









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

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)

Mean Time Between Failures (MTBF) 26,315,789 hours

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 number¹	Lines	Common mode peak impedance (kOhms)	Cutoff frequency ² (GHz)	Inductance min (µH)³	DCR max ⁴ (mOhms)	Isolation⁵ (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

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

Termination L = RoHS compliant tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.

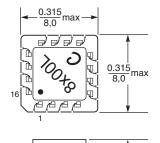
Special order: S = non-RoHS tin-lead (63/37).

Packaging D= 13" machine ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).

> 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.

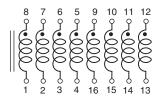
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



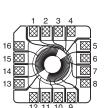
 $\frac{0.177}{-}$ max

<u>0.005/0,13</u>

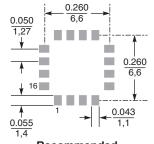
4,5



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



Dimensions are in inches



Recommended **Land Pattern**



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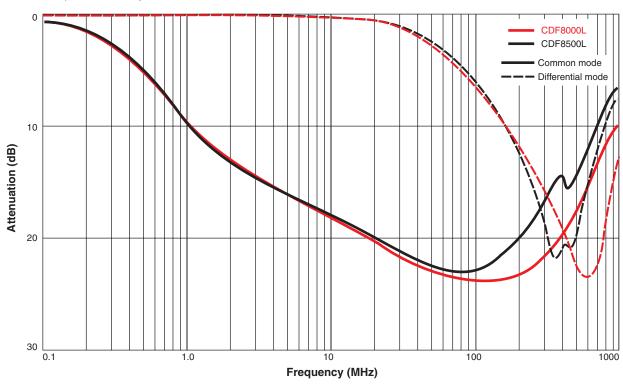
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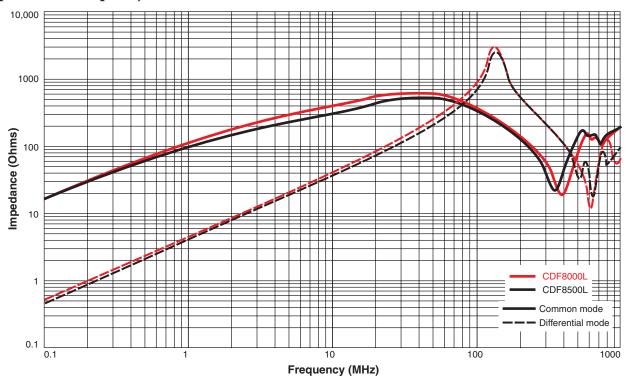


CDF8x00 Surface Mount Data Line EMI Filters

Attenuation (Ref: 50 Ohms)



Impedance vs Frequency





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