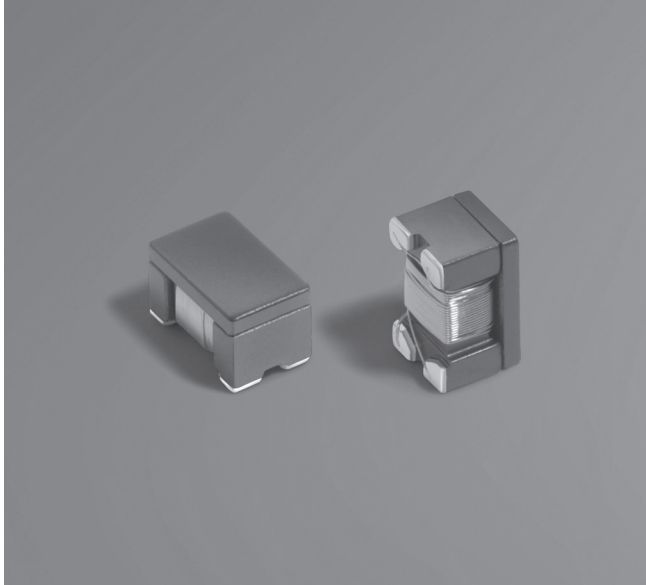


NEW!

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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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).

2. Inductance is per winding, measured at 100 kHz, 0.1 Vrms, 0 A dc using an Agilent/ HP 4263B LCR meter and a Coilcraft CCF 1113 fixture.

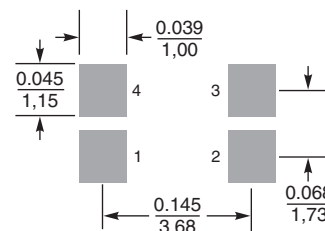
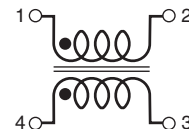
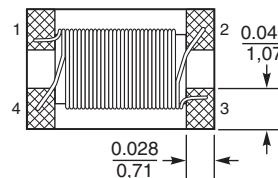
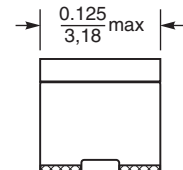
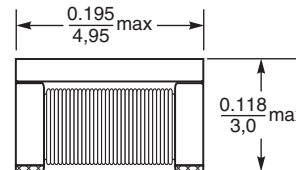
3. DCR is specified per winding, measured at on a Keithley 580 micro-ohmmeter and a Coilcraft CCF 888 fixture.

4. Winding to winding isolation (hipot) tested for one minute.

5. Current per winding that causes a 25°C rise from +125°C ambient.

6. Electrical specifications at 25°C.

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



**Recommended
Land Pattern**

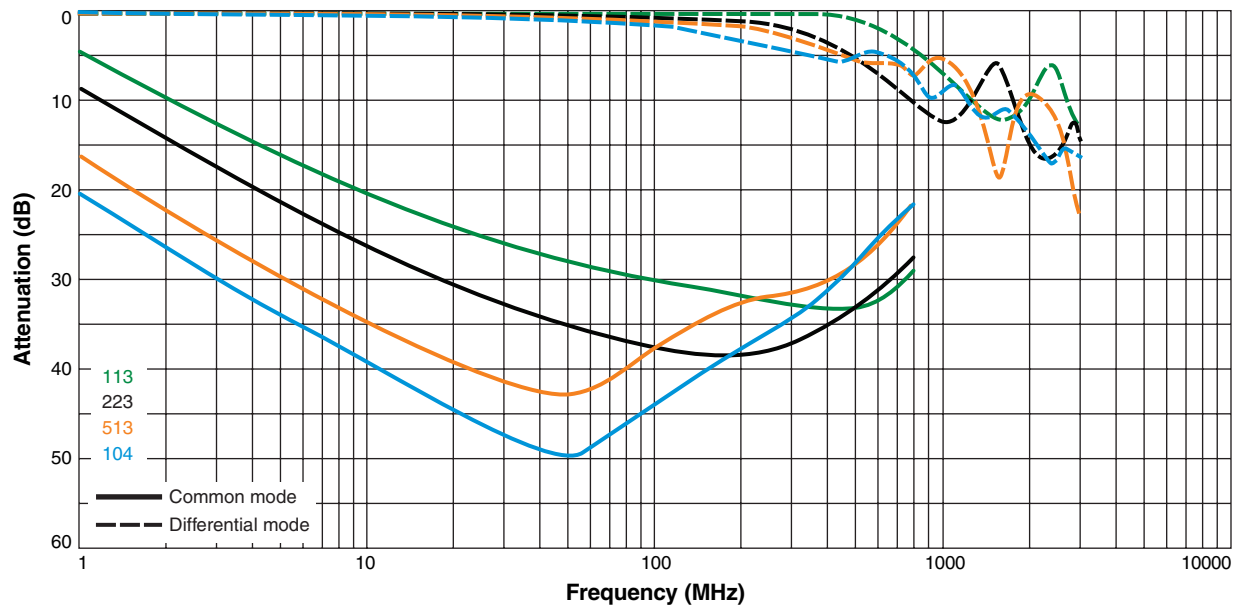
Dimensions are in **inches**
mm

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

