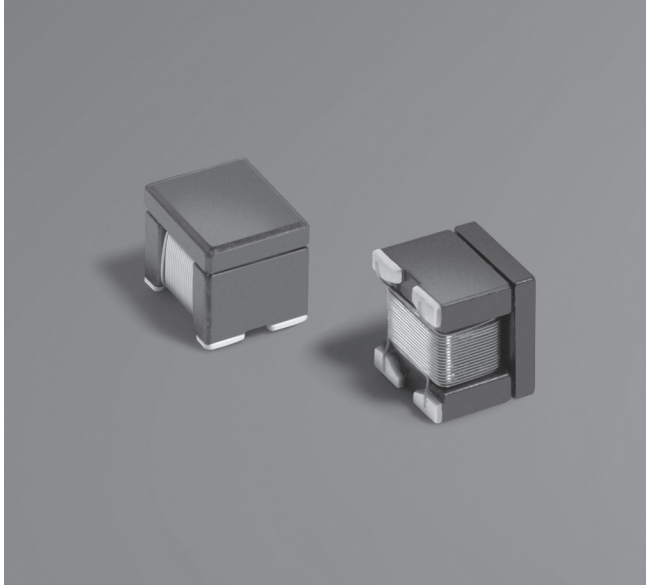


Common Mode Choke 1210CANbus



- Designed for common mode noise suppression on CAN or CAN FD in automotive or general industrial automation applications
- 51 μH value meets IEC 6228-3 (CDV Annex D) requirements
- Can be used for FlexRay automotive bus system
- Filters a broad frequency range of common mode noise
- Low profile 1210 footprint: 3.30 × 2.67 × 3.0 mm

Core material Ferrite

Environmental RoHS compliant, halogen free

Weight 100 – 120 mg

Terminations RoHS compliant matte tin over nickel over silver-palladium-glass frit.

Ambient temperature -40°C to $+125^{\circ}\text{C}$ with I_{rms} current.

Maximum Part Temperature $+150^{\circ}\text{C}$

Storage temperature Component: -40°C to $+150^{\circ}\text{C}$.

Tape and reel packaging: -40°C to $+80^{\circ}\text{C}$

Resistance to soldering heat Max three 40 second reflows at $+260^{\circ}\text{C}$, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ}\text{C}$ / 85% relative humidity)

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Inductance ² -30% +50% (μH)	DCR max ³ (Ohms)	Isolation ⁴ (Vrms)	I_{rms} ⁵ (mA)
1210CAN-113NR_	11	0.45	250	300
1210CAN-223NR_	22	0.60	250	300
1210CAN-513NR_	51	1.35	250	200
1210CAN-104NR_	100	3.70	250	100

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

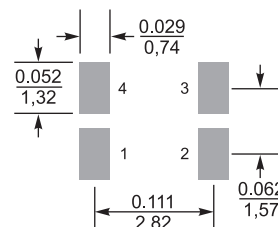
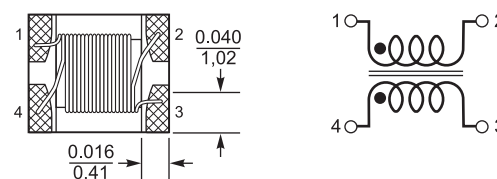
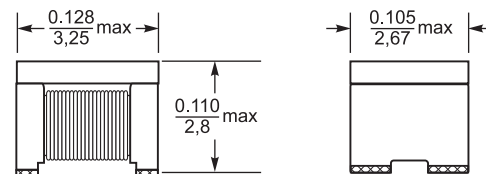
1210CAN-104NRC

Packaging: **C** = 7 machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13 machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (3000 parts per full reel).

- Inductance is per winding, measured at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/ HP 4263B LCR meter and a Coilcraft CCF 1190 fixture.
- DCR is specified per winding, measured on a Keithley 580 micro-ohmmeter and a Coilcraft CCF 858 fixture.
- Winding to winding isolation (hipot) tested for one minute.
- Equal current when applied to each winding simultaneously that causes a 25°C temperature rise from 125°C ambient. This information is for reference only and does not represent absolute maximum ratings.
- Electrical specifications at 25°C .

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



**Recommended
Land Pattern**

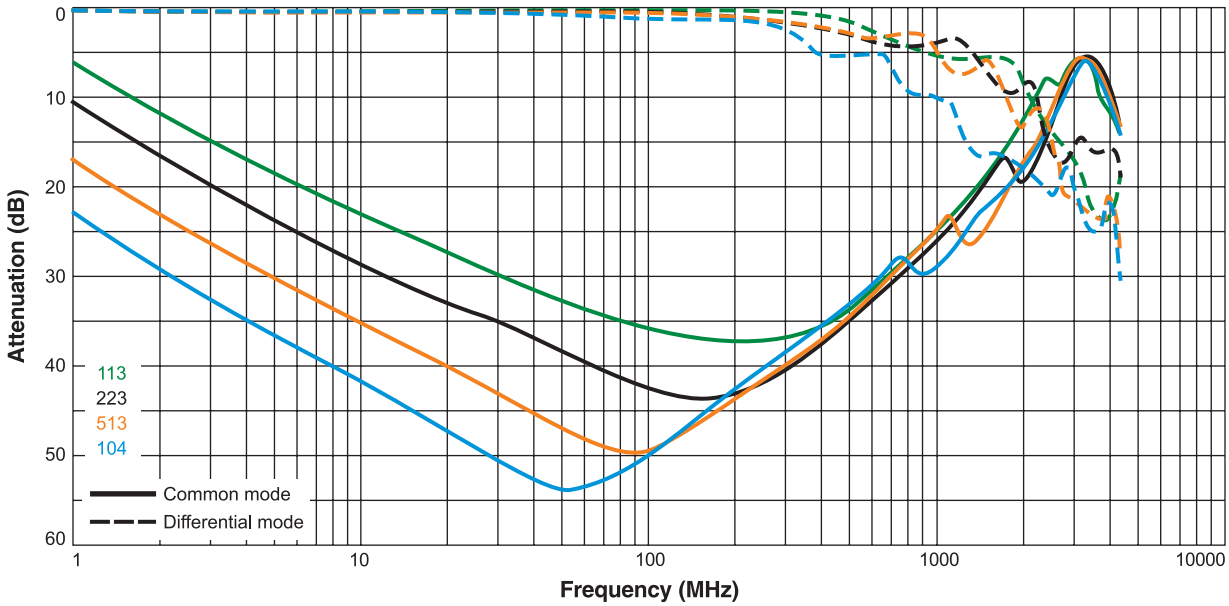
Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Packaging 750/7" reel; 3000/13" reel; Plastic tape: 12 mm wide, 0.25 mm thick, 8 mm pocket spacing, 2.72 mm pocket depth



Common Mode Choke – 1210CANbus

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

