

# SMT Common Mode Chokes

for power line applications

- Solutions for use in a wide array of power line circuits
- Ideal for use in consumer electronics and industrial applications
- Suppression of high frequency common mode noise up to 100 MHz
- Excellent current ratings – up to 10 A
- Isolation (hipot) up to 1500 Vrms
- Surface mount toroids
- Upon request, additional values may be available for particular applications



Part number	Common mode peak impedance (kOhms)	Inductance (mH)		Irms (A)	DCR max (mOhms)	Isolation (Vrms)	Length max (mm)	Width max (mm)	Height max (mm)	Page
		nom	min							
CE1755-AL	3.32 @ 5.1 MHz	0.88	0.57	1.2	130	1000	13.00	13.00	5.46	2
CR7915-AL	3.10 @ 4.9 MHz	1.12	0.73	2.6	49.5	1500	13.00	13.00	5.60	3
CF3094-AL	7.93 @ 2.5 MHz	1.17	0.76	1.1	200	1000	13.00	13.00	5.46	4
CM6518-AL	4.17 @ 1.9 MHz	1.40	0.91	2.5	60.0	1500	16.38	14.22	8.90	5
CJ5094-CL	28.28 @ 0.26 MHz	10.0	6.5	1.2	180	1000	16.38	14.22	8.90	6
CV9172-AL	70.01 @ 0.21 MHz	22.0	14.3	0.57	850	1000	16.38	14.22	8.90	7
CF2638L	2.59 @ 4.3 MHz	0.22	0.14	2.9	60.0	1000	19.56	17.02	9.91	8
CD1479-AL	4.19 @ 3.0 MHz	0.59	0.38	4.2	20.0	1000	19.56	17.02	9.91	9
CH4659-AL	4.56 @ 2.5 MHz	0.77	0.50	4.7	40.0	1000	19.56	17.02	9.91	10
CD1480-BL	4.53 @ 2.2 MHz	1.32	0.85	3.5	60.0	1000	19.56	17.02	9.91	11
CE2439L	9.42 @ 1.1 MHz	1.47	0.96	2.5	80.0	1000	19.56	17.02	9.91	12
CG3333-AL	2.27 @ 2.9 MHz	0.90	0.59	3.7	50.0	1000	19.56	17.02	9.90	13
CG3528-AL	6.23 @ 0.72 MHz	3.00	1.95	3.1	42.0	1000	19.56	17.02	9.91	14
CE1759-AL	4.82 @ 0.99 MHz	0.81	0.52	6.0	14.0	1000	31.0	26.0	13.0	15
CG3885-AL	3.11 @ 1.8 MHz	0.47	0.30	10.0	8.0	1000	31.0	26.0	12.7	16
CF2805-AL	3.64 @ 1.9 MHz	0.63	0.40	6.8	14.0	1000	31.0	26.0	12.7	17



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# Common Mode Choke – CE1755-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CE1755-AL_	3.32 @ 5.1 MHz	0.88	0.57	1.2	130	1000

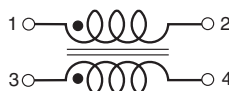
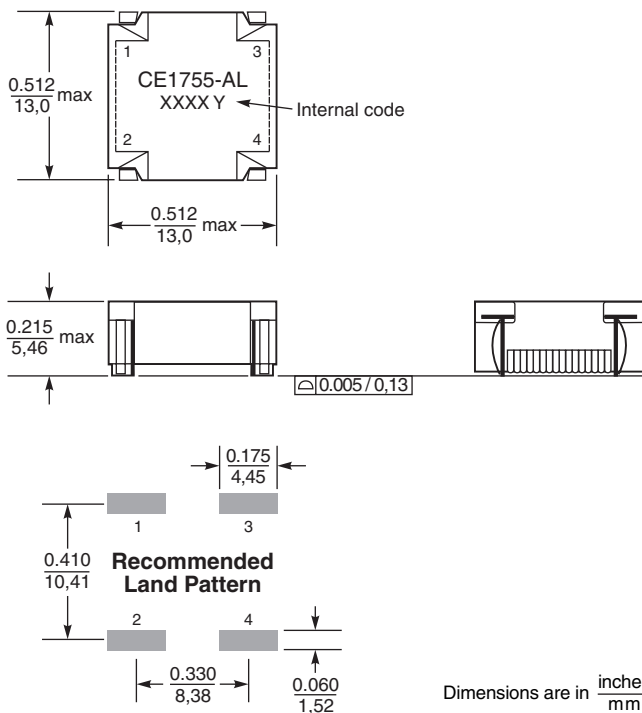
1. When ordering, please specify **packaging** code:

**CE1755-ALD**

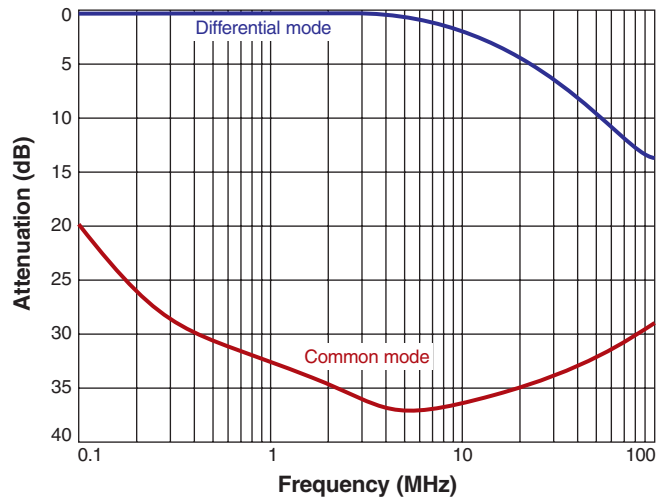
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (600 parts per full reel).

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.

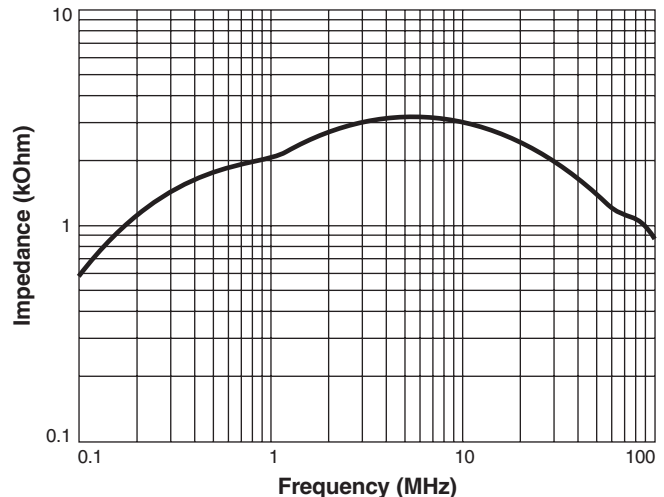
- Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 0.92 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 600/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 5.5 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CR7915-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CR7915-AL_	3.10 @ 4.9 MHz	1.12	0.73	2.6	49.5	1500

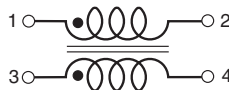
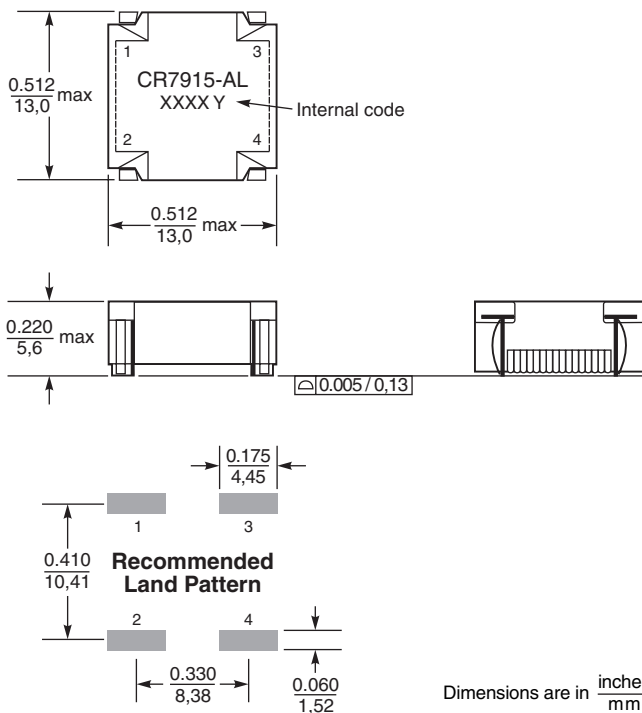
1. When ordering, please specify **packaging** code:

## CR7915-ALD

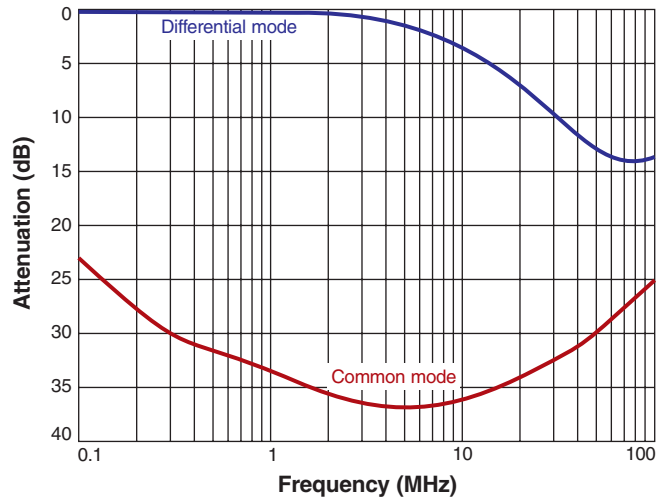
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (600 parts per full reel).  
B = Less than full reel. In tape, but not machine ready.  
To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
- Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
- DCR is specified per winding.
- Isolation (hipot) measured for two seconds.
- Electrical specifications at 25°C.

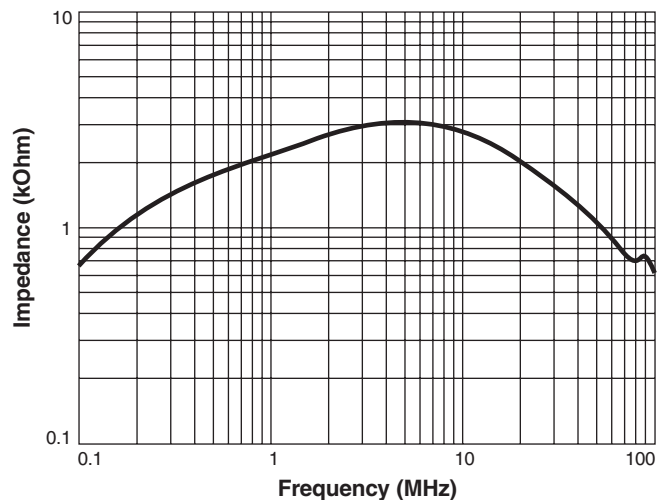
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 1.53 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 600/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 5.5 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Chokes – CF3094-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CF3094-AL_	7.93 @ 2.5 MHz	1.17	0.76	1.1	200	1000

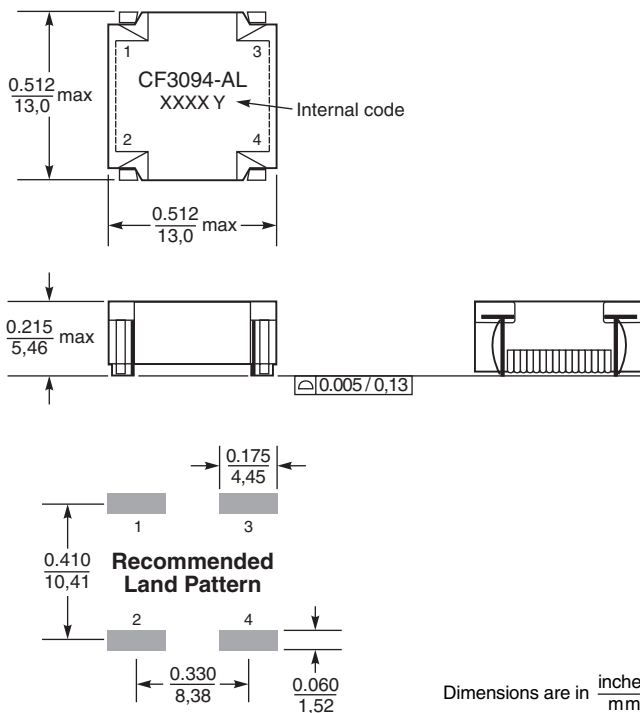
1. When ordering, please specify **packaging** code:

**CF3094-ALD**

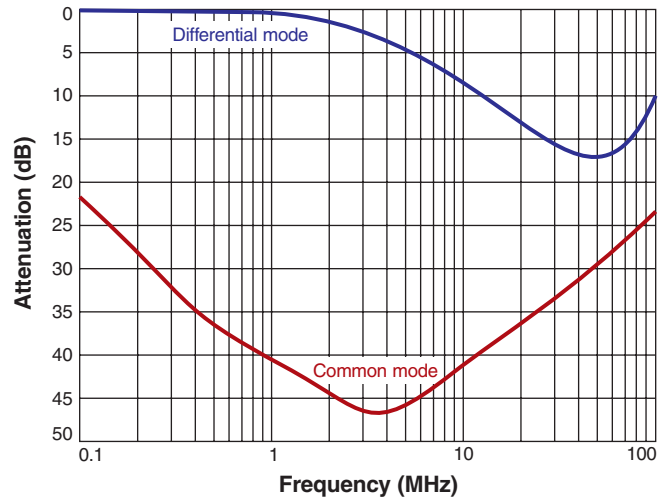
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (600 parts per full reel).

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.

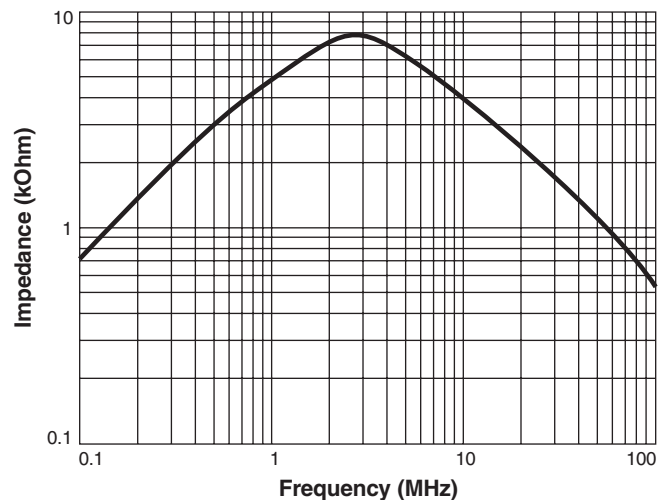
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 1.38 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 600/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 5.5 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CM6518-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CM6518-AL_	4.17 @ 1.9 MHz	1.40	0.91	2.5	60.0	1500

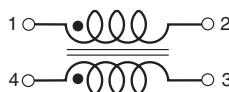
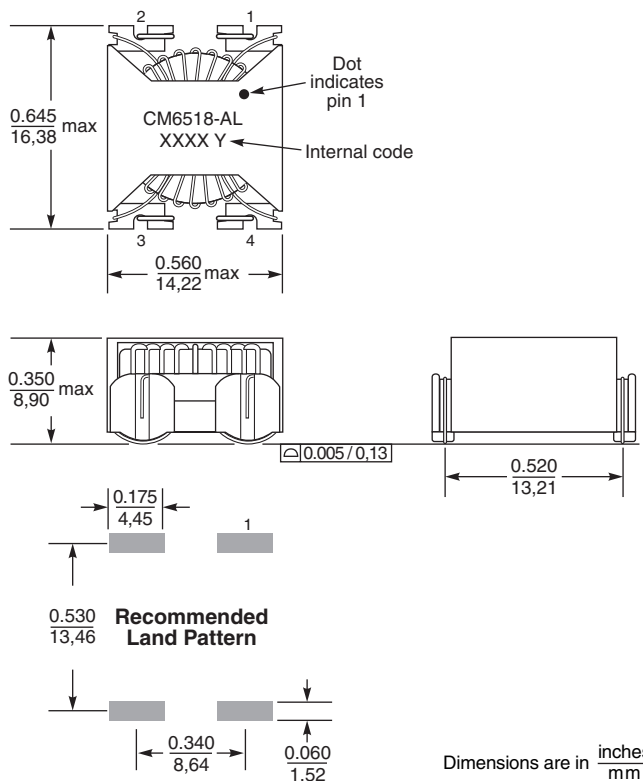
1. When ordering, please specify **packaging** code:

**CM6518-ALD**

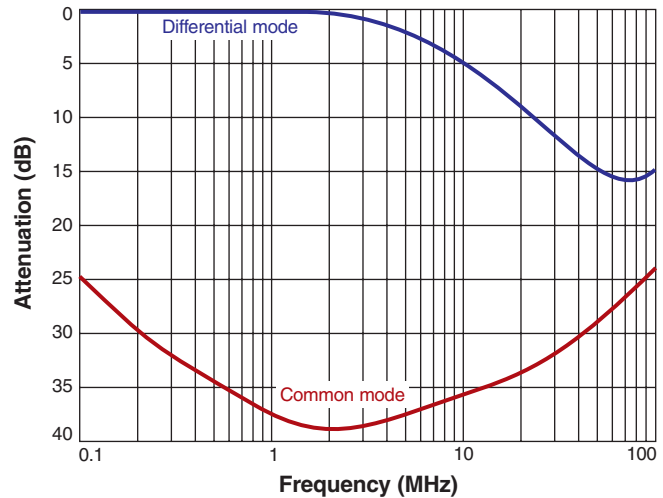
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (350 parts per full reel).

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.

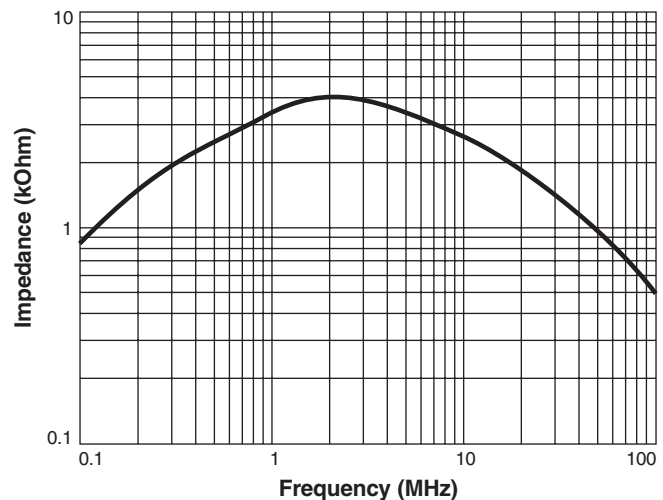
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 2.48 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 350/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 20 mm pocket spacing, 9.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CJ5094-CL

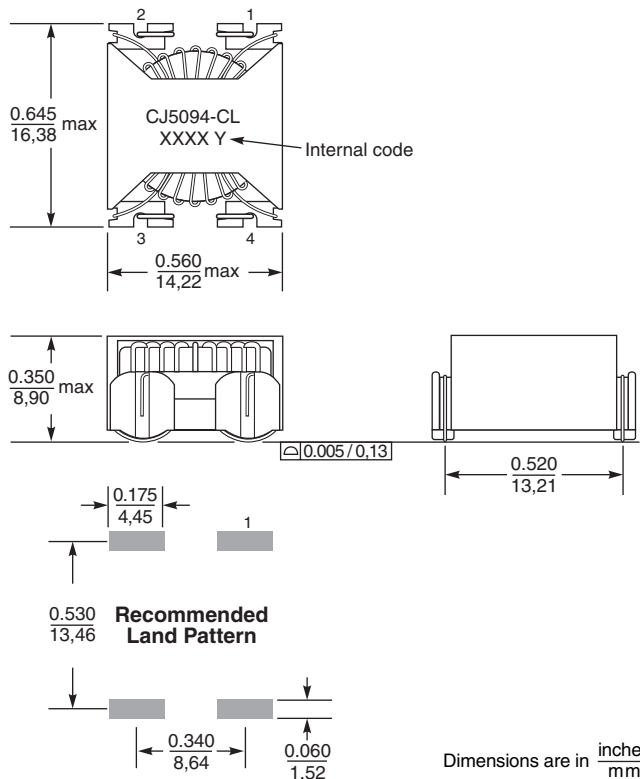
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CJ5094-CL_	28.28 @ 0.26 MHz	10.0	6.5	1.2	180	1000

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

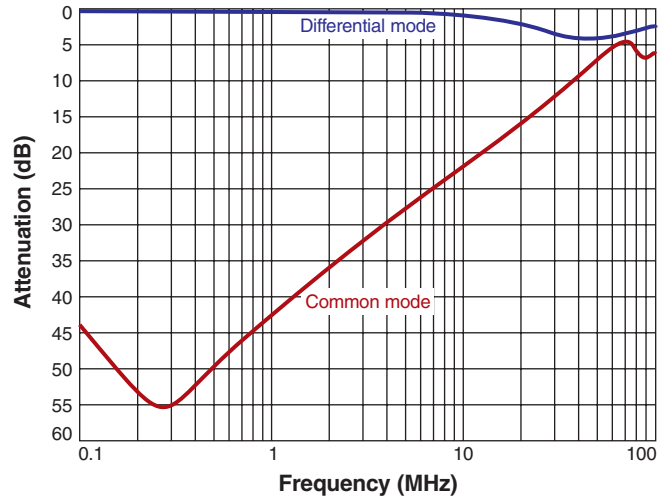
**CJ5094-CLD**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (350 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.

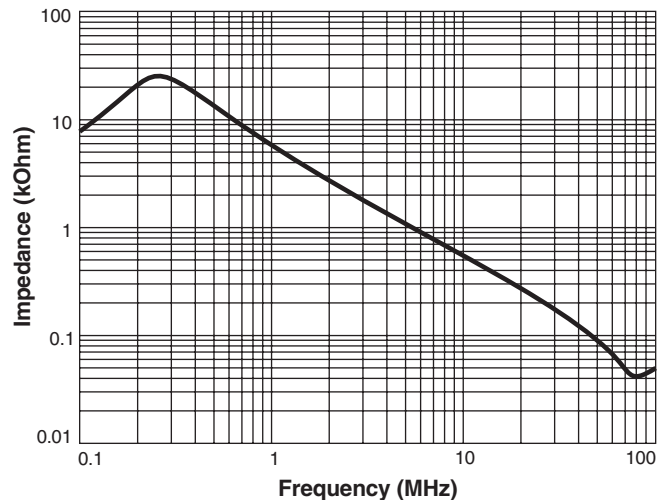
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 2.9 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 350/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 24 mm pocket spacing, 8.6 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CV9172-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		Irms <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CV9172-AL_	70.01 @ 0.21 MHz	22.0	14.3	0.57	850	1000

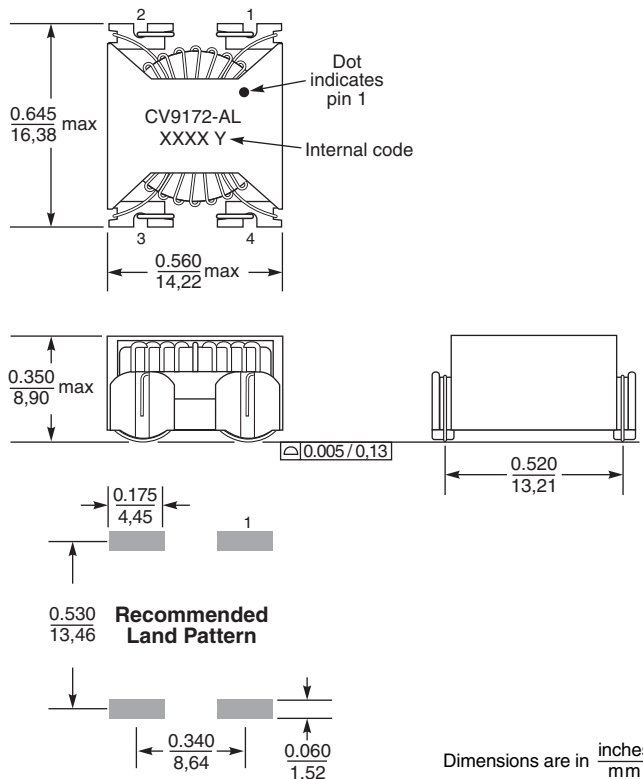
1. When ordering, please specify **packaging** code:

**CV9172-ALD**

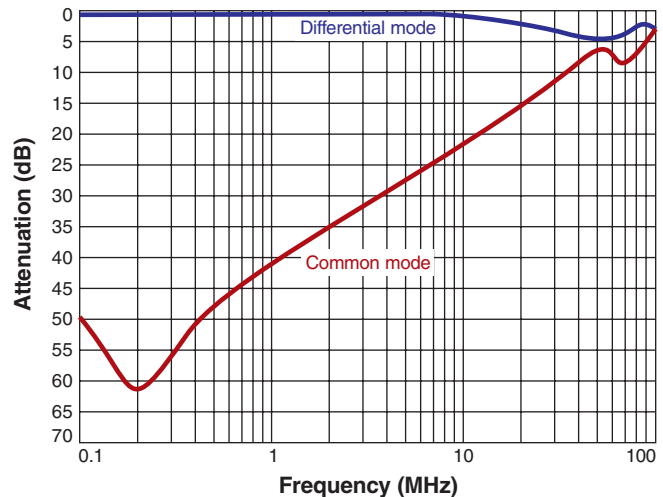
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (350 parts per full reel).

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.

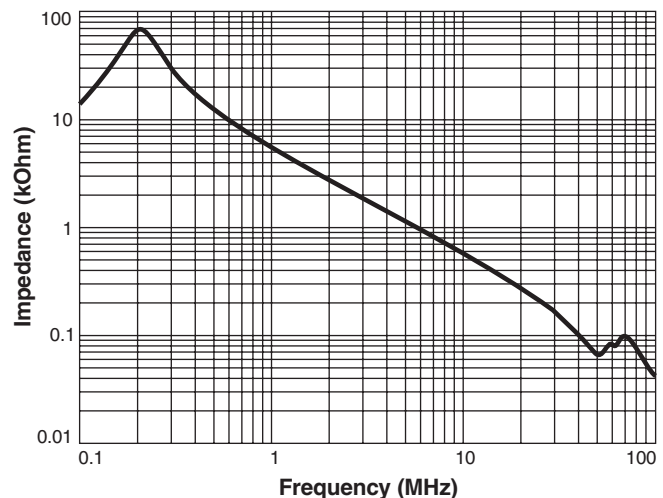
- Inductance shown for each winding, measured at 10 kHz, 1.0 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 2.4 g

**Ambient temperature** -40°C to +85°C with Irms current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 350/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 20 mm pocket spacing, 9.1 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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# Common Mode Choke – CF2638L

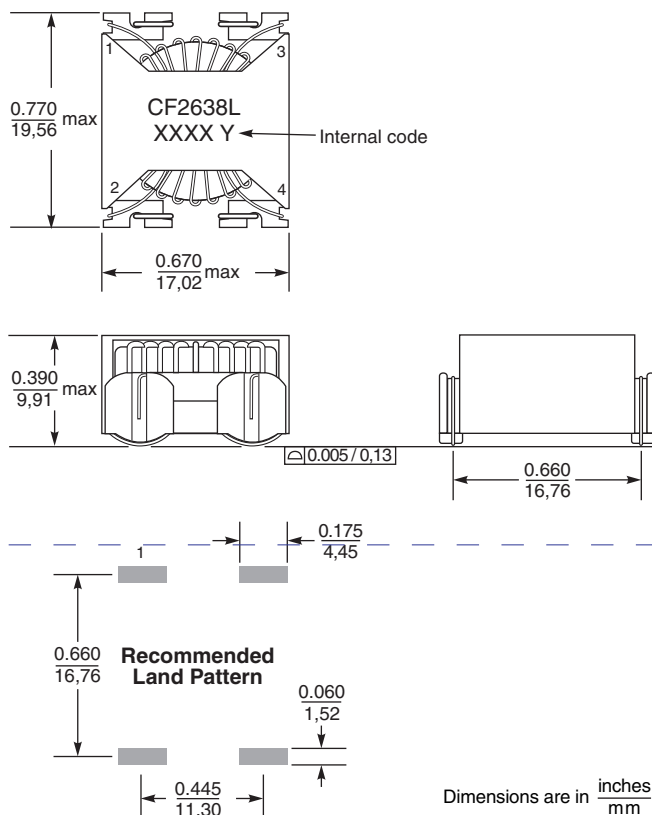
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CF2638LD	2.59 @ 4.3 MHz	0.22	0.14	2.9	60.0	1000

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

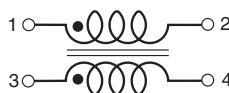
**CF2638LD**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (250 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.

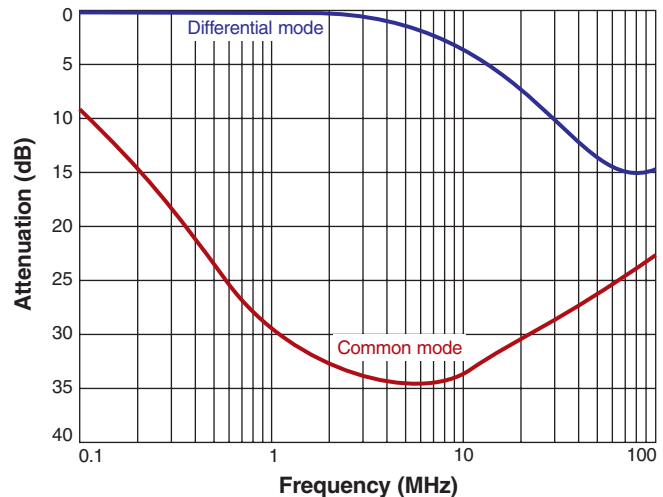
- Inductance shown for each winding, measured at 10 kHz, 1.0 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



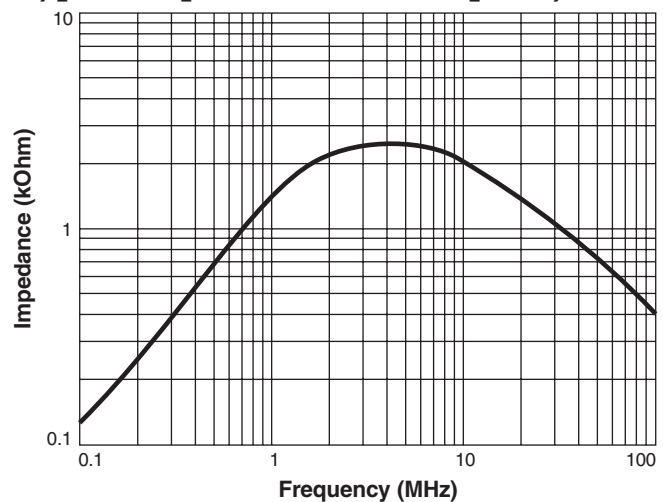
Dimensions are in  $\frac{\text{inches}}{\text{mm}}$



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 3.2 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CD1479-AL

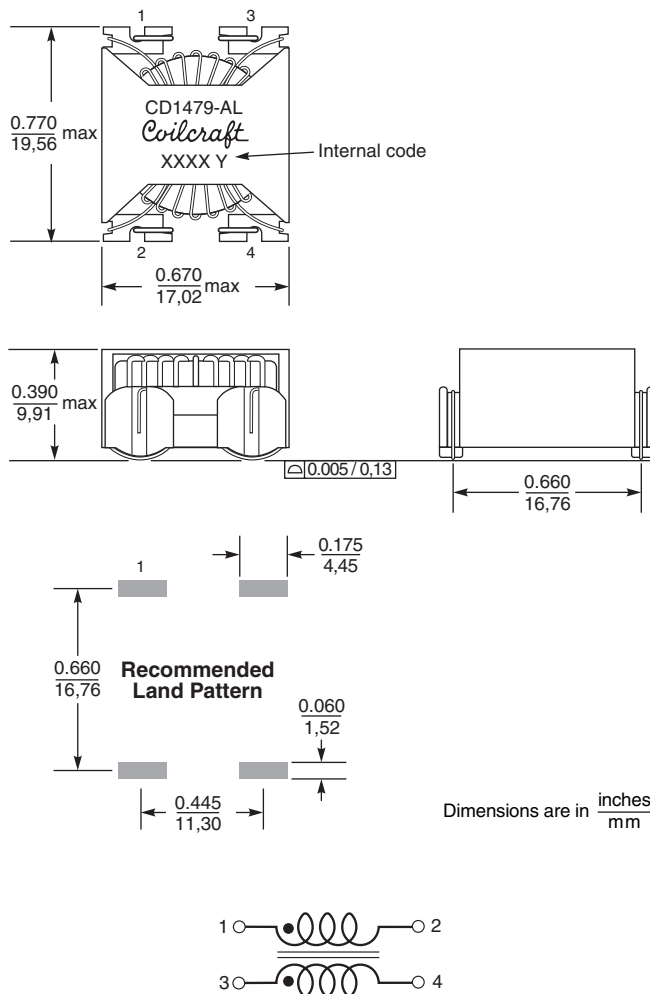
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CD1479-AL_	4.19 @ 3.0 MHz	0.59	0.38	4.2	20.0	1000

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

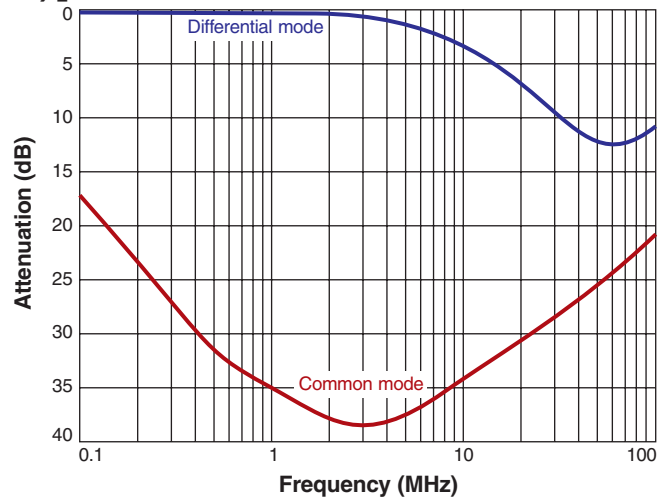
## CD1479-ALD

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 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.

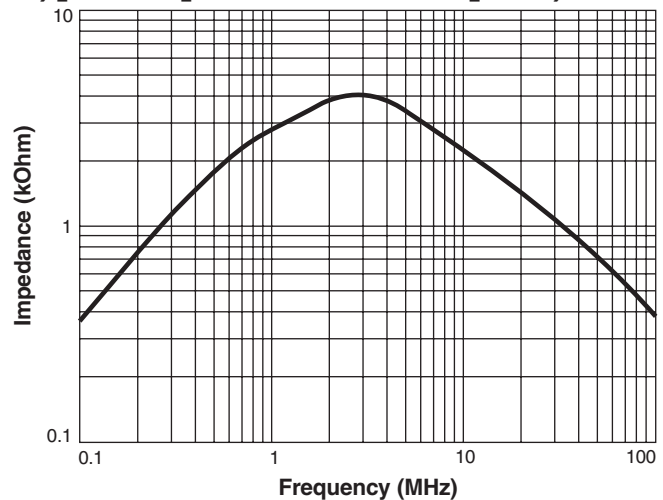
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 4.9 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Choke – CH4659-AL

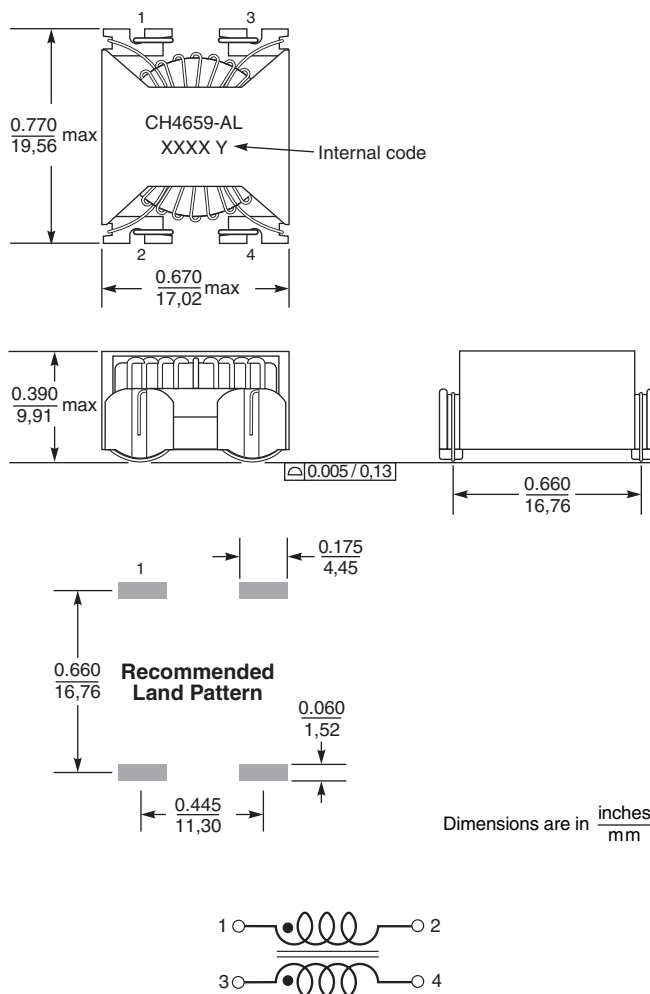
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CH4659-AL_	4.56 @ 2.5 MHz	0.77	0.50	4.7	40.0	1000

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

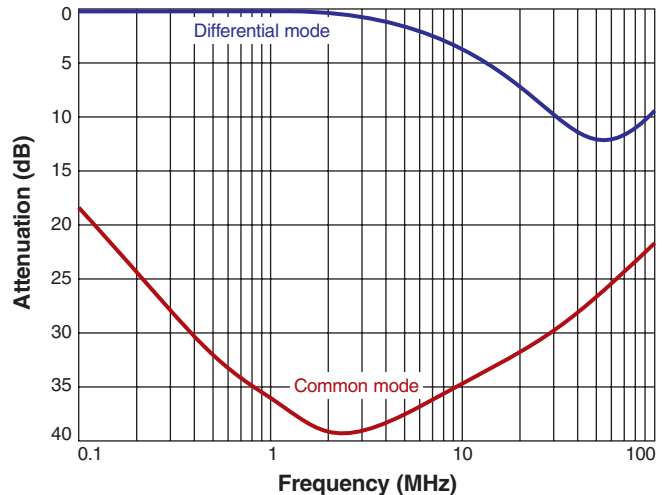
## CH4659-ALD

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 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.

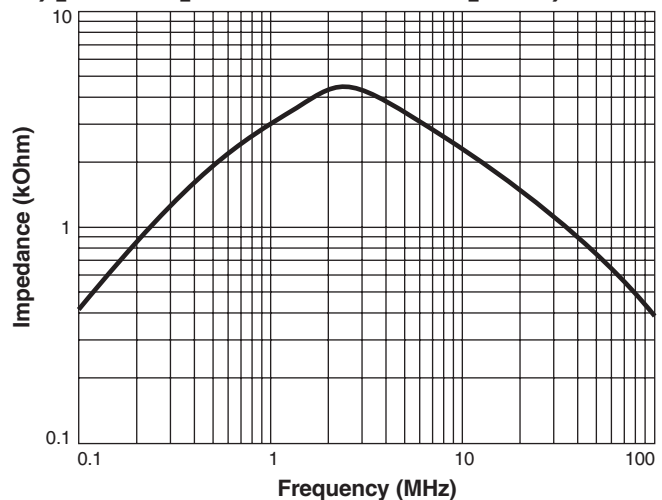
- Inductance shown for each winding, measured at 10 kHz, 1.0 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 4.8 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 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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# Common Mode Choke – CD1480-BL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CD1480-BL_	4.53 @ 2.2 MHz	1.32	0.85	3.5	60.0	1000

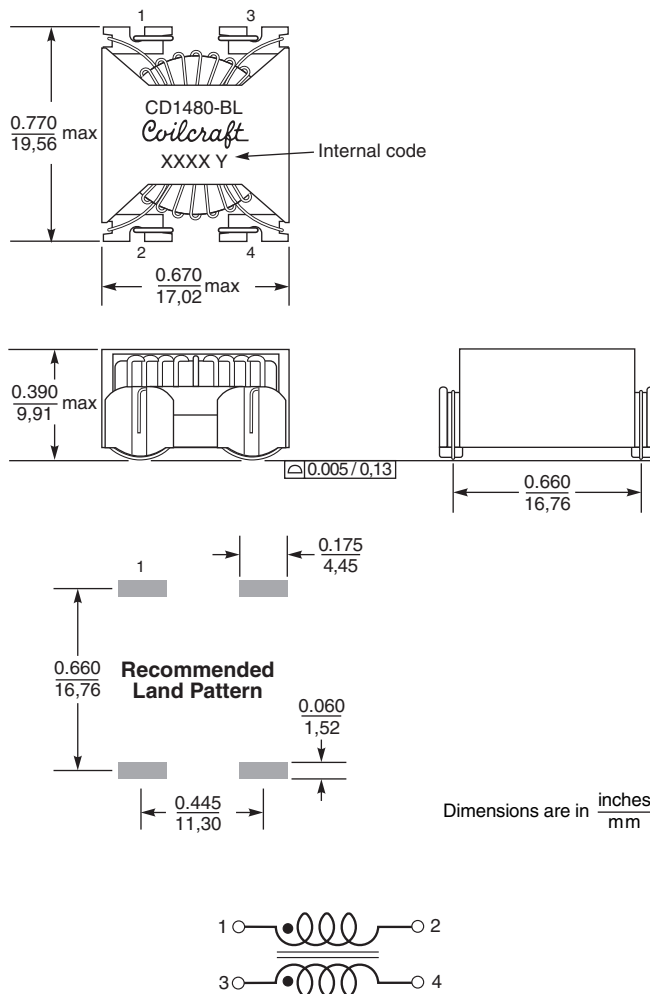
1. When ordering, please specify **packaging** code:

## CD1480-BLD

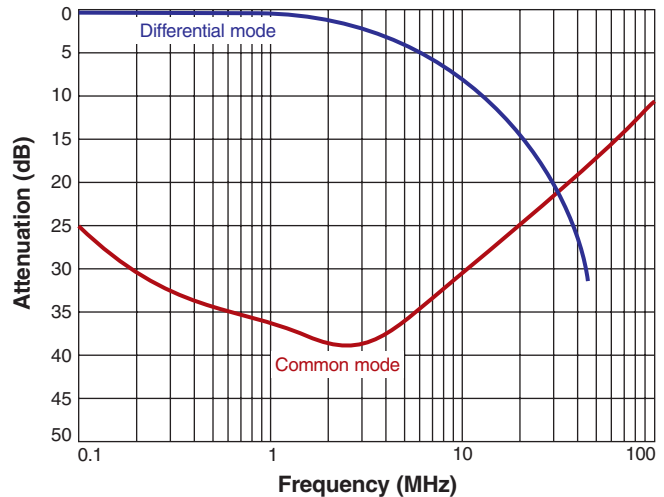
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel).  
B = Less than full reel. In tape, but not machine ready.  
To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance shown for each winding, measured at 1 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
- Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
- DCR is specified per winding.
- Isolation (hipot) measured for two seconds.
- Electrical specifications at 25°C.

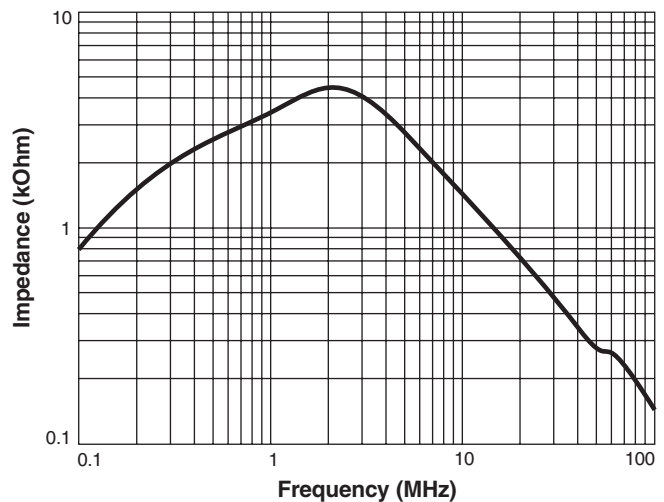
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 4.5 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 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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# Common Mode Choke – CE2439L

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CE2439L_	9.42 @ 1.1 MHz	1.47	0.96	2.5	80.0	1000

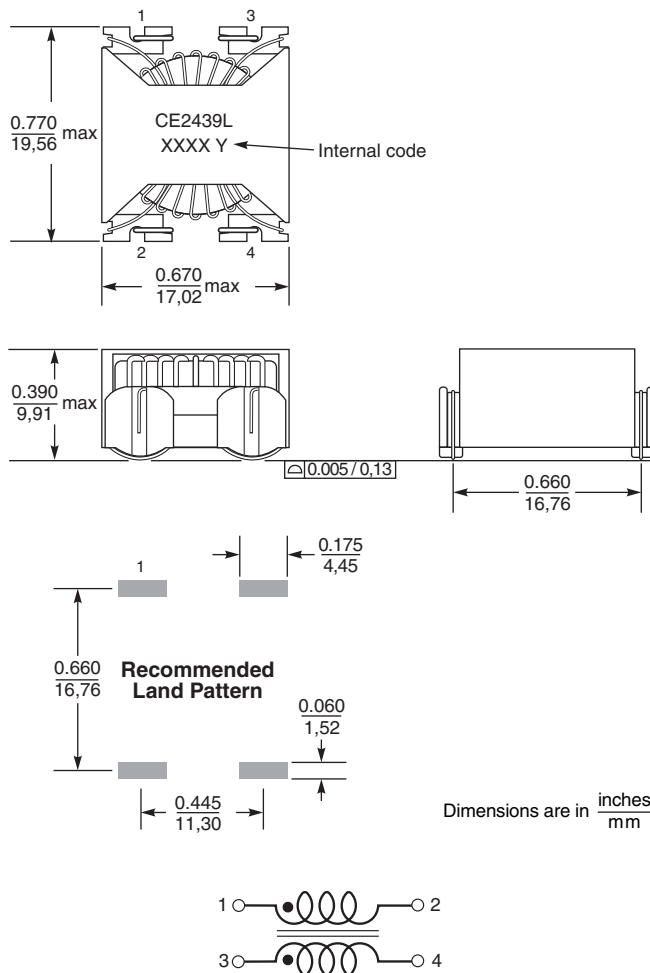
1. When ordering, please specify **packaging** code:

**CE2439LD**

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel).

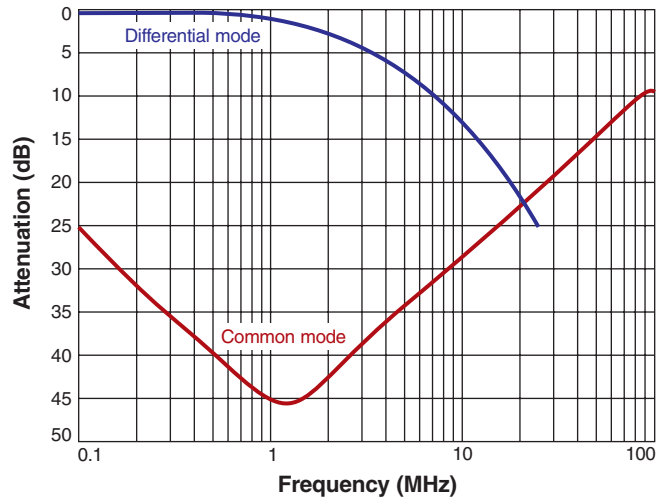
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance shown for each winding, measured at 1 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

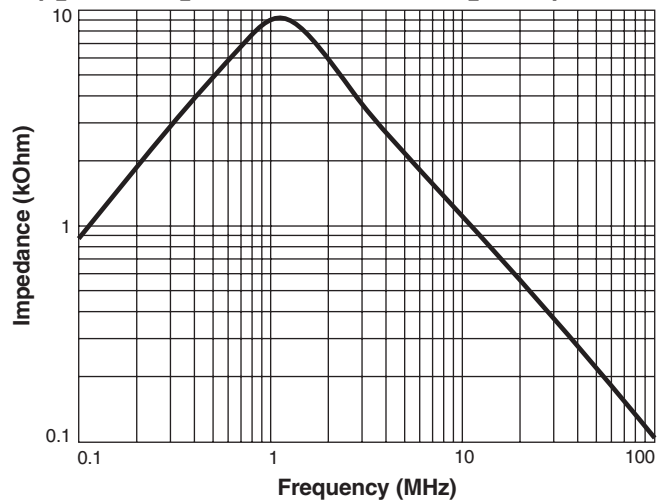


Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 4.3 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



# Common Mode Chokes – CG3333-AL

Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CG3333-AL	2.27 @ 2.9 MHz	0.90	0.59	3.7	50.0	1000

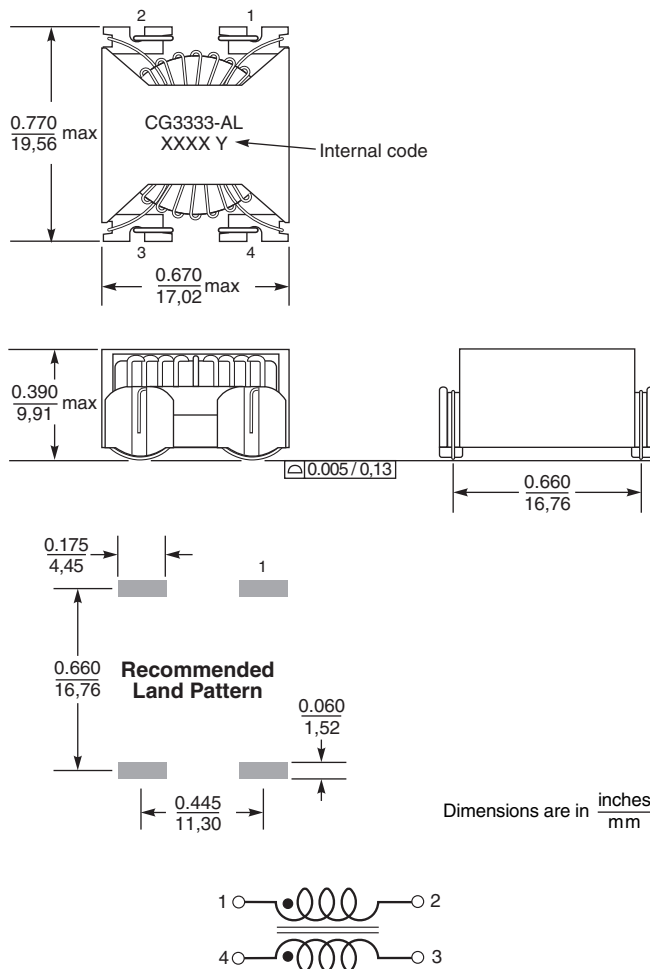
1. When ordering, please specify **packaging** code:

## CG3333-ALD

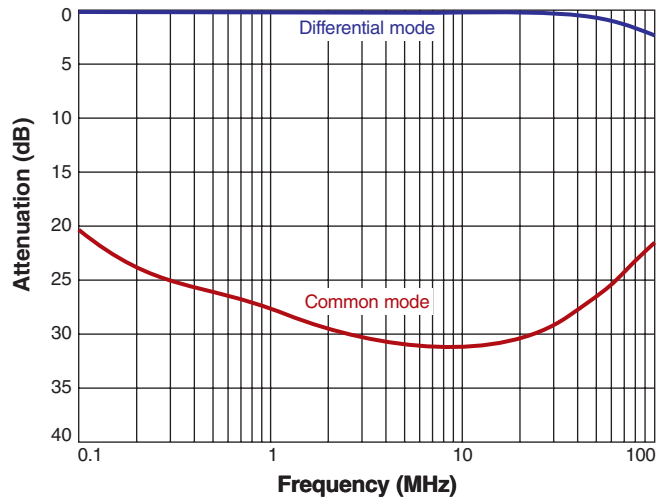
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel).

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.

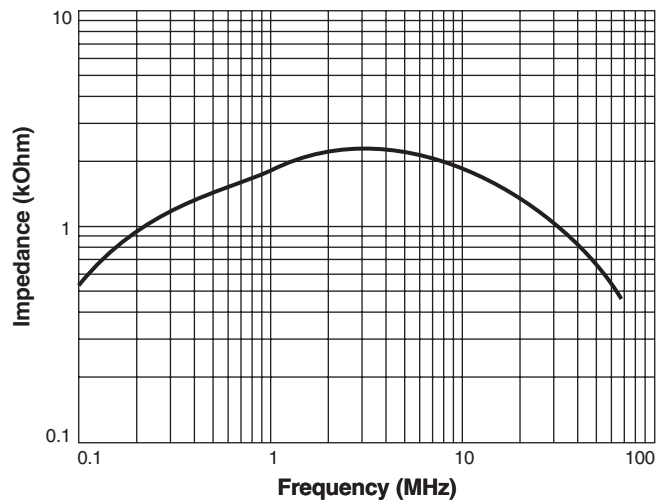
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 4.2 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 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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# Common Mode Chokes – CG3528-AL

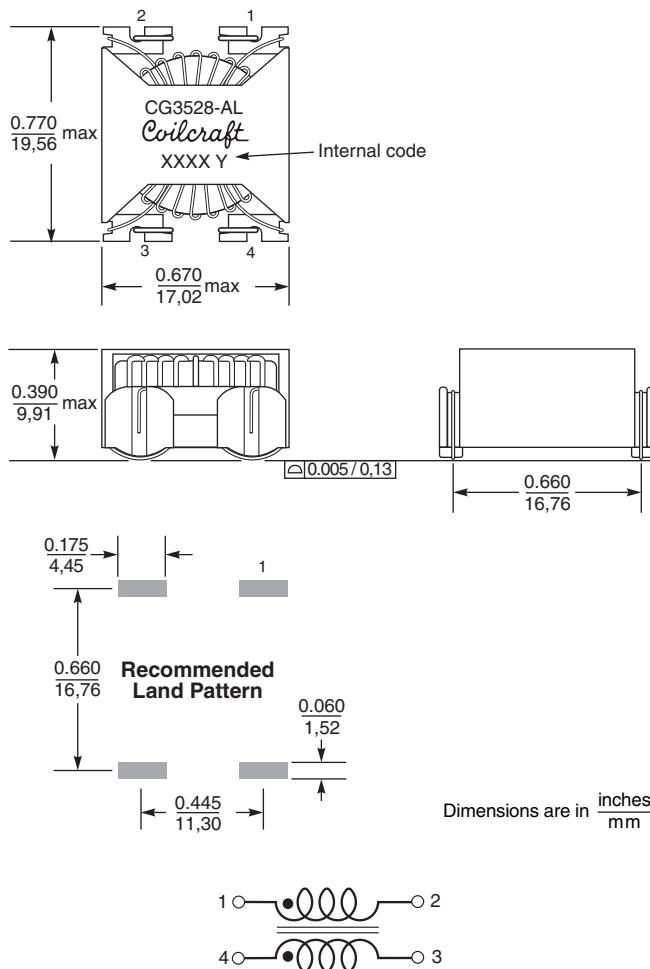
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CG3528-AL	6.23 @ 0.72 MHz	3.00	1.95	3.1	42.0	1000

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

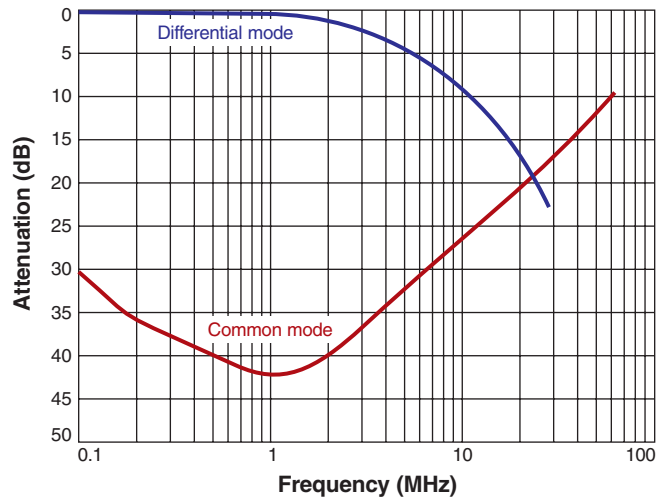
**CG3528-ALD**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (250 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.

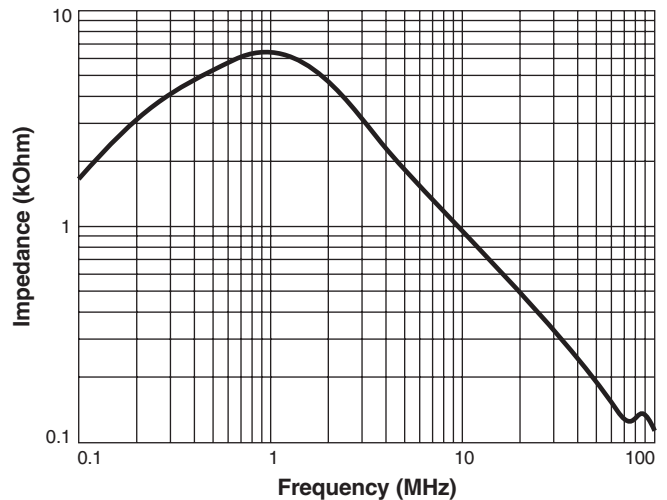
- Inductance shown for each winding, measured at 10 kHz, 1.0 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 5.1 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 10.1 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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# Common Mode Choke – CE1759-AL

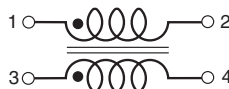
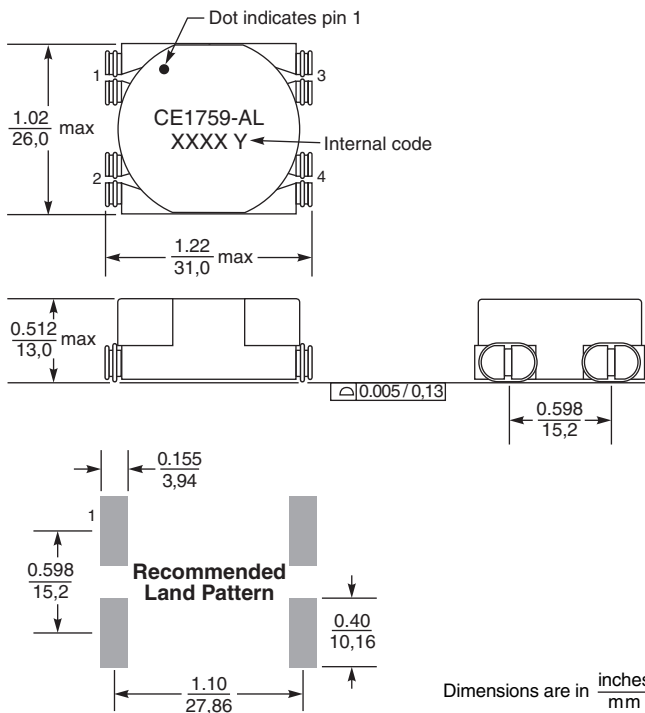
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CE1759-AL_	4.82 @ 0.99 MHz	0.81	0.52	6.0	14.0	1000

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

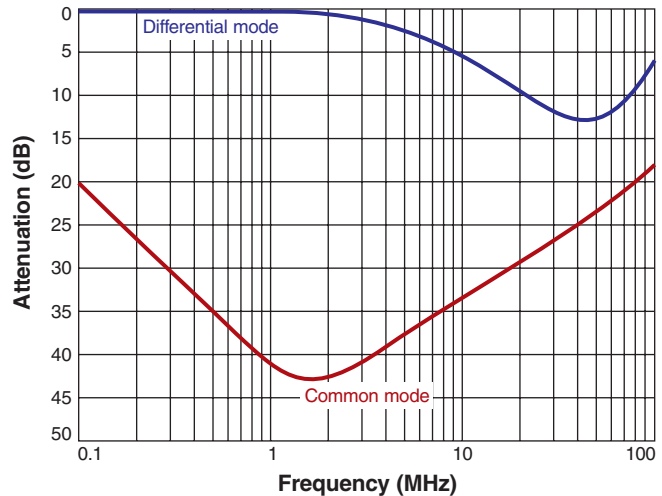
**CE1759-ALD**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (120 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.

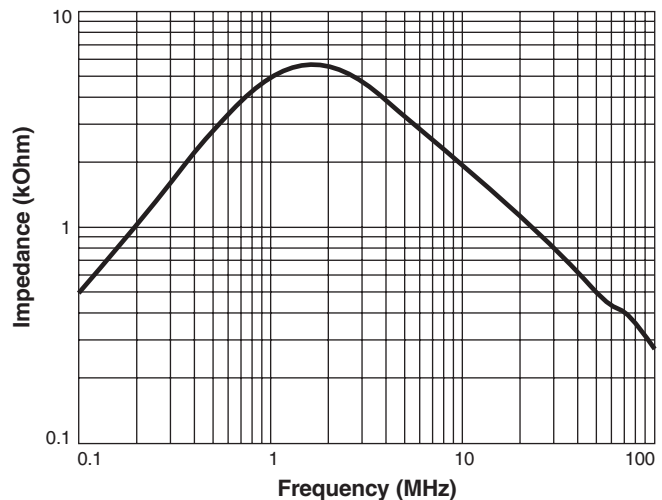
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 12.9 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 120/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 12.4 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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# Common Mode Choke – CG3885-AL

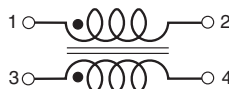
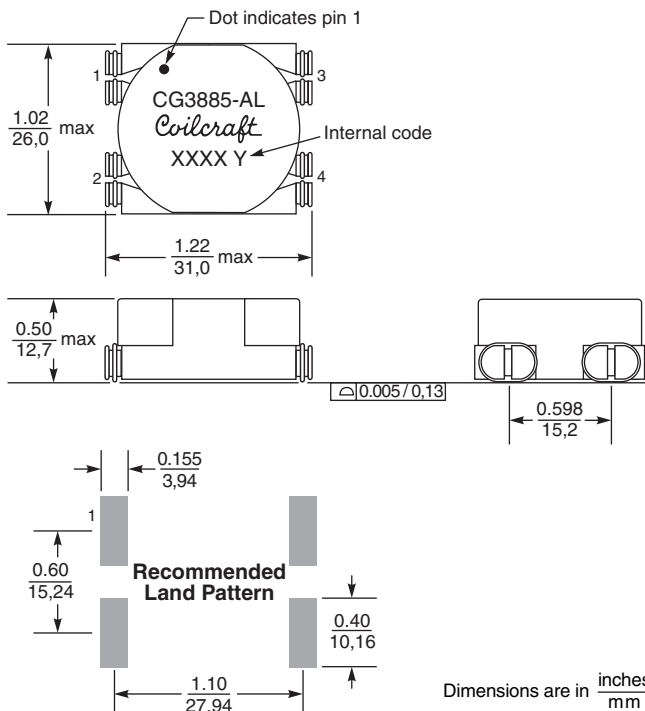
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CG3885-AL	3.11 @ 1.8 MHz	0.47	0.30	10.0	8.0	1000

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

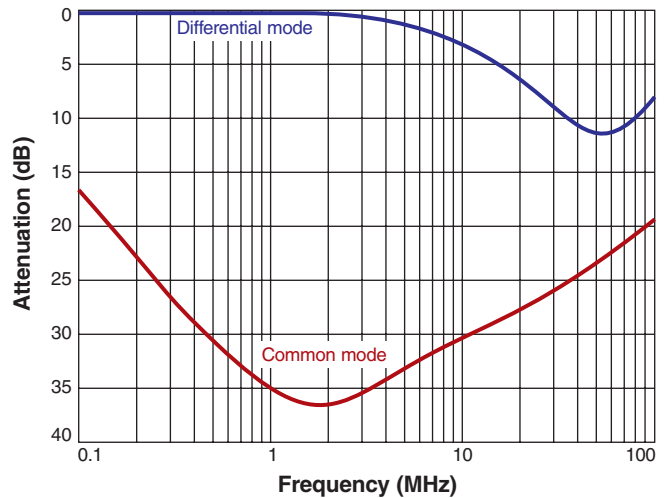
**CG3885-ALD**

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (120 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.

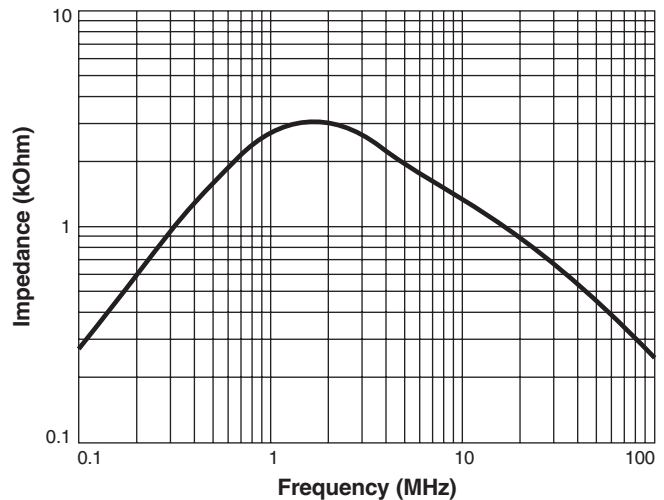
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 15.3 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 120/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 12.4 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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# Common Mode Choke – CF2805-AL

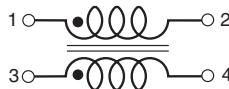
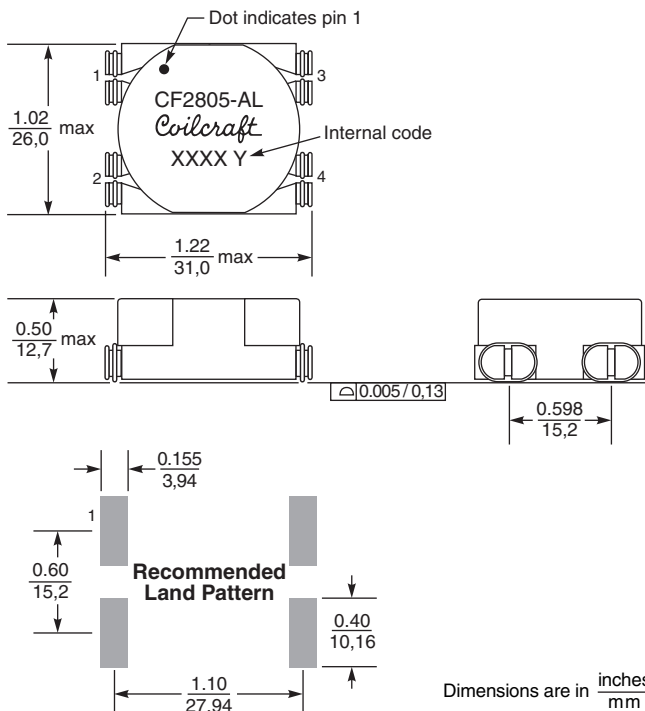
Part number <sup>1</sup>	Common mode impedance max (kOhms)	Inductance (mH) <sup>2</sup>		I <sub>rms</sub> <sup>3</sup> (A)	DCR max <sup>4</sup> (mOhms)	Isolation <sup>5</sup> (Vrms)
		nom	min			
CF2805-AL_	3.64 @ 1.9 MHz	0.63	0.40	6.8	14.0	1000

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

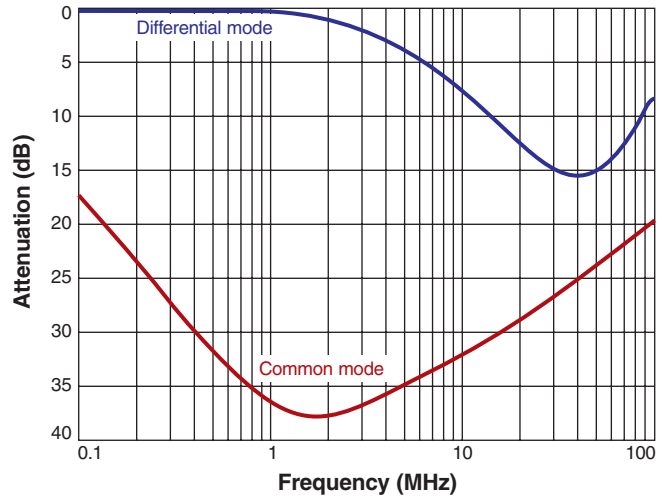
**CF2805-ALD**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (120 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.

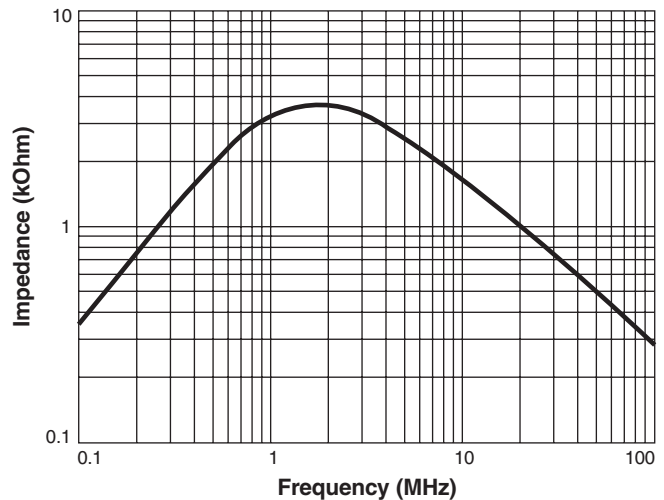
- Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.
  - Current per winding that causes a 40°C rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
  - DCR is specified per winding.
  - Isolation (hipot) measured for two seconds.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



## Typical Attenuation



## Typical Impedance versus Frequency



**Core material** Ferrite

**Terminations** RoHS compliant tin-silver-copper over copper

**Weight** 14.6 g

**Ambient temperature** -40°C to +85°C with I<sub>rms</sub> current

**Maximum part temperature** +125°C (ambient + temp rise)

**Storage temperature** Component: -40°C to +125°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** 120/13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 12.4 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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