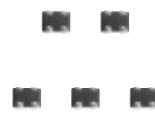


## 2 mode Noise Filters

Type: **EXC24CB/P**



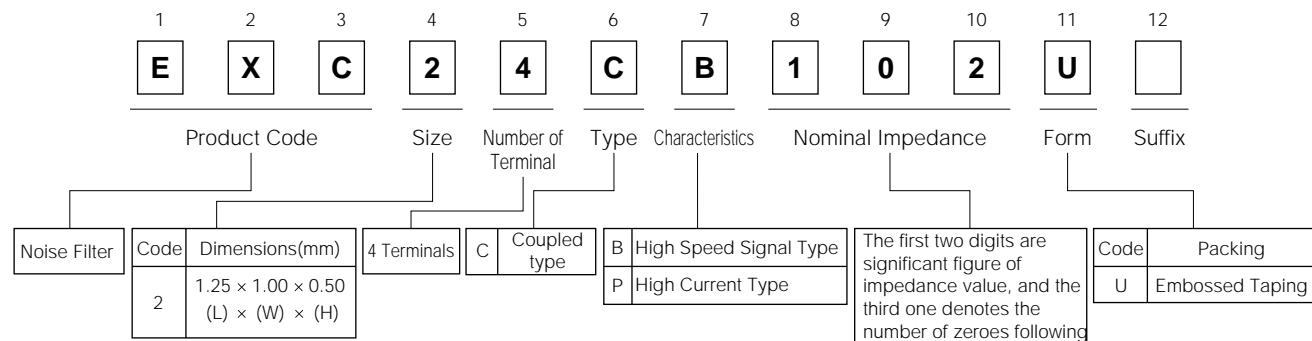
### ■ Features

- Improves Acoustic quality of mobile phones and portable audio equipment(Burst noise suppression)
- Effective suppression for both common and normal mode noise.
- Small size(L 1.25 mm×W 1.00 mm×H 0.50 mm) and lightweight(About 3 mg)

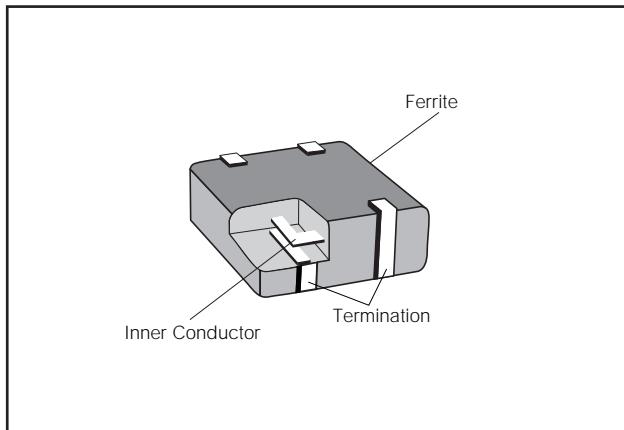
### ■ Recommended Applications

- Receiver line, Speaker line, Microphone line and Headset for Mobile phones (GSM, TDMA, PDC, PHS).
- Digital audio and video equipment such as PDA, DSC, DVC, CD Player, DVD Player, MD Player.
- Small digital equipment such as Personal Computers, Printers, DVD and CD-ROMs, LCD

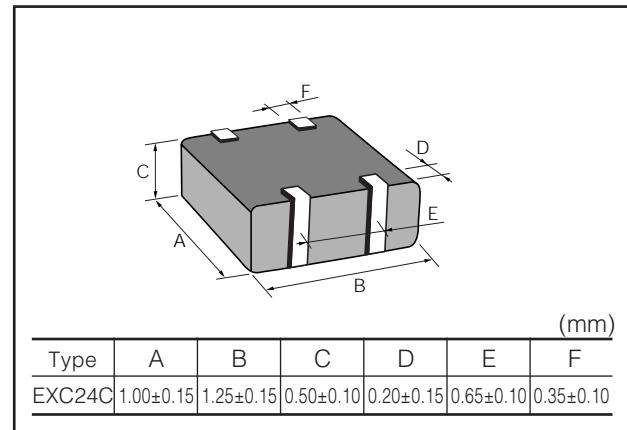
### ■ Explanation of Part Numbers



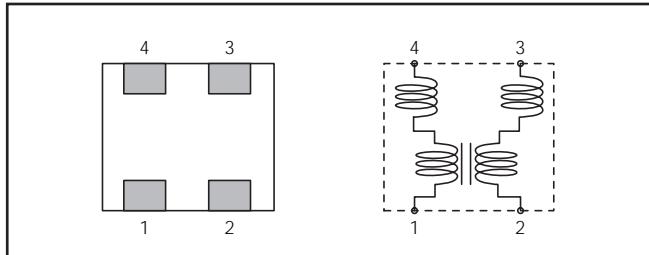
### ■ Construction



### ■ Dimensions in mm (not to scale)



### ■ Circuit Configuration



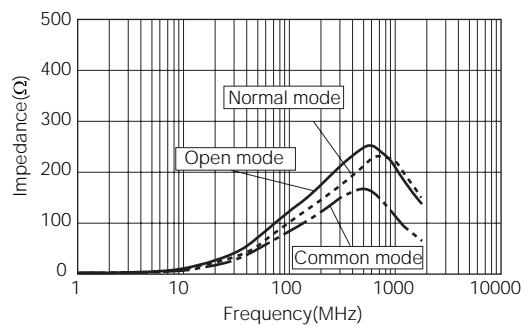
### ■ Ratings

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

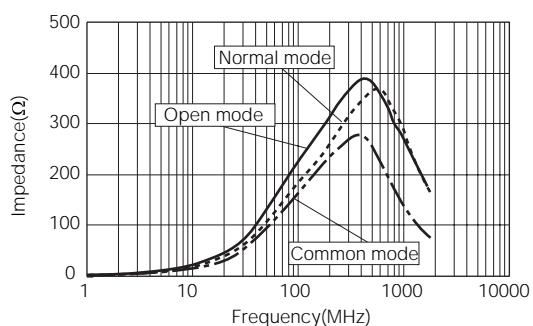
### ■ Impedance Characteristics (Typical)

Measured by HP4291A

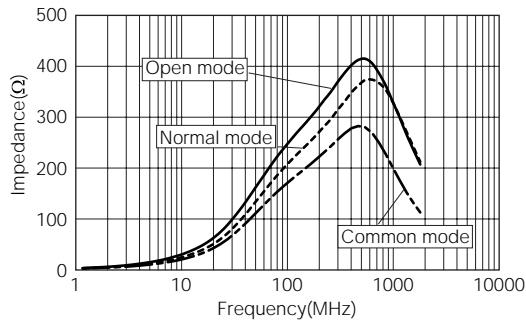
#### ● EXC24CP121U



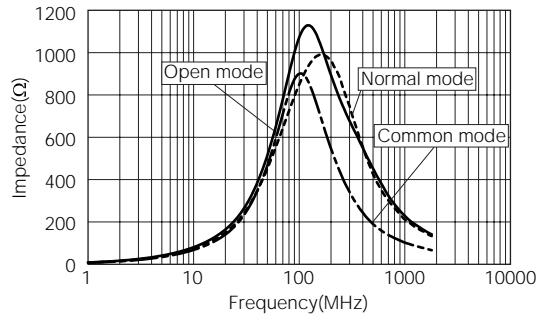
#### ● EXC24CP221U



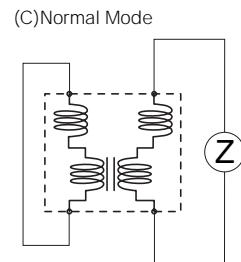
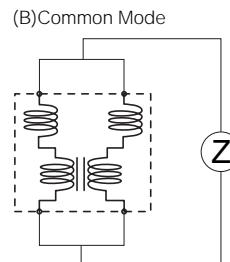
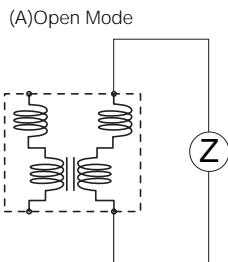
#### ● EXC24CB221U



#### ● EXC24CB102U



### ● Measurement Circuit

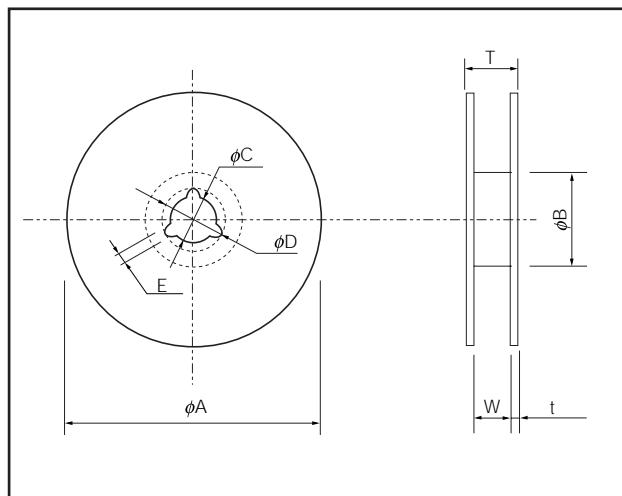


## ■ Packaging Specifications

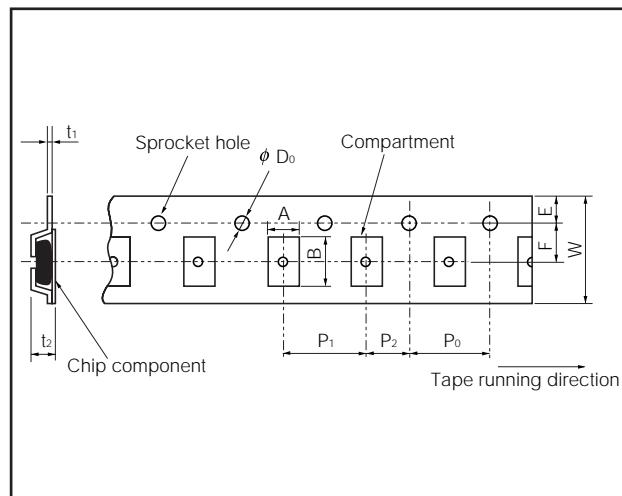
## ● Standard Quantity

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)



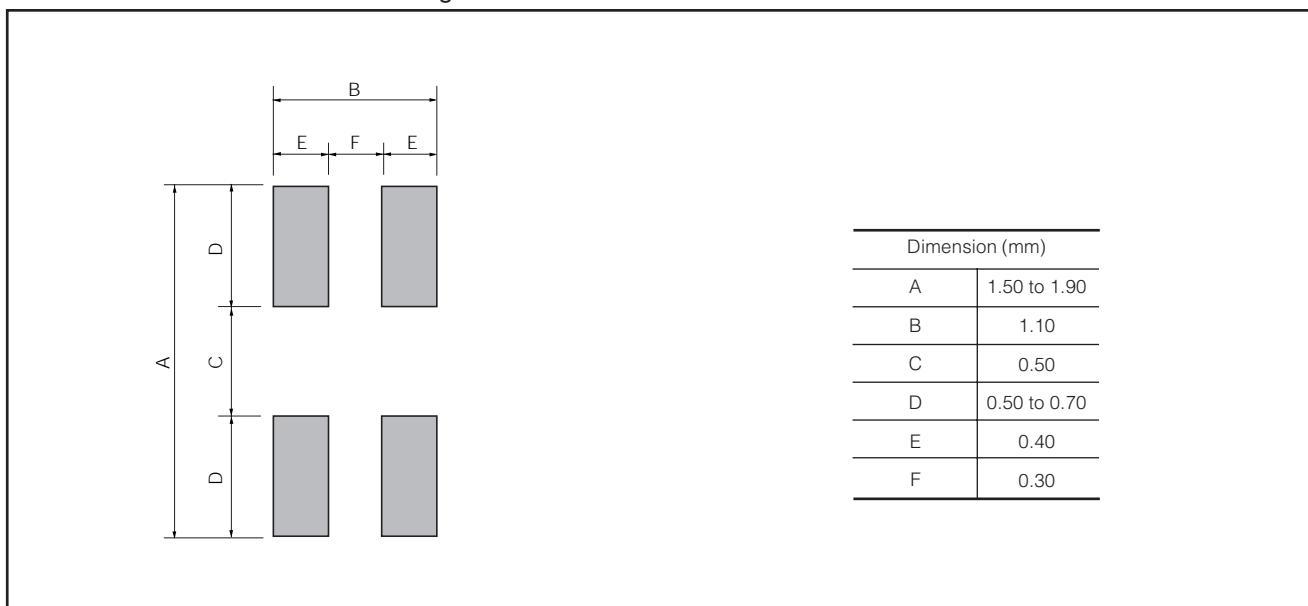
## Standard Reel Dimensions (mm)

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 <sub>1</sub>	P <sub>2</sub>	P <sub>0</sub>	φD <sub>0</sub>	t <sub>1</sub>	t <sub>2</sub>
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

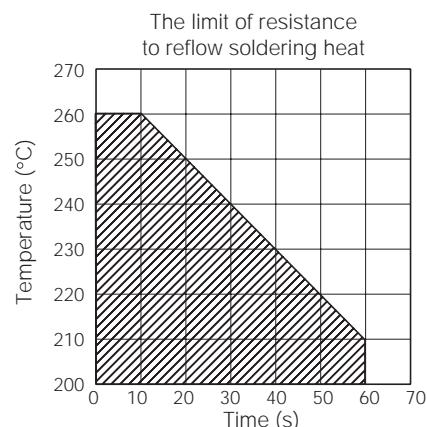
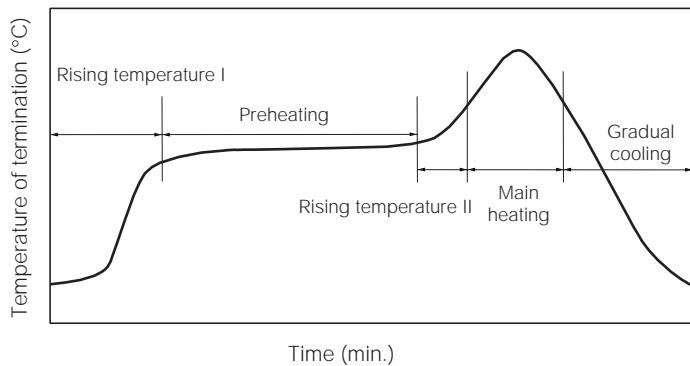


### ■ Soldering Conditions

Precautions and recommendations are described below.

- Please contact us for additional information when using in conditions other than those specified.
- Please measure the temperature of the terminals and evaluate solderability of every type of solder and printed circuit 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 <sup>+10</sup> <sub>-5</sub> °C Peak	210 °C to 100 °C 1 °C to 4 °C/s

\* Reflow soldering should be a maximum of two times.

<Repair with hand soldering>

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

### ⚠ Safety Precautions

1. Flux: Use rosin type or non-halogen type flux.
2. Cleaning agent: Use alcohol based solvents only. Consult us before using any other type of cleaning agent.
3. Excessive mechanical stress may damage the components. Handle with care.
4. Store under temperature ranging from -5 °C to 40 °C and relative humidity from 40 % to 60 %. Avoid rapid changes of temperature and humidity.
5. Use the components within half a year after date of inspection for shipment.
6. Before ordering, test the components in your application to ensure proper function and compatibility.