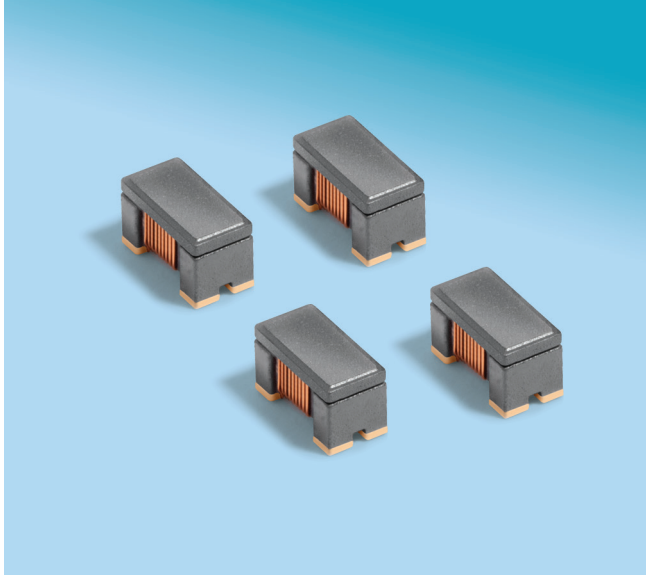


NEW!

Outgassing Compliant USB Chokes AR376FRA



- For common mode noise suppression in high speed differential signal lines: USB2.0, IEEE1394, LVDS, etc.
- Up to 2.7 GHz differential mode 3 dB cutoff frequency
- Up to 2.24 kOhms common mode peak impedance and 40 dB common mode noise attenuation.
- Passes NASA low outgassing specifications

Core material Ferrite

Terminations Tin-lead (63/37) over tin over nickel over silver-palladium-glass frit. Other terminations available at additional cost.

Weight 33 – 38 mg

Ambient temperature –40°C to +105°C with Irms current

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

Storage temperature Component: –55°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)

Packaging 2000/7" reel; 7500/13" reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.5 mm pocket depth

Part number ¹	Common mode peak impedance (kOhms)	Cutoff frequency ² (GHz)	Common mode attenuation typ (dB)			Inductance ³ min (nH)	DCR max ⁴ (Ohms)	Isolation ⁵ (Vrms)	Imax (mA)
			10 MHz	100 MHz	500 MHz				
AR376FRA371MPZ	>0.21 @ 3.0 GHz	2.7	1.2	4.8	8.1	31	0.10	250	700
AR376FRA102MPZ	0.36 @ 1.9 GHz	2.2	3.8	9.0	13.3	66	0.14	250	700
AR376FRA172MPZ	0.55 @ 1.5 GHz	2.1	5.0	12.4	18.0	107	0.18	250	700
AR376FRA262MPZ	0.76 @ 1.1 GHz	2.0	6.1	15.3	21.0	161	0.22	250	600
AR376FRA372MPZ	1.11 @ 1.1 GHz	1.2	9.1	18.5	24.4	226	0.26	250	600
AR376FRA532MPZ	1.45 @ 0.93 GHz	0.78	10.9	21.4	26.3	319	0.30	250	600
AR376FRA672MPZ	1.67 @ 0.81 GHz	0.75	13.9	23.4	28.0	412	0.34	250	500
AR376FRA872MPZ	1.99 @ 0.72 GHz	0.53	16.3	25.3	29.4	510	0.39	250	500
AR376FRA113MPZ	2.24 @ 0.66 GHz	0.51	16.9	27.1	30.0	623	0.44	250	500
AR376FRA223MPZ	3.36 @ 0.34 GHz	0.22	22.4	33.1	32.3	1040	0.85	250	300

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

AR376FRA223MPZ

Termination: **P** = Tin-lead (63/37) over tin over nickel over silver-palladium-glass frit.

C = Tin-lead (63/37) over gold over nickel over silver-palladium-glass frit

A = Gold over nickel over silver-palladium-glass frit

R = Tin over nickel over silver-palladium-glass frit.
Not suitable for applications or screening with pure tin restrictions.

Screening: **Z** = Unscreened

H = Coilcraft CP-SA-10001 Group A

G = Coilcraft CP-SA-10001 Group A (SLDC Option A)

D = Coilcraft CP-SA-10001 Group A (SLDC Option B)

F = ESCC3201 (F4 operational life performed at 90°C)

1/2/3 = EEE-INST-002 (Family 1) Level 1/2/3

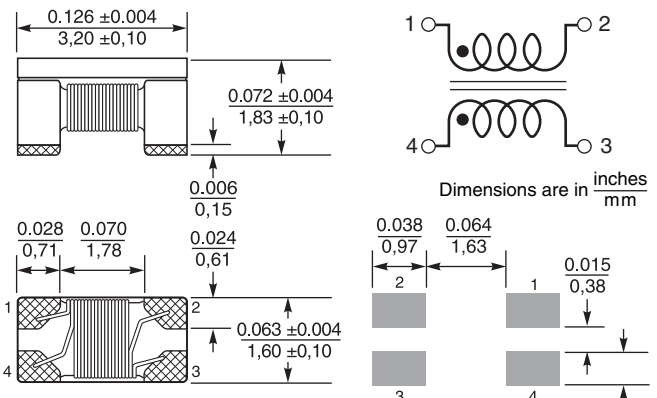
4/5 = MIL-STD-981 (Family 11) Class B=4, Class S=5

- Screening performed to the document's latest revision.
- Lot qualification (Group B) available.

- Frequency at which the differential mode attenuation equals –3 dB
- Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.
- DCR is specified per winding.
- Winding to winding isolation (hipot) tested for one minute.

6. Electrical specifications at 25°C.

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



Note: Dimensions are before solder application. For maximum overall dimensions including solder, add 0.003 in / 0.076 mm to the maximum length, width and height.

Suggested Land Pattern

0.026
0.66

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

1102 Silver Lake Road
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Phone 800-981-0363

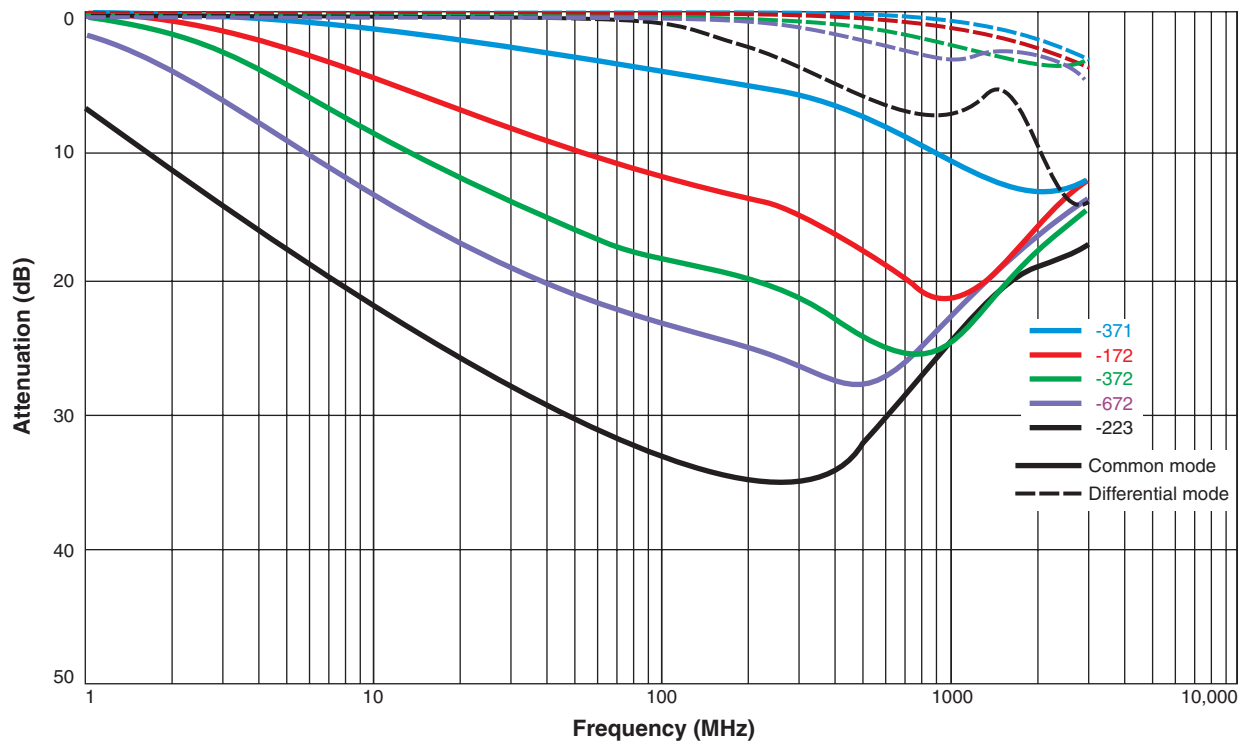
Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

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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.

USB 2.0 Common Mode Filter – AR376FRA

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

