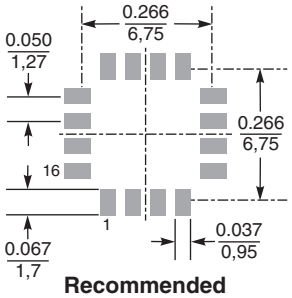
Dimensions – CDF8x00



Note: Location of the wire slots for parts manufactured prior to August 2017 may be different.

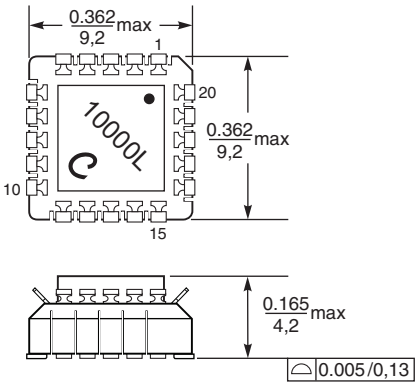


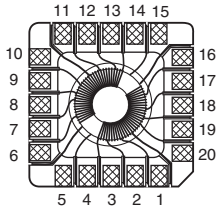
Dimensions are in inches / mm



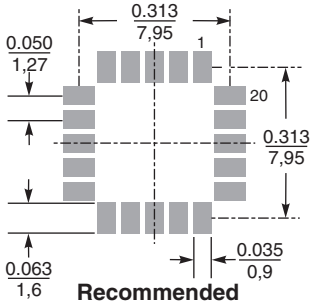
Recommended Land Pattern

Dimensions – CDF10000





Dimensions are in inches / mm



Recommended Land Pattern

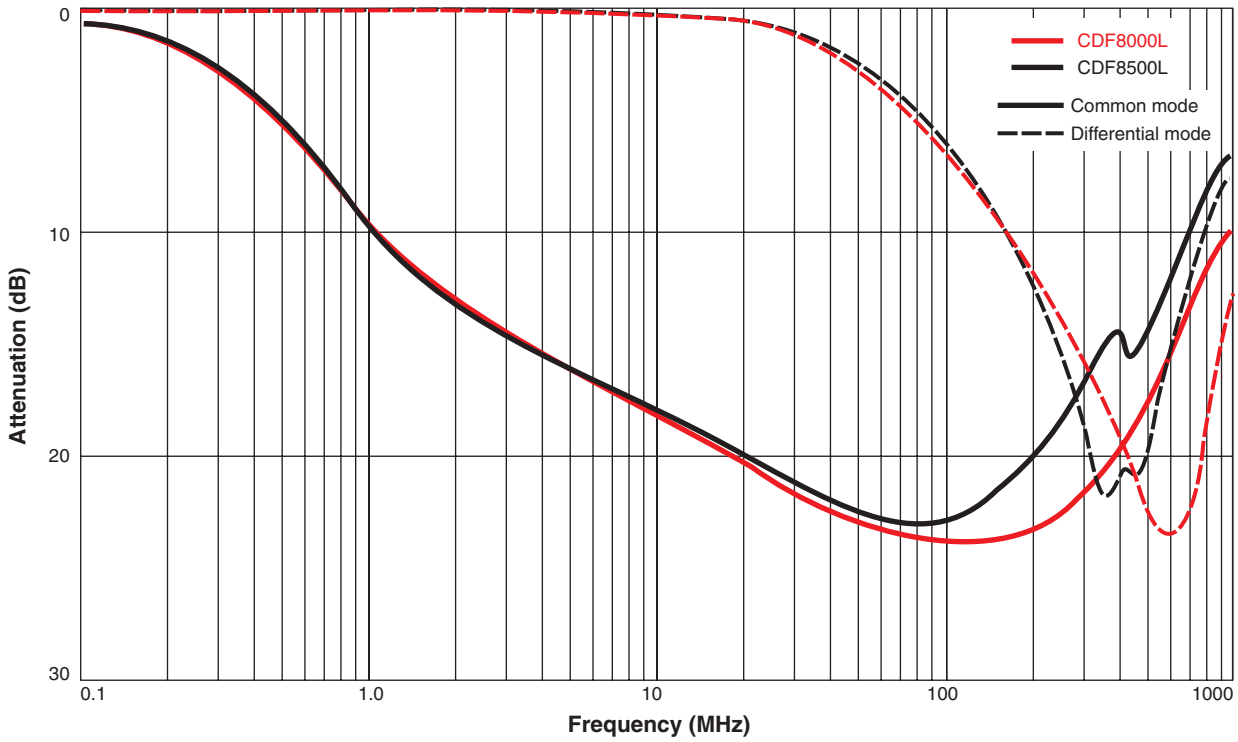
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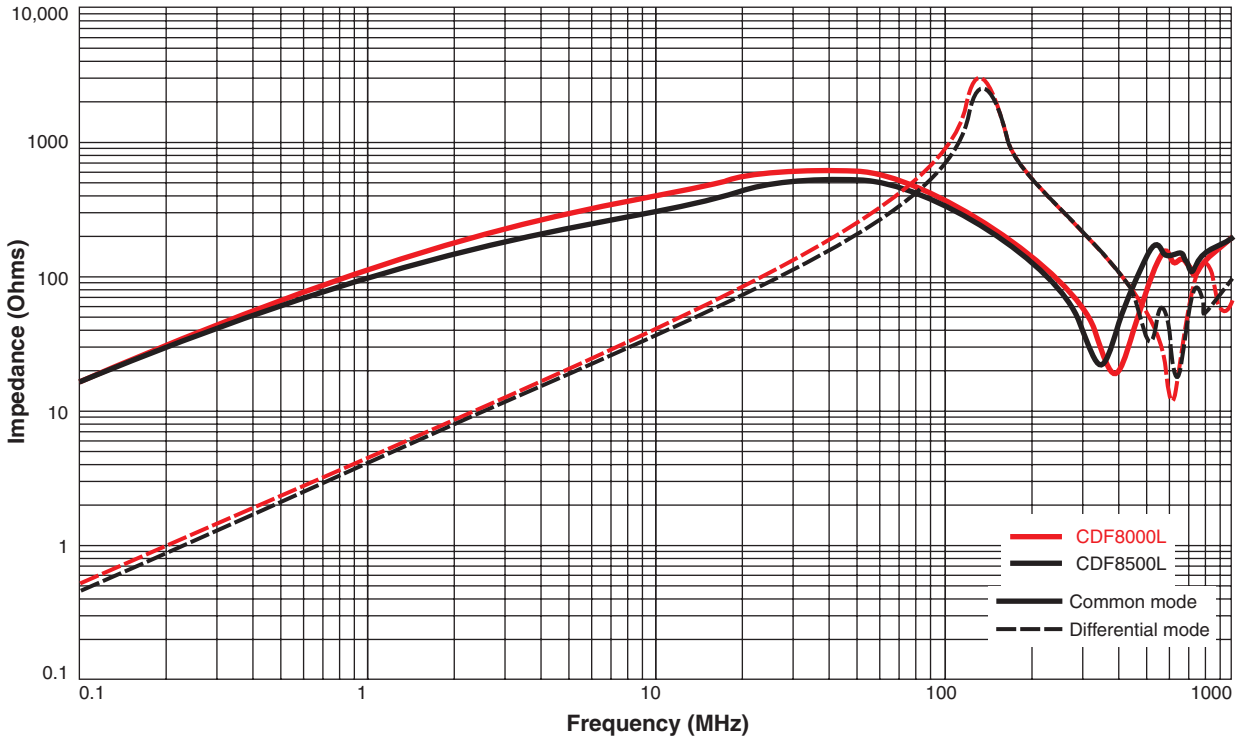
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CDF8x00 Surface Mount Data Line EMI Filters

Attenuation (Ref: 50 Ohms)



Impedance vs Frequency



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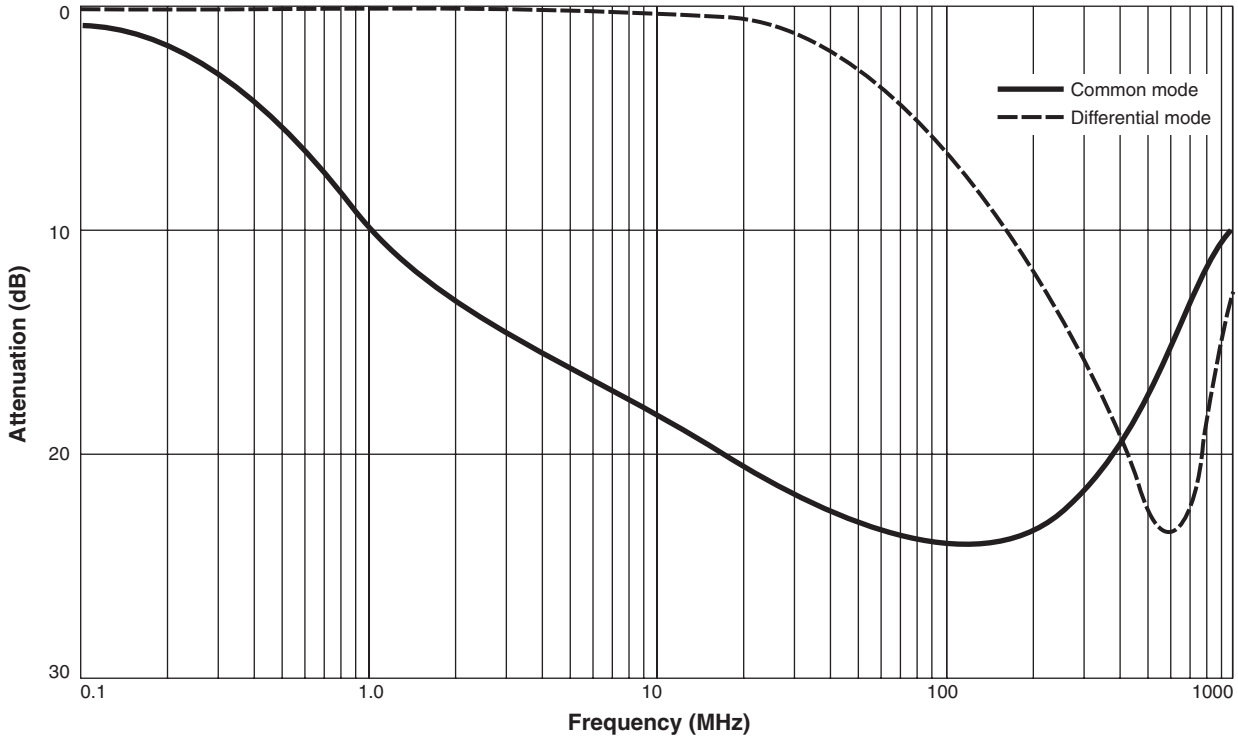
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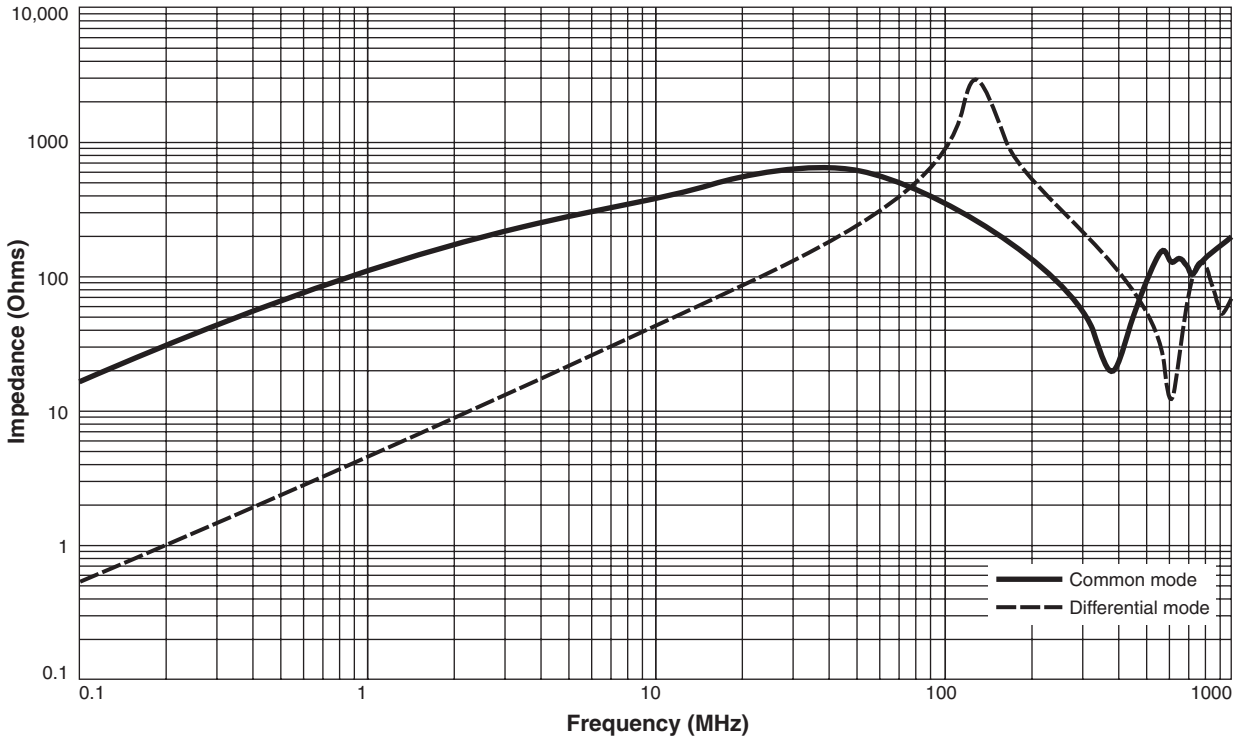
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CDF10000 Surface Mount Data Line EMI Filters

Attenuation (Ref: 50 Ohms)



Impedance vs Frequency



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