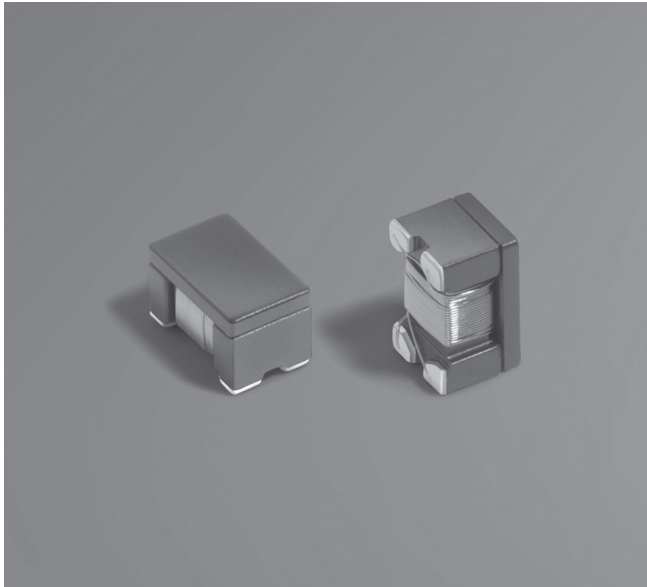


Common Mode Choke 1812CANbus



- Designed for common mode noise suppression on CAN or CAN FD in automotive or general industrial automation applications
- Can be used for FlexRay automotive bus system
- 50% lower DCR and higher current handling than other CANbus chokes in the market
- Filters a broad frequency range of common mode noise
- Low profile 1812 footprint: 4.95 × 3.18 × 3.0 mm

Core material Ferrite

Environmental RoHS compliant, halogen free

Weight 120 – 130 mg

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

Ambient temperature -40°C to +125°C with Irms current.

Maximum Part Temperature +150°C

Storage temperature Component: -40°C to +150°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)

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% (µH) | DCR max ³ (Ohms) | Isolation ⁴ (Vrms) | Irms ⁵ (mA) |
|--------------------------|--------------------------------------|--------------------------------|----------------------------------|---------------------------|
| 1812CAN-113NR_ | 11 | 0.27 | 250 | 460 |
| 1812CAN-223NR_ | 22 | 0.40 | 250 | 400 |
| 1812CAN-513NR_ | 51 | 0.59 | 250 | 300 |
| 1812CAN-104NR_ | 100 | 0.80 | 250 | 260 |

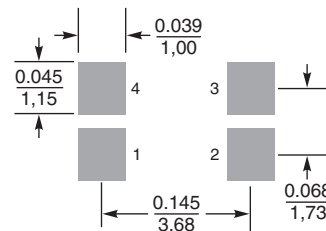
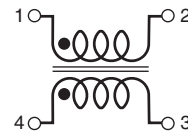
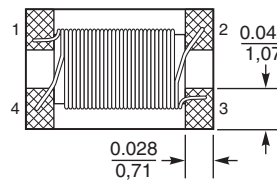
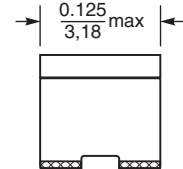
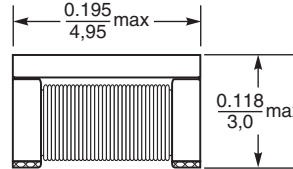
1. When ordering, please specify **packaging** code:

1812CAN-104NRC

Packaging: **C** = 7 machine-ready reel. EIA-481 embossed plastic tape (600 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 (2200 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 1113 fixture.
 - DCR is specified per winding, measured at on a Keithley 580 micro-ohmmeter and a Coilcraft CCF 858 fixture.
 - Winding to winding isolation (hipot) tested for one minute.
 - Current per winding that causes a 25°C rise from +125°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Recommended Land Pattern

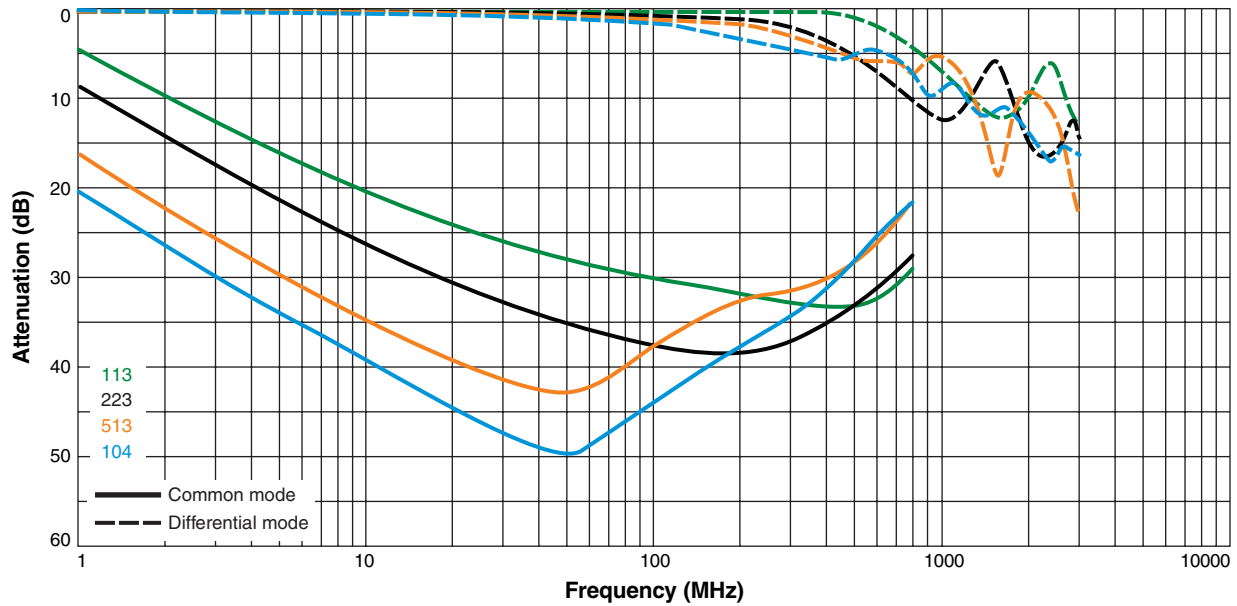
Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Packaging 600/7" reel; 2200/13" reel; Plastic tape: 12 mm wide, 0.30 mm thick, 8 mm pocket spacing, 3.05 mm pocket depth

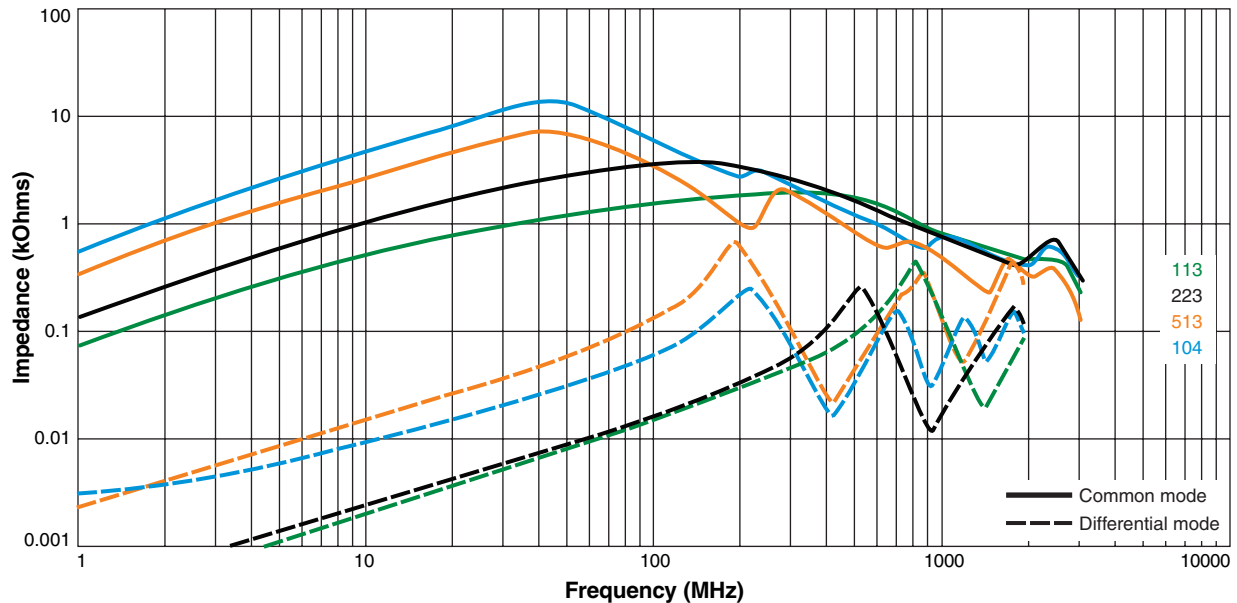


Common Mode Choke – 1812CANbus

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1201-2 Revised 06/11/21
 © Coilcraft Inc. 2021
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.