

Common mode Noise Filters

Type: **EXC24CC/D**



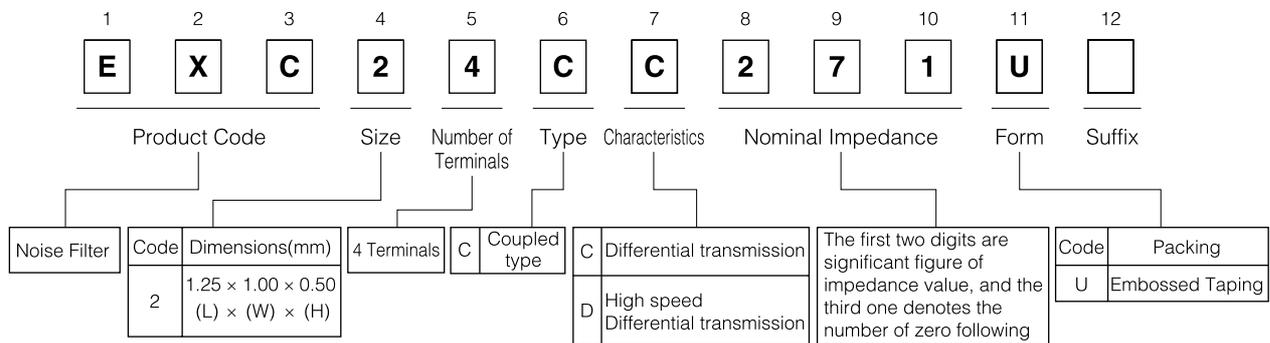
■ Features

- Effective in noise suppression of portable equipment
- Magnetic shield type
- Small size(L 1.25 mm×W 1.00 mm×H 0.50 mm) and light weight(About 3 mg)

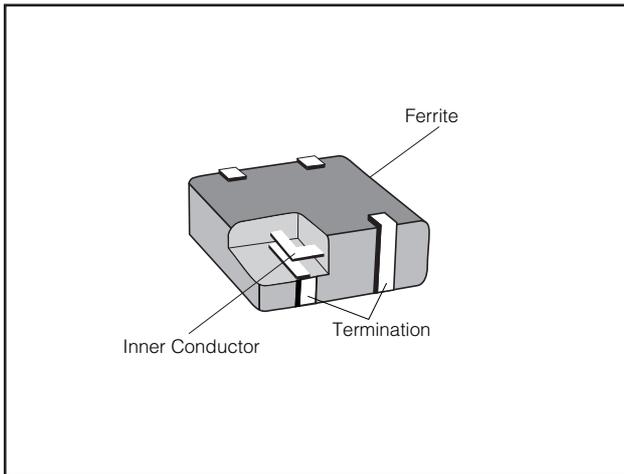
■ Recommended Applications

- Digital audio and Video equipment such as PDA, DSC, DVC, CD Player, DVD Player, MD Player.
- USB data line of Mobile phone (IMT2000)
- Small digital equipment such as Personal computers

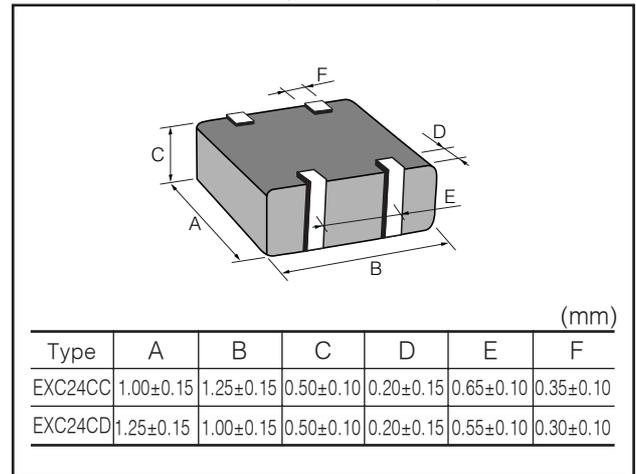
■ Explanation of Part Numbers



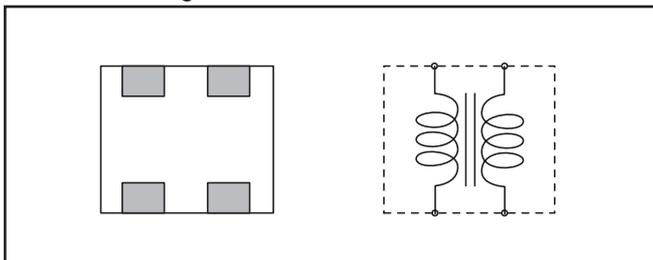
■ Construction



■ Dimensions in mm (not to scale)



■ Circuit Configuration



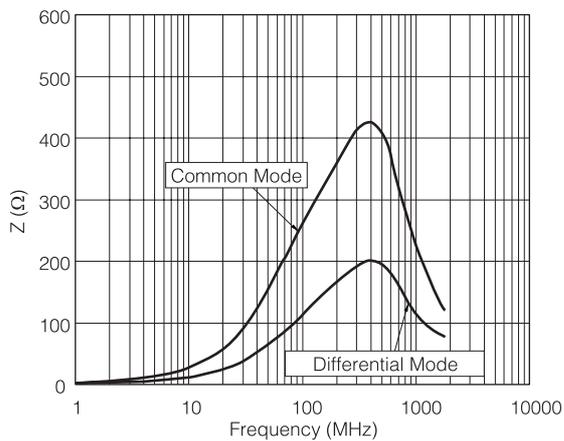
■ Ratings

Part Number	Impedance (Ω) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance (Ω) max.
	Common Mode	Differential Mode			
EXC24CC271U	270 Typ.	160 max.	5	100	1.5
EXC24CC181U	180 Typ.	160 max.	5	100	1.2
EXC24CD900U	90 Typ.	30 max.	5	100	2.5

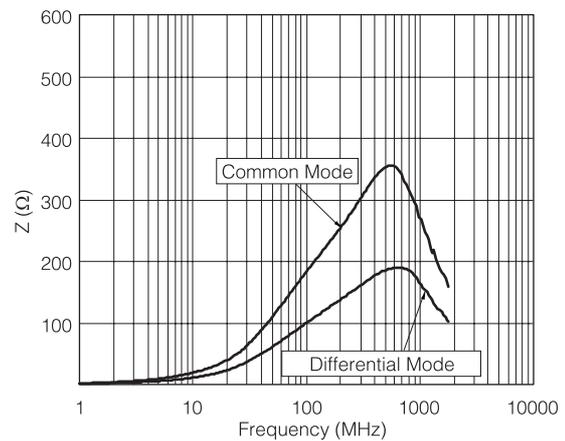
■ Impedance Characteristics (Typical)

Measured by HP4291A

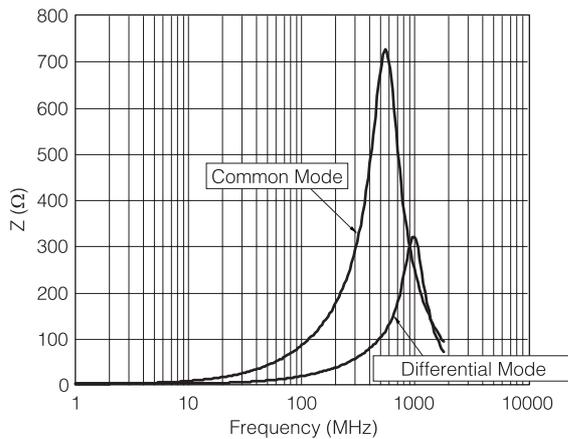
● EXC24CC271U



● EXC24CC181U

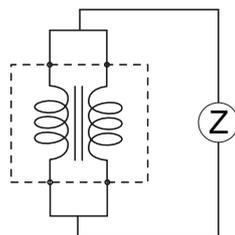


● EXC24CD900U

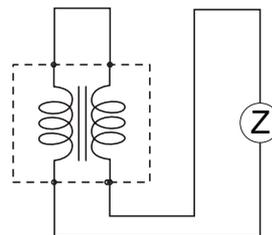


● Measurement Circuit

(A) Common Mode



(B) Differential Mode

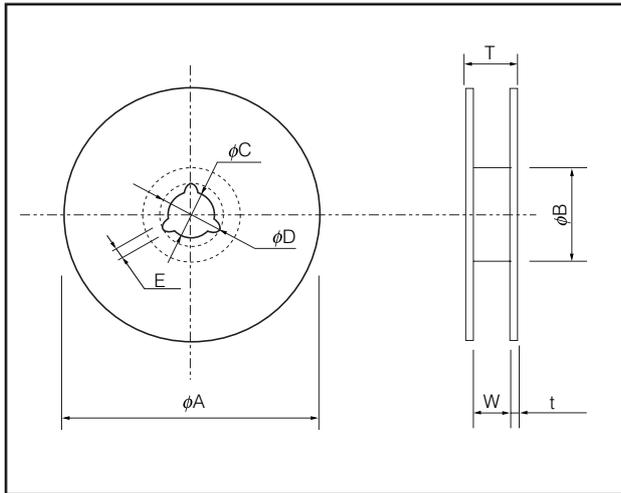


■ Packaging Methods

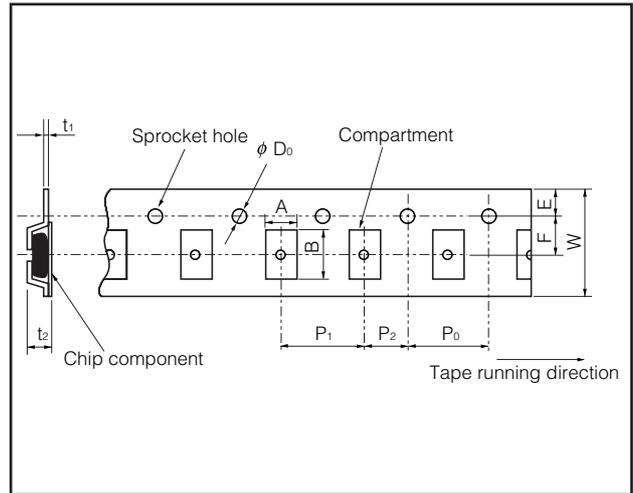
● Standard Quantity

Part Number	Embossed Taping	Weight (mg/pc.) Reference Data
EXC24C□□□□U	5000 pcs./reel	3

● Standard Reel Dimensions in mm



● Embossed Carrier Dimensions in mm (not to scale)



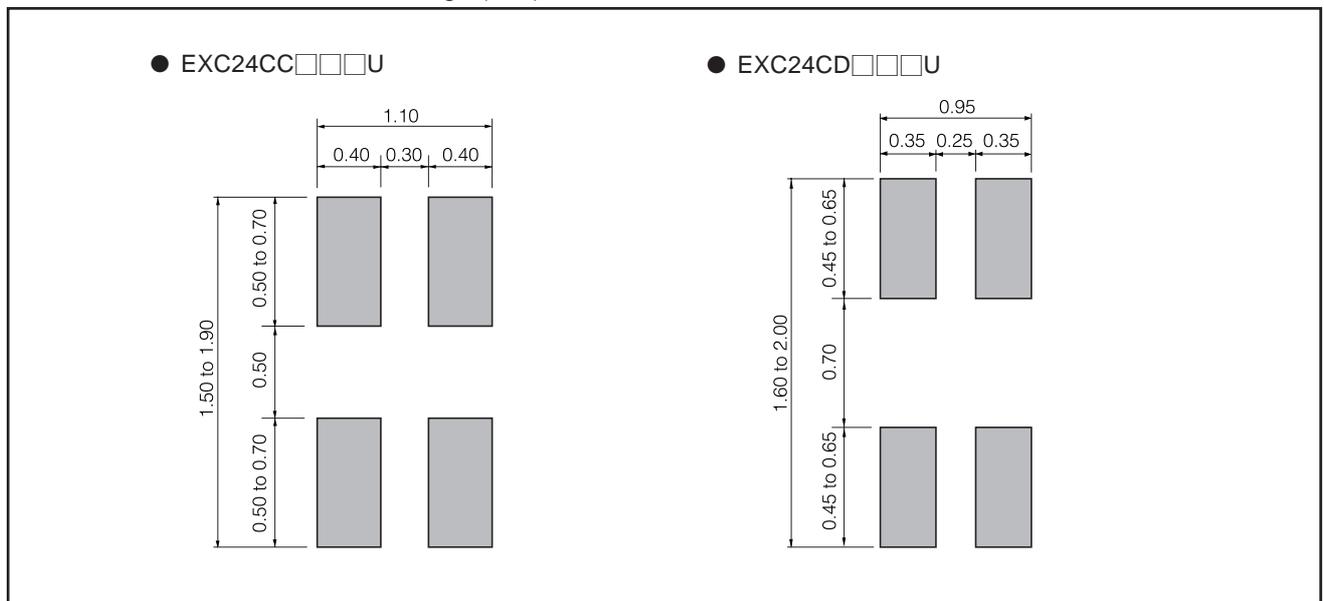
Standard Reel Dimensions (mm)

Part Number	φA	φB	φC	φD	E	W	T	t
EXC24C□□□□U	180.0±3.0	60.0±1.0	13.0±0.5	21.0±0.8	2.0±0.5	9.0±0.3	11.4±1.5	1.2±0.2

Embossed Carrier Dimensions (mm)

Part Number	A	B	W	F	E	P ₁	P ₂	P ₀	φD ₀	t ₁	t ₂
EXC24C□□□□U	1.20±0.15	1.45±0.15	8.0±0.2	3.5±0.1	1.75±0.10	4.0±0.1	2.0±0.1	4.0±0.1	1.5±0.1	0.25±0.05	0.90±0.15

■ Recommended Land Pattern Design (mm)

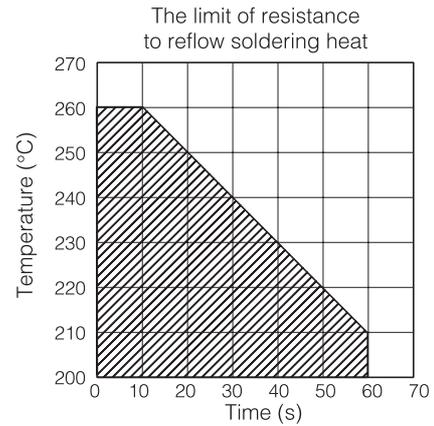
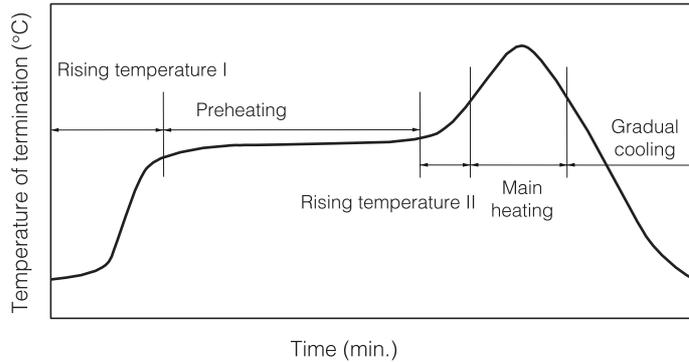


■ Soldering Conditions

Precaution and recommendations are described below.

- Please contact us for additional information when you use in conditions other than those specified.
- Please measure a temperature of terminations and study solderability every type of the board, before actual use.

<Recommended reflow soldering temperature>



Solder	Rising temperature I	Preheating	Rising temperature II	Main heating	Gradual cooling
For solder (Sn-37Pb)	The normal time for preheating 30 s to 60 s	140 °C to 160 °C 60 s to 120 s	Preheating to 200 °C 20 s to 40 s	235±10 °C Peak	200 °C to 100 °C 1 °C to 4 °C/s
For lead-free solder (Sn-3Ag-0.5Cu)	The normal time for preheating 30 s to 60 s	150 °C to 170 °C 60 s to 120 s	Preheating to 210 °C 20 s to 40 s	250 ⁺¹⁰ ₋₅ °C Peak	210 °C to 100 °C 1 °C to 4 °C/s

* Reflow soldering shall be two times maximum.

<Repair with hand soldering>

- Use a soldering iron with tip temperature 280 °C or less. Solder for 3 seconds or less for each termination.

⚠ Cautions for Safety

1. Flux: Use rosin type or non-halogen type flux.
2. Cleaning agent: Use alcohol type. Inquire for other type of cleaning agents.
3. Excessive mechanical stress may damage the components. Handle with care.
4. Store under temperature -5 °C to 40 °C and relative humidity 40 % to 60 %. Avoid rapid changes of temperature and humidity.
5. This catalog shows the quality and performance of a unit component. For quality assurance, exchange the delivery specification with us. Before adoption, be sure to evaluate and verify the product mounting it in your product.