

# CAN-Bus Common Mode Chokes

Current compensated surface mount common mode chokes for controller area networks (CAN-Bus) in automotive, industrial and medical applications.

### Features:

- Surface Mount
- Accurate current matching capability over a broad range of inductance values
- Sector wound coils at 25 & 51  $\mu\text{H}$  to filter differential mode noise from the data signal.
- Low distortion
- Custom designs possible
- Smaller ( 1812 ) size parts are also available.

### Applications:

- Automotive controller area network systems
- Industrial controls controller area network systems
- Medical monitoring systems
- Filtering common mode EMI on high speed differential lines such as network and telecom applications

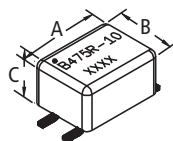
CC	1812	C	513	R	-10
Product Series Code	Part Size Code	Rated Current Code	Impedance Value Code	Packaging Code	Additional Description

Operating Temperature Range: -40°C to +125°C (0°C to 125°C for  $L_p \geq 1000 \mu\text{m}$ )

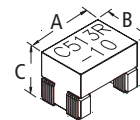
PART NUMBER	Lp Inductance ( $\mu\text{H}$ )			Impedance (Z)	L leakage ( $\mu\text{H}$ )	Hi-Pot (VAC) 0.5 mA 2 sec.	DCR Typical ( $\Omega$ )	Idc (mA) continuous	
	Test Conditions	MIN	NOM						MAX
CC1812C513R-10	100 KHz / 50 mV	35.7	51.0	66.3	3500 $\Omega$ @40 MHz	2.60	250	0.50	200
CC2824J502R-10	100 KHz / 50 mV	3.5	5.0	6.5	400 $\Omega$ @500 MHz	0.05	250	0.10	1200
CC2824E113R-10	100 KHz / 50 mV	7.7	11.0	14.3	800 $\Omega$ @200 MHz	0.05	250	0.12	800
CC2824E253R-10	100 KHz / 50 mV	17.5	25.0	32.5	2000 $\Omega$ @100 MHz	1.50	250	0.13	800
CC2824E513R-10	100 KHz / 50 mV	35.0	51.0	66.3	3800 $\Omega$ @50 MHz	2.00	250	0.16	800
CC2824E474R-10	100 KHz / 50 mV	329.0	470.0	611.0	8600 $\Omega$ @5 MHz	0.20	750	0.20	700
CC2824E105R-10	100 KHz / 50 mV	700.0	1000.0	1500.0	4250 $\Omega$ @7 MHz	0.20	750	0.20	700
CC2824D225R-10	10 KHz / 50 mV	1540.0	2200.0	3300.0	5300 $\Omega$ @5 MHz	0.25	750	0.40	500
CC2824B475R-10	10 KHz / 50 mV	3290.0	4700.0	7050.0	12300 $\Omega$ @2 MHz	0.30	750	0.55	400

### Dimensions

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)
CC2824	7.50 MAX (0.295 MAX)	5.50 MAX (0.217 MAX)	3.80 MAX (0.150 MAX)
CC1812	5.00 MAX (0.197 MAX)	3.50 MAX (0.138 MAX)	5.55 MAX (0.140 MAX)



CC2824  
Surface Mount



CC1812  
Surface Mount



# Typical Insertion Loss @ 50 $\Omega$

