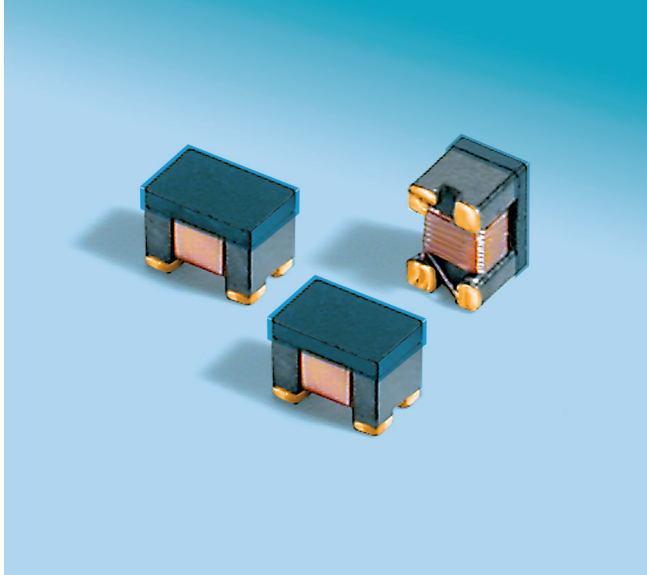


# Common Mode Chokes for Critical Applications



- Eliminates virtually all common mode noise in high-speed, differential mode signal transmission applications such as USB 2.0, IEEE1394, HDMI and LVDS.
- Most provide >25 dB common mode attenuation and >100 ohms impedance.

**Core material** Ferrite

**Terminations** Gold over nickel over silver-palladium-glass frit. Other terminations available at additional cost

**Weight** 14.9 – 15.2 mg

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

**Maximum part temperature** +105°C (ambient + temp rise).

**Storage temperature** Component: –55°C to +105°C.

Tape and reel packaging: –55°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** 2000 per 7"reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.14 mm pocket depth

Part number <sup>1</sup>	Common mode impedance typ (Ohms)			Common mode attenuation typ (dB)			Inductance <sup>2</sup> min (nH)	DCR max <sup>3</sup> (Ohms)	Isolation (Vrms)	Irms <sup>4</sup> (mA)
	10 MHz	100 MHz	500 MHz	10 MHz	100 MHz	500 MHz				
CP336FRA421MAZ	14	42	70	1.1	2.3	8.4	23	0.12	250	500
CP336FRA901MAZ	28	90	154	1.4	4.2	16.9	47	0.17	250	500
CP336FRA172MAZ	57	170	303	2.3	6.7	22.0	84	0.25	250	500
CP336FRA262MAZ	85	260	435	3.0	8.6	27.8	147	0.26	250	500
CP336FRA372MAZ	118	370	641	4.5	11.9	34.3	189	0.32	250	500
CP336FRA502MAZ	148	500	945	4.9	14.5	31.3	273	0.37	250	500
CP336FRA672MAZ	246	670	1231	8.4	16.6	30.0	322	0.45	250	500
CP336FRA902MAZ	294	900	1715	8.7	18.7	30.5	413	0.65	250	250

1. When ordering, please specify **termination** and **testing** codes:

**CP336FRA902MAZ**

**Termination:** A = Gold over nickel over silver-palladium-glass frit  
Special order:

C = Tin-lead over gold over nickel over silver-palladium-glass frit

F = Tin-silver-copper over gold over nickel over silver-palladium-glass frit

**Testing:**

Z = Unscreened

H = Group A screening per Coilcraft CP-SA-10001

T = Screening per MIL-STD-981

U = Screening per EEE-INST-002

F = Screening per ESCC 3201

All screening performed to the document's latest revision  
Custom screening also available

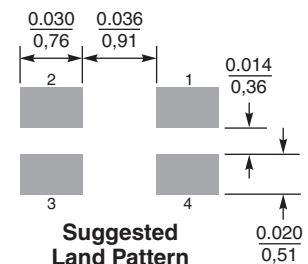
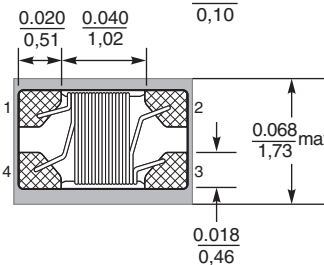
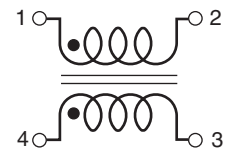
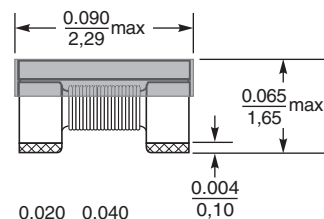
2. Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.

3. DCR is specified per winding.

4. DC current at 25°C that causes a 20% (typ) inductance drop from its value without current.

5. Electrical specifications at 25°C.

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



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

**Suggested Land Pattern**

**Coilcraft CPS**  
CRITICAL PRODUCTS & SERVICES

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1102 Silver Lake Road  
Cary, IL 60013  
Phone 800-981-0363

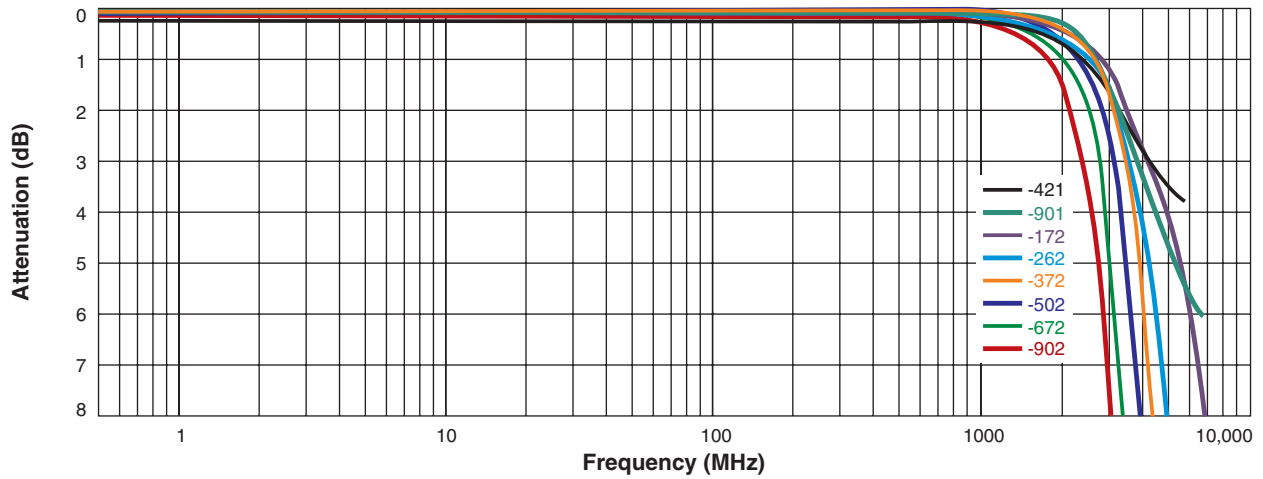
Fax 847-639-1508  
Email cps@coilcraft.com  
www.coilcraft-cps.com

Document CP306-1 Revised 05/16/17

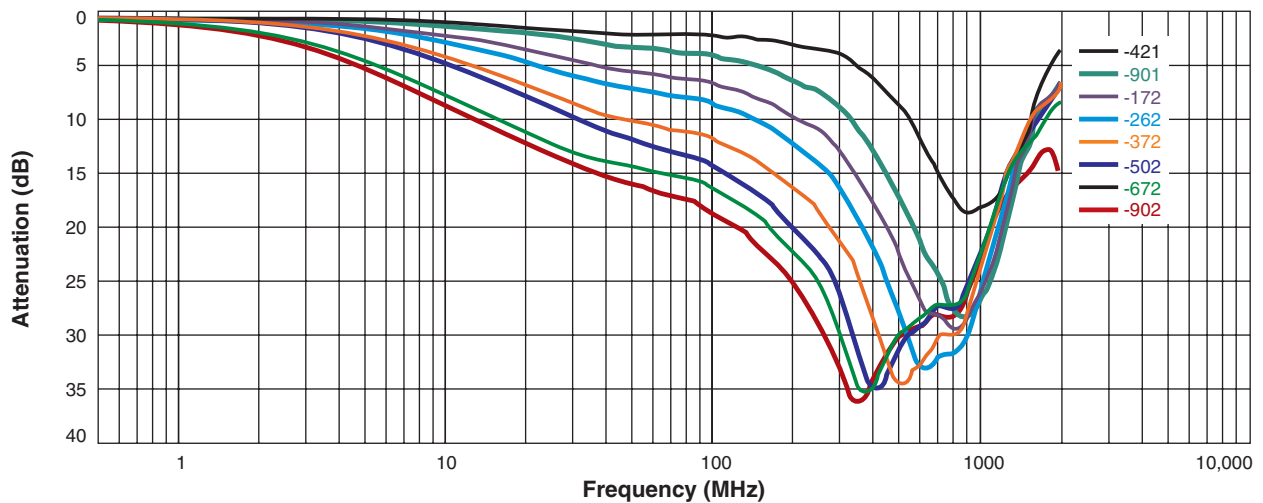
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

# 0805 Common Mode Choke – CP336FRA

Typical Differential Mode Attenuation (Ref: 50 Ohms)



Typical Common Mode Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

