2 mode Noise Filters

Type: **EXC24CB/CP**
EXC24CN

Features

- Burst/radiation noise filtering for audio circuits
- The optimally magnetic-coupled ferrite beads allow for the filtering of both common and normal mode noises
- The strong multi-layer structure provides high resistance to reflow soldering heat and a high mounting reliability
- Magnetic shield type
- High Impedance : 220 to 1 kΩ (EXC24CB type)
- Low Resistance Value : 0.4 Ω max. (EXC24CP type)
- High Impedance : 600 Ω, Low Resistance Value : 0.9 Ω max. (EXC24CN type)
- RoHS compliant

Recommended Applications

- Smart phones, Tablet PCs, DSC and Portable Music Player
- Noise suppression of burst noise of Receiver/Microphone and D-class power amplifier

Explanation of Part Numbers

- EXC24CB/CP Type

1	2	3	4	5	6	7	8	9	10	11	12
E	X	C	2	4	C	B	1	0	2	U	
Product Code			Size	Number of Terminals	Type	Characteristics	Nominal Impedance			Form	Suffix

Noise Filter

Code	Dimensions(mm)
2	1.25 × 1.00 × 0.50 (L) × (W) × (H)

4 Terminals

C	Coupled type

B	High Impedance Type
P	Low DCR Type

The first two digits are significant figure of impedance value, and the third one denotes the number of zeros following

Code	Packing
U	Embossed Carrier Taping 2 mm pitch, 5,000 pcs.

- EXC24CN Type

1	2	3	4	5	6	7	8	9	10	11	12
E	X	C	2	4	C	N	6	0	1	X	
Product Code			Size	Number of Terminals	Type	Characteristics	Nominal Impedance			Form	Suffix

Noise Filter

Code	Dimensions(mm)
2	1.25 × 1.00 × 0.50 (L) × (W) × (H)

4 Terminals

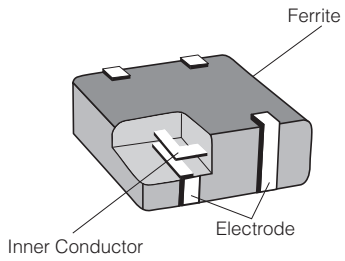
C	Coupled type

N	High Impedance Type and Low DCR Type

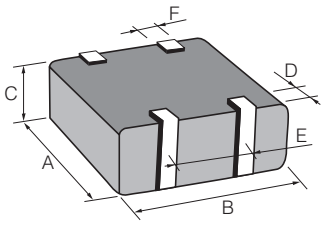
The first two digits are significant figure of impedance value, and the third one denotes the number of zeros following

Code	Packing
X	Pressed Carrier Taping 2 mm pitch, 10,000 pcs.

Construction

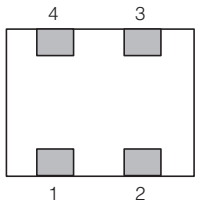


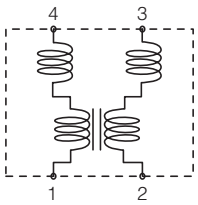
Dimensions in mm (not to scale)



Part No. (inch size)	Dimensions (mm)						Mass (Weight) [mg/pc.]
	A	B	C	D	E	F	
EXC24C (0504)	1.00±0.15	1.25±0.15	0.50±0.10	0.20±0.15	0.65±0.10	0.35±0.10	3

Circuit Configuration (No Polarity)





- The pin numbers shown here are for reference purposes only. Confirm the actual pin number arrangement with the exchanged specification documents.

Ratings

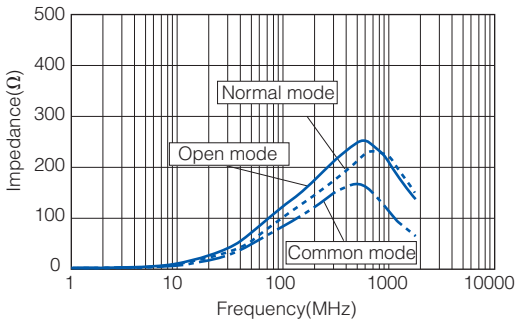
Part Number	Impedance (Open mode)		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance (Ω) max.
	(Ω) at 100 MHz	Tolerance(%)			
EXC24CP121U	120	±25	5	500	0.3
EXC24CP221U	220			350	0.4
EXC24CB221U	220			100	0.7
EXC24CB102U	1000			50	1.5

Part Number	Impedance (Common mode)		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance (Ω) max.
	(Ω) at 100 MHz	Tolerance(%)			
EXC24CN601X	600	±25	5	200	0.9

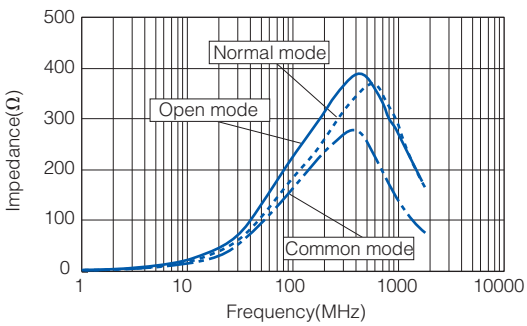
- Category Temperature Range –40 °C to +85 °C

Impedance Characteristics (Typical)

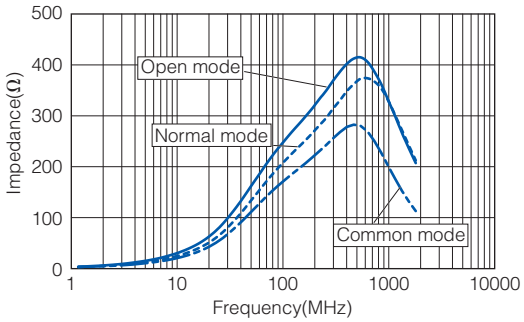
● EXC24CP121U



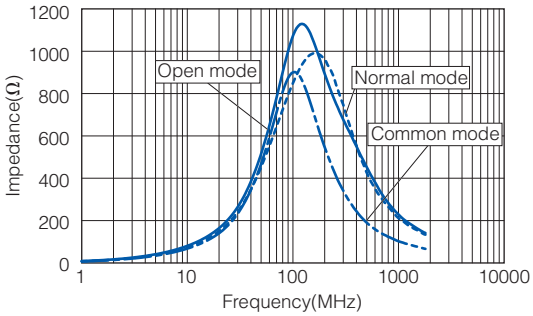
● EXC24CP221U



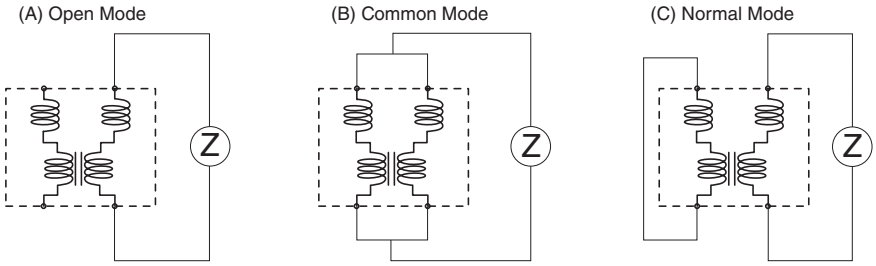
● EXC24CB221U



● EXC24CB102U

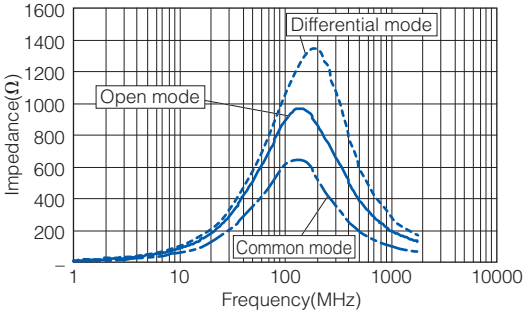


● Measurement Circuit

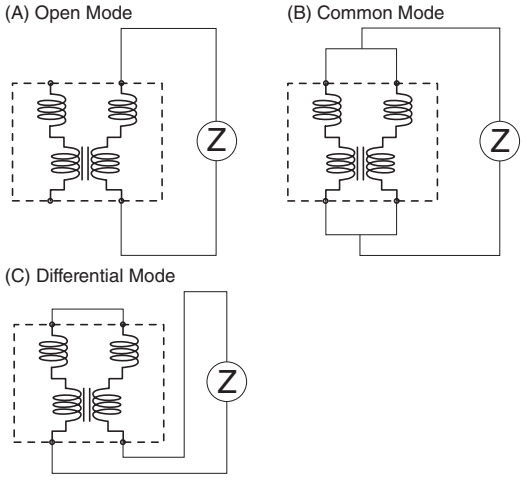


Attenuation Characteristics (Typical)

● EXC24CN601X



● Measurement Circuit



■ **As for Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions,** Please see Data Files

Perfomance

Test Item	Performance Requirements	Test Conditions
Resistance	Within Specified Tolerance	25 °C
Overload	–	Rated Voltage
Resistance to Soldering Heat	±30 % (Impedance Change)	260 °C, 10 s
Rapid Change of Temperature	±30 % (Impedance Change)	–40 °C (30 min.) / +85 °C (30 min.), 200 cycles
High Temperature Exposure	±30 % (Impedance Change)	85 °C, 500 h
Damp Heat, Steady State	±30 % (Impedance Change)	60 °C, 95 %RH, 500 h
Load Life in Humidity	±30 % (Impedance Change)	60 °C, 95 %RH, Rated Current, 500 h

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