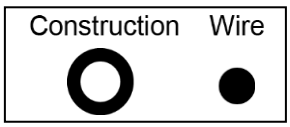
Common Mode Choke
TCAB231010RS Series

Construction Wire



Outline:

- High-permeability magnetic core material enables high inductance.
- Hi-Pot：Up to 2100Vac.
- Excellent temperature stability with minimal inductance variation over temperature.
- Outstanding wideband EMI suppression performance, covering 1 kHz to 300 MHz, with consistently high permeability and high impedance across the entire frequencyrange.
- Compact package design facilitates high-density mounting and saves PCB space.

Features:

- Enviromental: RoHS, Reach compliant ,Halogen free
- Weight: 18.82g
- Moisture Sensitivity:Level (MSL) 1
  (unlimited floor life at <30°C / 85% relative humidity).
- Operating temperature: -55℃～+125℃
  (Including Self-heating)
- Storage temperature range: -55℃～+125℃

Application:

- Power electronics
- Power line in- and output filter
- Radio interference suppression in motors
- Suppression for common mode noise

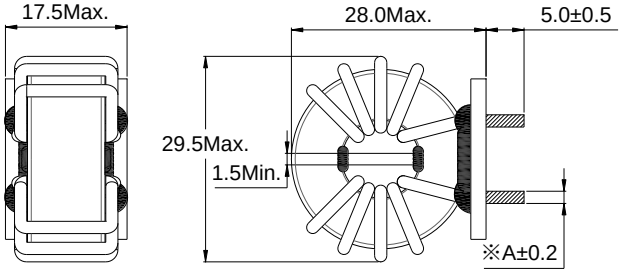
1 Electrical Characteristics

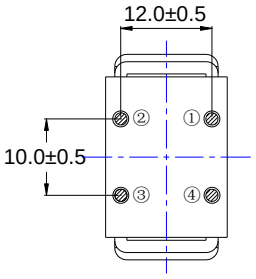
Part No.	Inductance (mH)※1	D.C.R. (mΩ)	Rated Current (A) ※2	Rated Voltage (V)	Hi-Pot (Vac)
	L(1-2)=(4-3) +50%/-30%	(1-2)=(4-3) Max.	(1-2)=(4-3) Max.	(1-2)=(4-3) Max.	(1、2)-(4、3) 5mA/2S
TCAB231010RS-102	1.00	2.30	20.0	300	2100
TCAB231010RS-152	1.50	2.95	18.0	300	2100
TCAB231010RS-202	2.00	4.40	15.0	300	2100
TCAB231010RS-402	4.00	7.60	11.0	300	2100
TCAB231010RS-702	7.00	18.0	7.00	300	2100
TCAB231010RS-153	15.0	39.5	5.00	300	2100
TCAB231010RS-353	35.0	72.5	3.50	300	2100
TCAB231010RS-823	82.0	151	2.50	300	2100

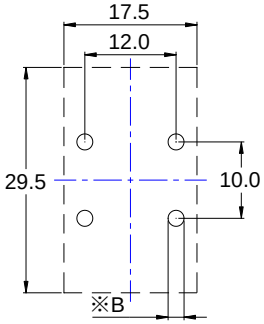
All data is tested on 25℃ ambient temperature

1. Inductance measure condition at 10kHz,0.1V.
2. Rated currnet:the actual value of DC current when the temperature rise is ΔT70℃(Ta=25℃)

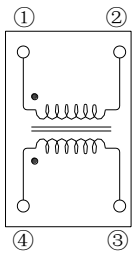
2 Product Dimensions (mm)







Reference Hole Pattern



Schematic

Inductance	1.0mH	1.5mH	2.0mH	4.0mH	7.0mH	15.0mH	35.0mH	82.0mH
A(mm)	1.60	1.50	1.30	1.10	0.80	1.00	1.00	1.00
B(mm)	2.10	2.00	1.70	1.60	1.20	1.30	1.30	1.30

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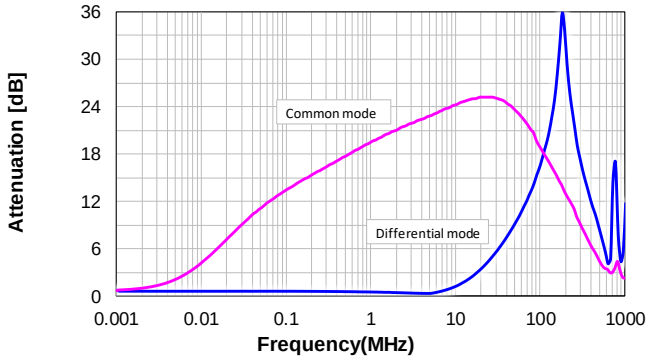
http://www.codaca.com E-mail: info@codaca.com

This product is not authorized for use in any application related to safety.
Specification subject to change without notice. Please check web site for latest information.

Revised: 07/22/2026

3 Insertion loss vs Frequency

TCAB231010RS-102



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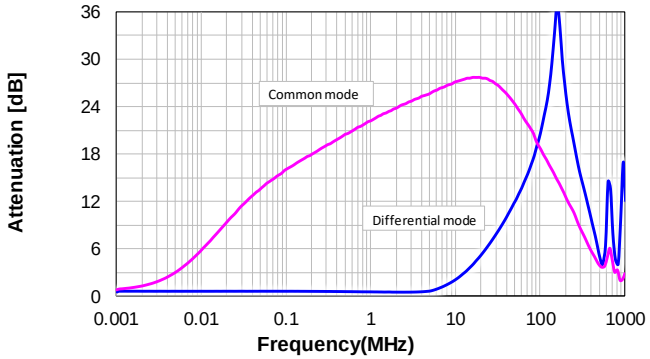

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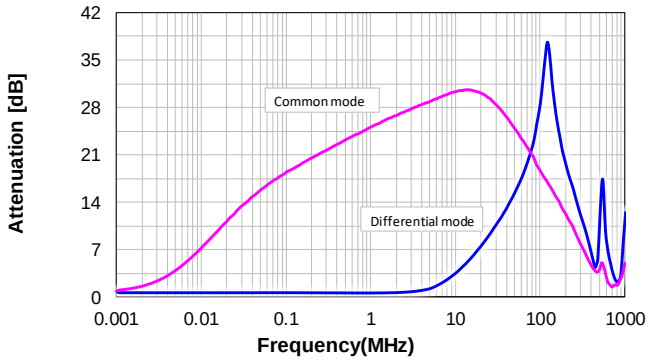
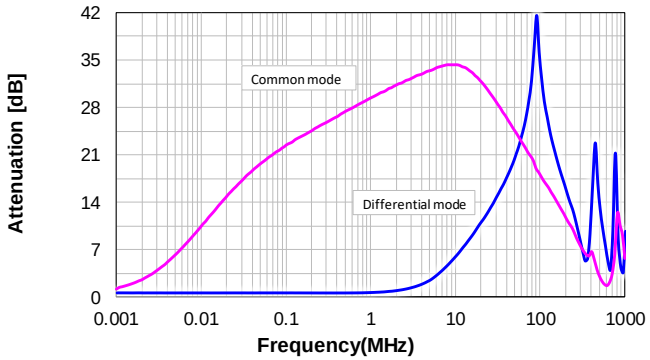
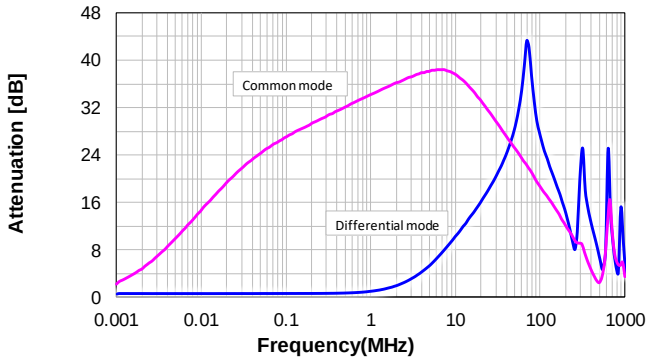


TCAB231010RS-402



TCAB231010RS-702



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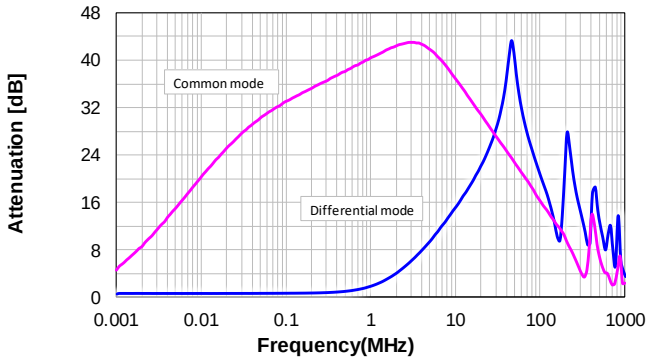

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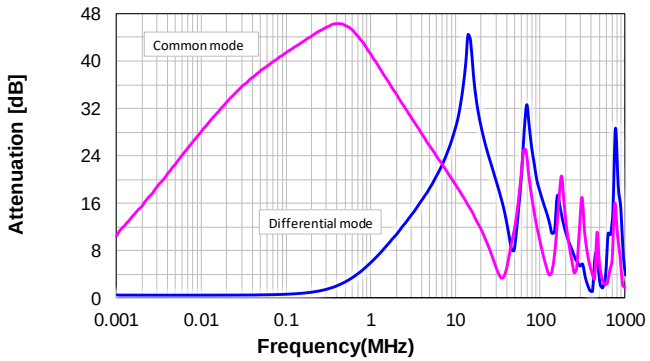

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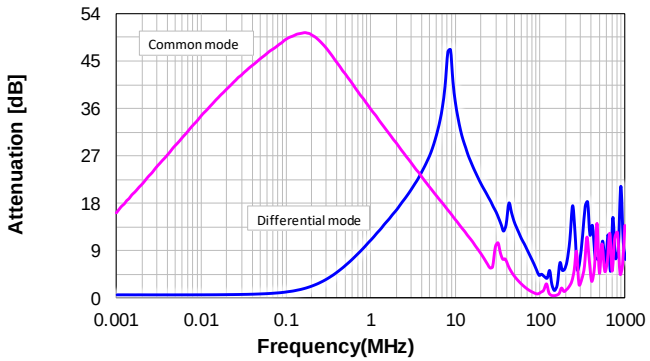
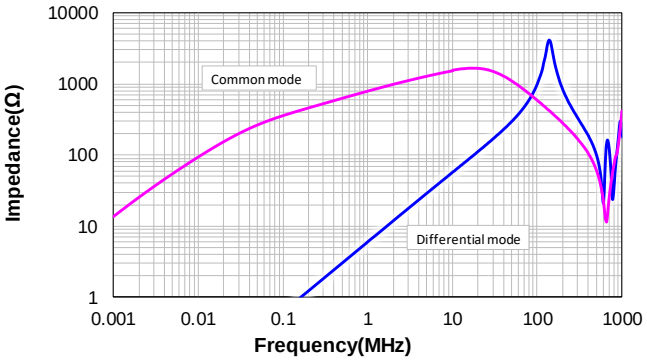


4 Impedance vs Frequency

TCAB231010RS-102



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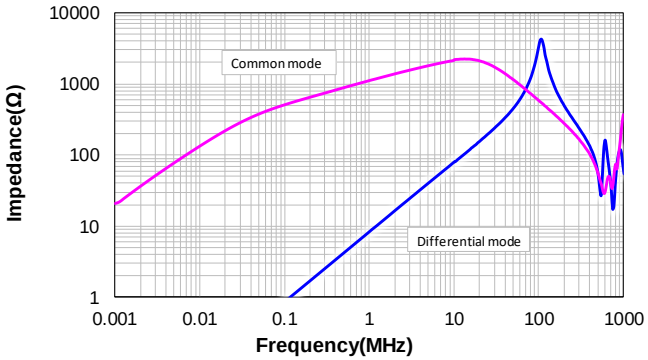

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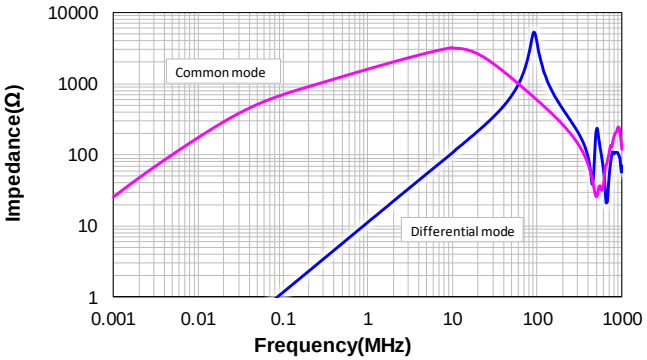

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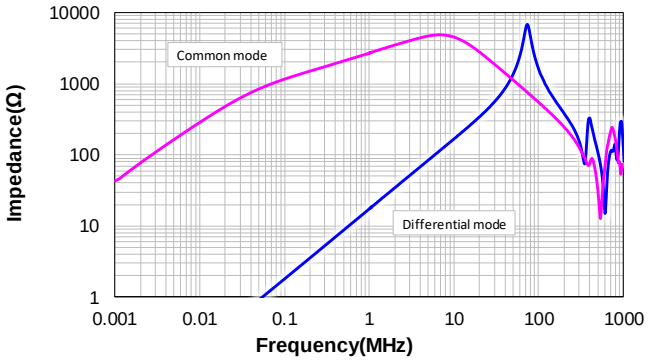

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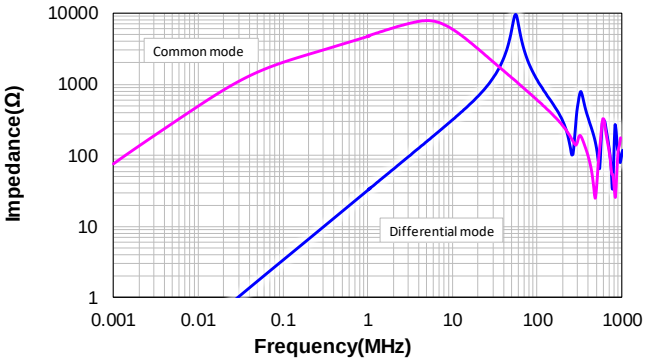

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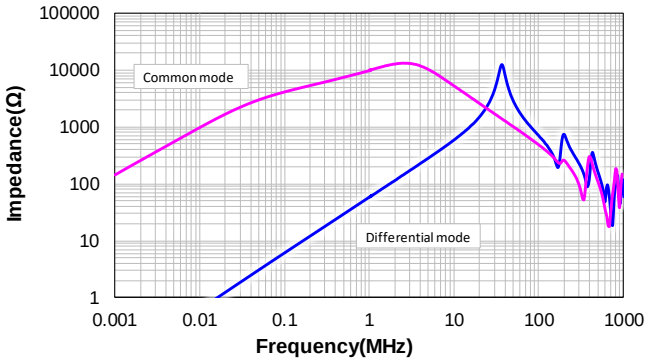

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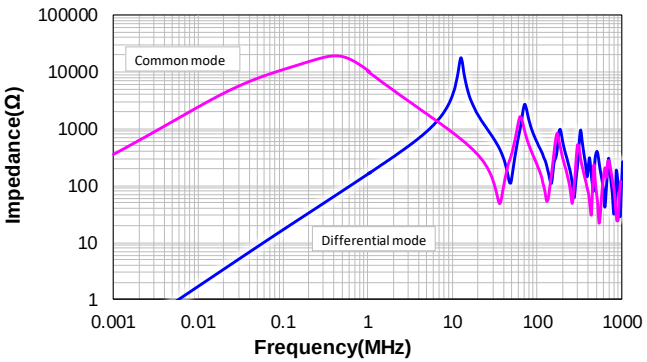

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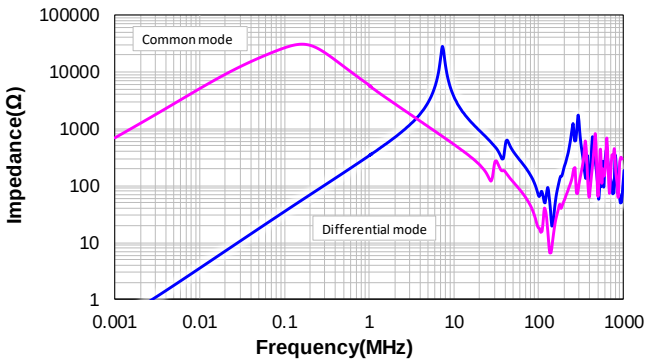
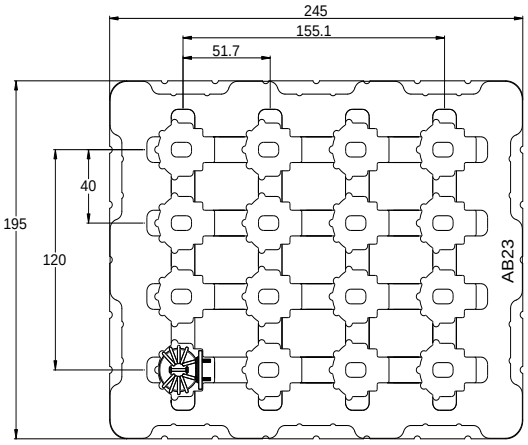
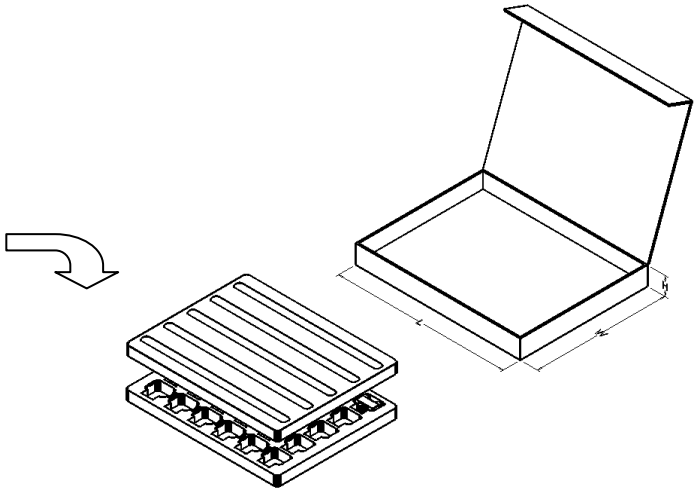


5 Packing Specification

5.1 Plastic Tray Dimensions (mm)

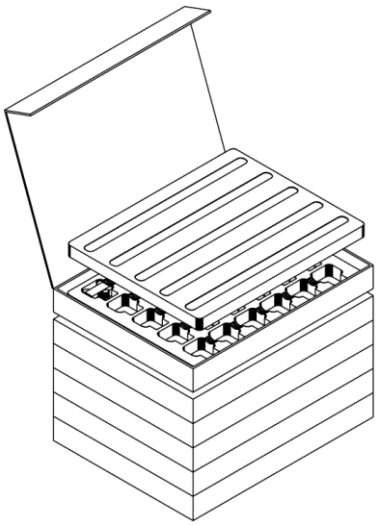


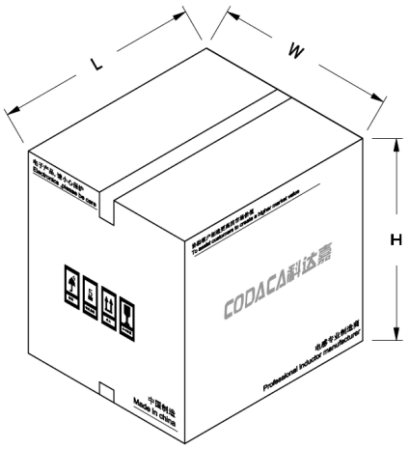


Packaging Unit (Pcs)	Material
16	APET

L typ	W typ	H typ	No. of Tray (Pcs)	Packaging Unit(Pcs)	Material
265	205	30	1	16	Paper

5.2 Packing(mm)





L typ	W typ	H typ	No. of Inner Carton	Packaging Unit(Pcs)	Material
275	232	261	8	128	Paper

6 Notice of Use

6.1 Special reminder: circuit design, component placement, PCB size and thickness, cooling system, etc., all will affect the product temperature. Please verify the product temperature in the final application.

6.2 Product in packing storage condition: temperature 5～40°C, RH≤70%.
If taken out for use, the remaining products should be sealed in plastic bags and preserved in accordance with the above conditions, to avoid oxidation of terminal (electrodes), affecting soldering status.

6.3 A storage of Codaca electronic products for longer than 12 months is not recommended. Within other effects, the terminals may suffer degradation, resulting in bad solderability. Therefore, all products shall be used within the period of 12 months based on the day of shipment.

6.4 Do not keep products in unsuitable storage conditions, such as areas susceptible to high temperatures, high humidity, dust, or corrosion.

6.5 Always handle products with care.

6.6 Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering.
Always ensure optimum conditions for soldering.

6.7 When this product will be used on a similar or new project to the original one, sometimes it might be unable to satisfy the specifications due to different conditions of usage.

6.8 This inductor itself does not have any protective function in abnormal condition, such as overload, short-circuit, open-circuit conditions, etc. Therefore, it shall be confirmed that there is no risk of smoke, fire, dielectric withstand voltage, insulation resistance, etc., in abnormal conditions protective devices or protection circuit in the end product.

6.9 Hi-Pot test with higher voltage than spec value will damage insulating material and shorten its life.

6.10 If used in potting compound, the magnet wire coating might be damaged, please consult with us.

6.11 Refrain from rinsing product. If necessary, please consult with us.

*6.12 Codaca electronic products without "V" prefix are qualified for industrial product requirements, and with "V" prefix are qualified for AEC-Q200, but it doesn't mean that Codaca electronic products can absolutely meet specific industry norms and quality test standards in automotive electronics or more strict application fields. Codaca electronic will be exempted from being responsible for the consequences of using Codaca products in automotive electronics or higher application fields related to safety when without being aware of it.