USB 2.0 Common Mode Choke – 0603



These Coilcraft filters are designed to eliminate virtually all common mode noise in high-speed, differential mode signal transmission applications such as USB 2.0, IEEE1394 and LVDS. Most provide greater than 15 dB common mode attenuation and greater than 100 ohms impedance.

These low profile parts are designed for applications where space is at a premium, requiring less than half the board space of our 0805USB filters.

These dual-wound filters feature very low DC resistance and are available in five impedance values to meet your specific requirements.

Coilcraft **Designer's Kit C384** contains samples of all values shown here plus all values in our 1206USB and 0805USB series. To order, contact Coilcraft or purchase online at **http://order.coilcraft.com**.

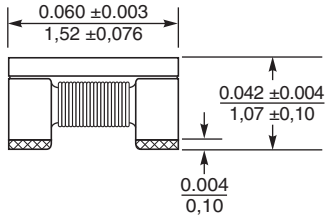
Part number[1]	Common mode impedance typ (Ohms) 100 MHz	500 MHz	1 GHz	Common mode attenuation typ (dB) 100 MHz	500 MHz	1 GHz	Inductance[2] min (nH)	DCR max[3] (Ohms)	Isolation (Vrms)	Irms[4] (mA)
0603USB-251ML_	25	44	64	1.31	3.16	8.45	18	0.077	250	500
0603USB-601ML_	60	99	142	3.00	6.88	13.27	37	0.109	250	500
0603USB-951ML_	95	156	234	4.62	9.75	16.06	63	0.142	250	500
0603USB-142ML_	145	242	353	6.85	12.80	18.16	98	0.174	250	500
0603USB-222ML_	225	384	592	9.14	16.53	20.29	150	0.209	250	500

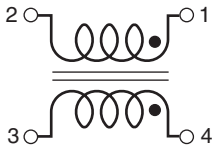
1. When ordering, please specify **packaging** code:

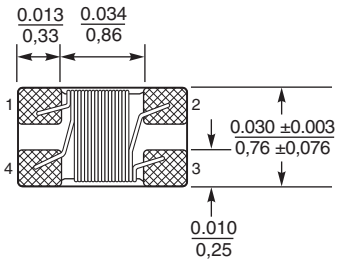
0603USB-222ML C

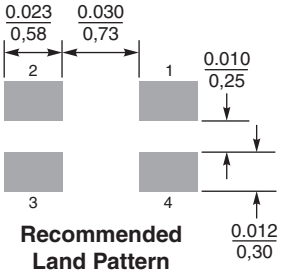
Packaging: C = 7″ machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape (7500 parts per full reel).

2. Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.
3. DCR is specified per winding.
4. Current per winding that causes a 20°C rise from 25°C ambient.
5. Operating temperature range –40°C to 85°C.
6. Electrical specifications at 25°C.









Recommended Land Pattern

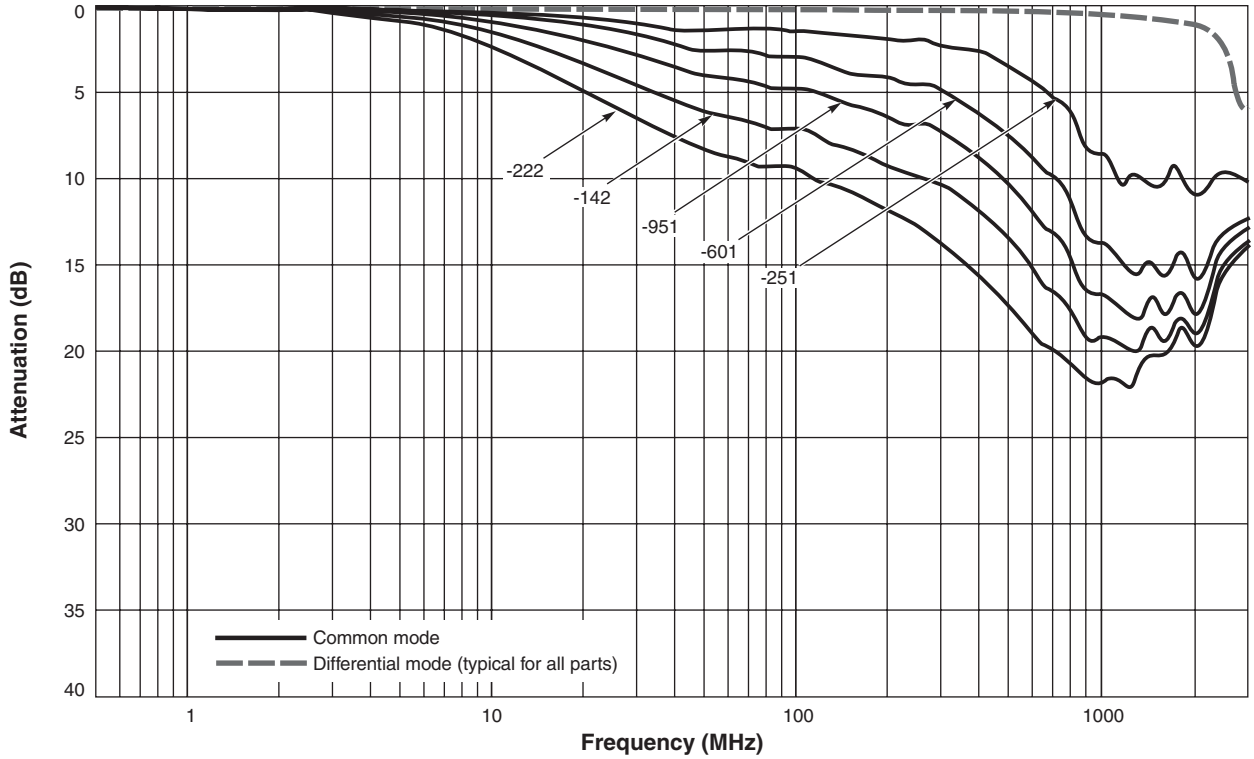
Terminations: Gold over nickel over silver-palladium-glass frit
Weight: 4.9 – 5.2 mg
Tape and reel: 2000/7″ reel; 7500/13″ reel 8 mm tape width
For packaging data see Tape and Reel Specifications section.

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E-mail info@coilcraft.com **Web** http://www.coilcraft.com

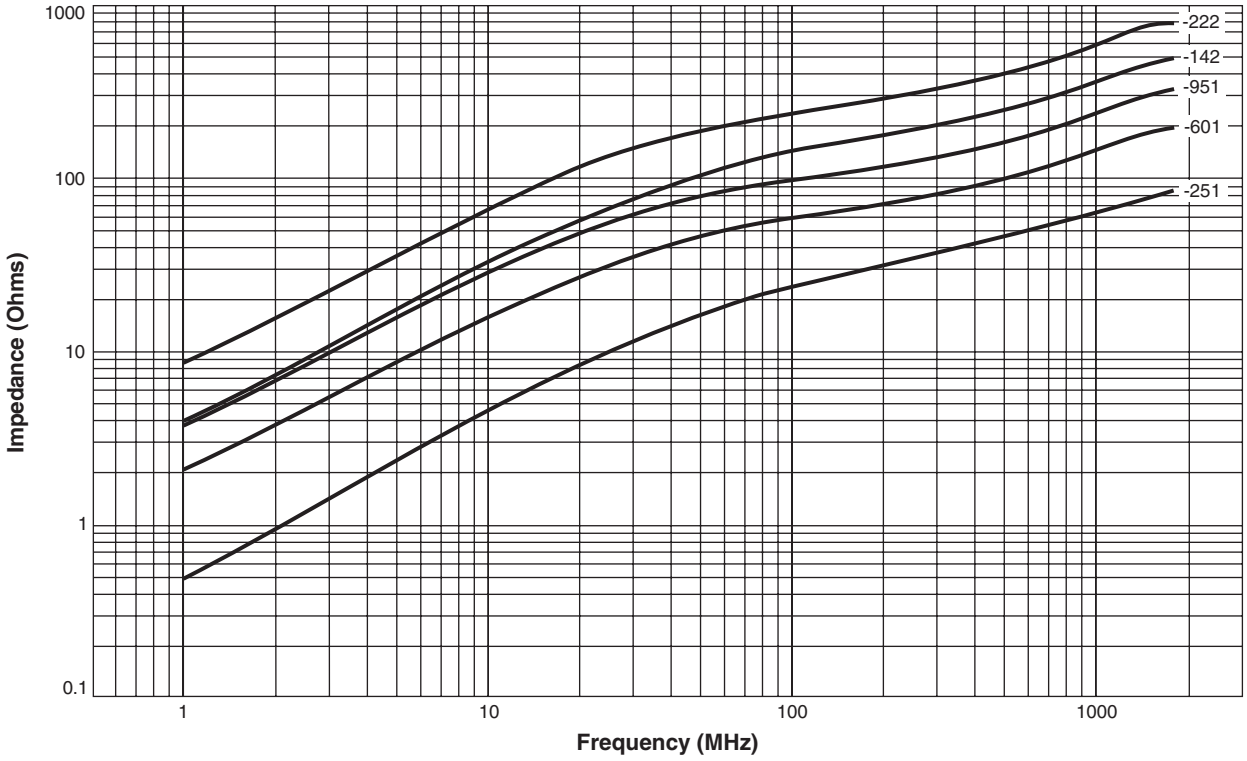
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Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information.

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