



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 μH 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

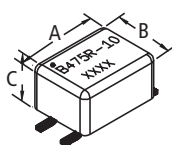
| CC | 1812 | C | 513 | R | -10 |
|---------------------|----------------|--------------------|----------------------|----------------|------------------------|
| Product Series Code | Part Size Code | Rated Current Code | Impedance Value Code | Packaging Code | Additional Description |

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

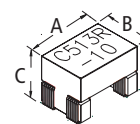
| PART NUMBER | Lp Inductance (μH) | | | Impedance (Z) | L leakage (μH) | Hi-Pot (VAC) 0.5 mA 2 sec. | DCR Typical (Ω) | Idc (mA) continuous | |
|----------------|---------------------------------|--------|--------|---------------|-----------------------------|----------------------------|--------------------------|---------------------|------|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

