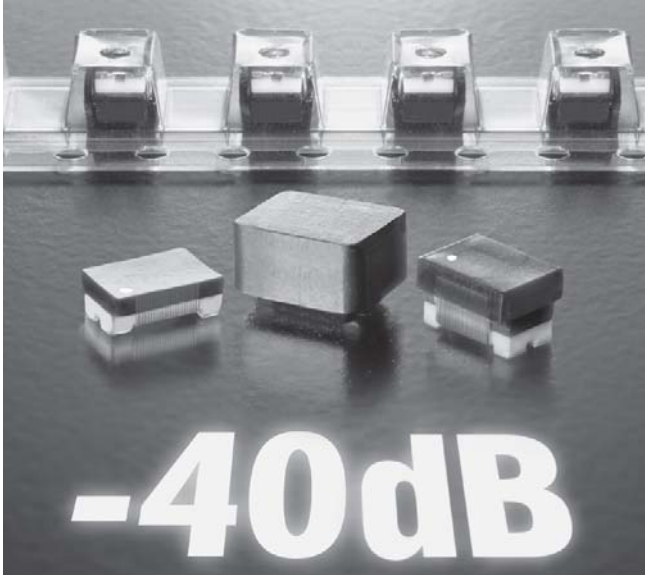




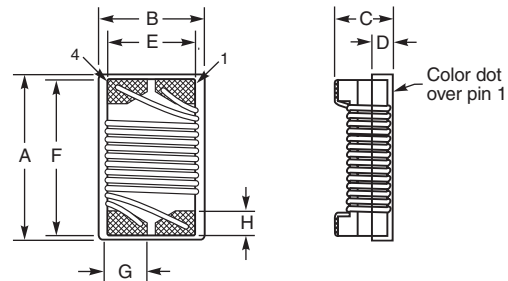
# Common Mode EMI Filters - M2022 Series



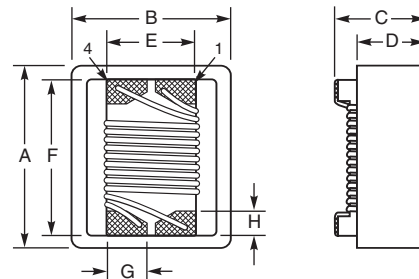
These common mode filters provide excellent noise attenuation in a compact, surface mount package. They're built in an 1812 size configuration that's ideal for auto insertion. In addition to the standard filter, a low profile (-ALPL) and shielded (-ASL) version are available.

Features include excellent isolation, environmental stability and low cost. Coilcraft can also supply custom filters with special combinations of impedance, response and current handling.

## M2022-AL, M2022-ALPL



## M2022-ASL



Part number <sup>1</sup>	Inductance <sup>2</sup> (μH)	DCR max (mOhm)	Irms <sup>3</sup> (mA)	Isolation (Vrms)
M2022-AL_	4.2±10%	800	500	500
M2022-ALPL_	4.0±10%	990	500	500
M2022-ASL_	11.5 min	850	500	500

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

### M2022-ALPLC

**Packaging:** C=7" 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 C instead.

**D**=13" machine-ready reel. EIA-481 embossed plastic tape (2200 parts per full reel).

2. Inductance is per winding, measured at 10 MHz.

3. Current that causes a 30°C temperature rise from 25°C ambient.

4. **Ambient temperature range:** -40°C to +85°C with Irms current

5. **Storage temperature range:** Component: -40°C to +85°C  
Packaging: -40°C to +80°C

6. Electrical specifications at 25°C.

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

## M2022-AL

A max	B max	C max	D ref	E ref	F ref	G min	H
0.195	0.150	0.135	0.070	0.100	0.178	0.04	0.03
4,95	3,81	3,43	1,78	2,54	4,52	1,02	0,76

## M2022-ALPL

A max	B max	C max	D ref	E ref	F ref	G min	H
0.195	0.150	0.079	0.070	0.100	0.178	0.04	0.03
4,95	3,81	2,01	1,78	2,54	4,52	1,02	0,76

## M2022-ASL

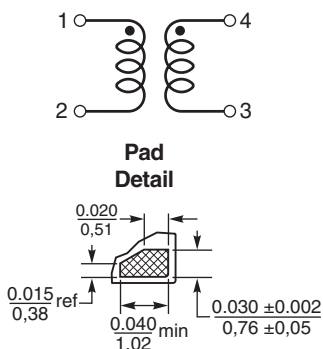
A max	B max	C max	D ref	E ref	F ref	G min	H
0.231	0.196	0.150	0.107	0.100	0.178	0.04	0.03
5,87	4,98	3,81	2,72	2,54	4,52	1,02	0,76

**Weight:** M2022-AL 155 mg; M2022-ALPL 85.5 mg; M2022-ASL 319 mg

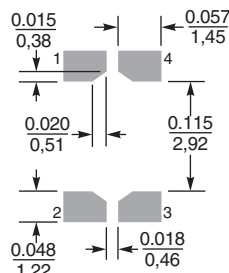
**Terminations:** Gold over nickel over moly-manganese.

**Tape and reel:** 600/7" reel; 2200/13" reel 12 mm tape width

For packaging data see Tape and Reel Specifications section.



### Recommended Land Pattern



**Coilcraft**®

Specifications subject to change without notice.

Please check our website for latest information. Document 151-1 Revised 10/30/08

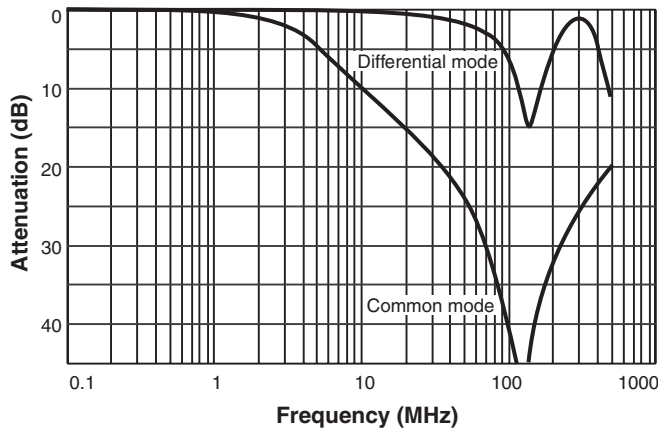
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

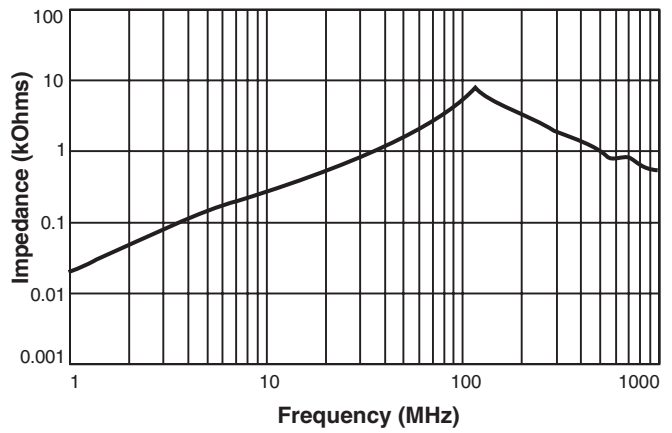


# M2022-AL, M2022-ALPL

## Typical Attenuation\*

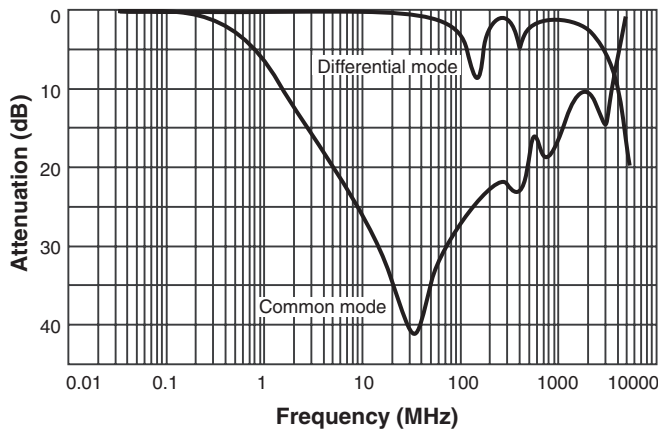


## Typical Impedance vs Frequency

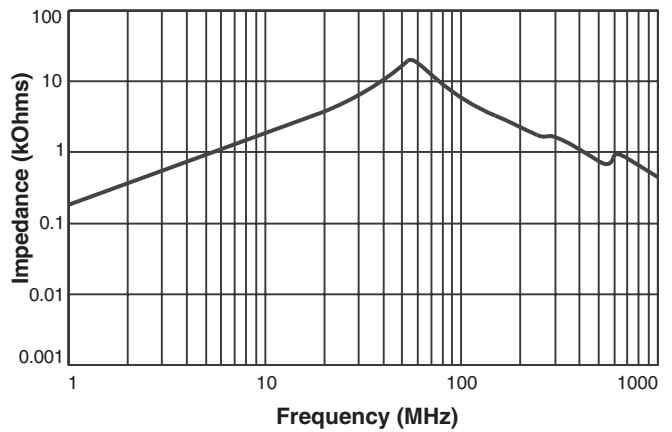


# M2022-ASL

## Typical Attenuation\*



## Typical Impedance vs Frequency



\*Measured on Agilent/HP 8753D network analyzer. Ref: 50 Ohms.



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Please check our website for latest information. Document 151-2 Revised 10/30/08

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>