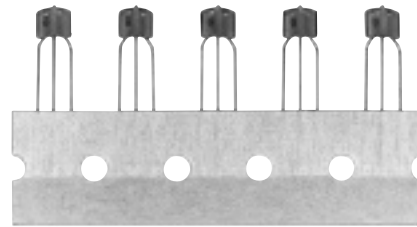


## EMI Filters

Type: **EXCEMT**



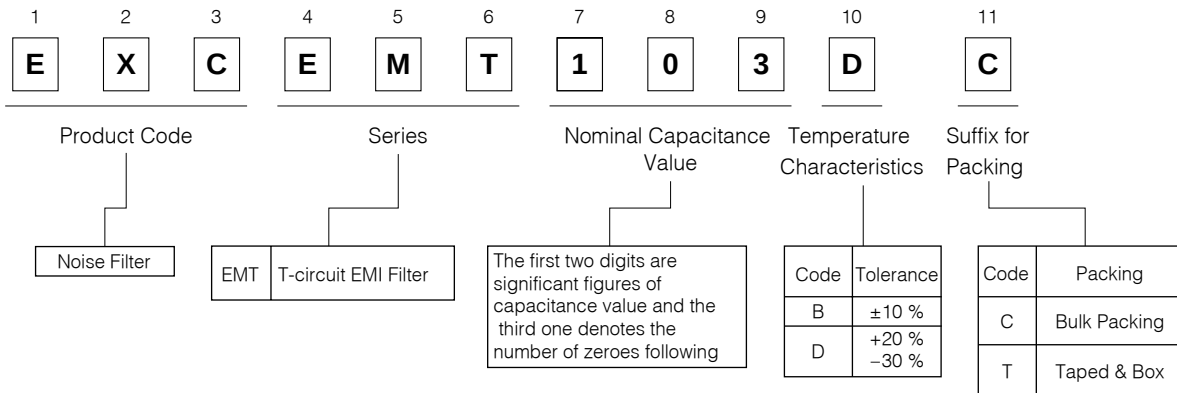
### ■ Features

- Small in size and taped type is available
- Excellent noise filtering characteristics using T-network connections.
- Preformed leads provide better solderability for through-hole P.W.B.

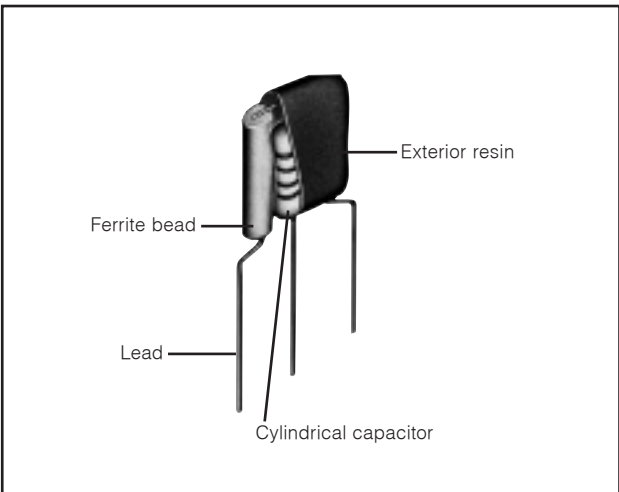
### ■ Recommended Applications

- Digital equipment Personal Computers, Word Processors, Printers, HDD, PPC, and Communication equipment
- Digital audio and Video equipment
- AC adapters and Switching Power supplies
- Engine controls, Panels and Audio systems
- Electronic musical instruments and other digital devices

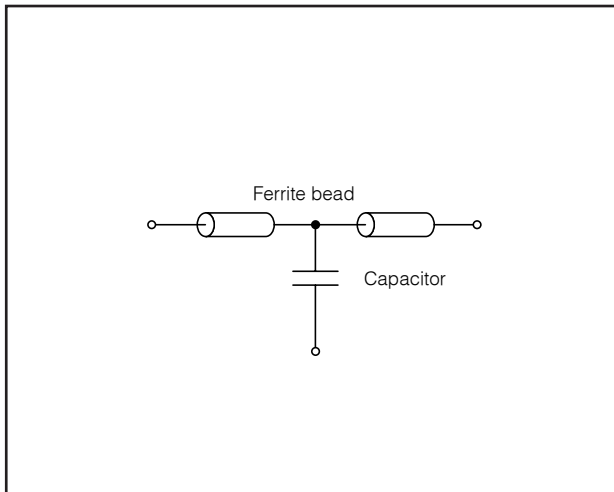
### ■ Explanation of Part Numbers



### ■ Construction



### ■ Schematic



## Ratings

Category Temperature Range (Operating Temp. Range): -25 °C to +85 °C

| Part Number | Rated Voltage (V DC) | Capacitance <sup>(1)</sup> (pF) | Tolerance (%) | Temperature Characteristics <sup>(2)</sup> | Rated Current (A DC) | 25 dB Attenuation Frequency <sup>(3)</sup> (MHz) | 15 dB Attenuation Frequency <sup>(3)</sup> (MHz) |
|-------------|----------------------|---------------------------------|---------------|--------------------------------------------|----------------------|--------------------------------------------------|--------------------------------------------------|
| EXCENT220B□ | 50                   | 22                              | ±20           | YB                                         | 5                    | 800 to 1000                                      | 600 to 1000                                      |
| EXCENT470B□ | 50                   | 47                              | ±20           | YB                                         | 5                    | 450 to 700                                       | 400 to 1000                                      |
| EXCENT101B□ | 50                   | 100                             | ±20           | YB                                         | 5                    | 350 to 550                                       | 250 to 900                                       |
| EXCENT221B□ | 50                   | 220                             | ±20           | YB                                         | 5                    | 250 to 400                                       | 150 to 500                                       |
| EXCENT271B□ | 50                   | 270                             | ±20           | YB                                         | 5                    | 250 to 400                                       | 150 to 500                                       |
| EXCENT471B□ | 50                   | 470                             | ±20           | YB                                         | 5                    | 150 to 350                                       | 70 to 500                                        |
| EXCENT102B□ | 50                   | 1000                            | ±20           | YB                                         | 5                    | 100 to 250                                       | 50 to 400                                        |
| EXCENT222D□ | 16                   | 2200                            | ±20           | YD                                         | 5                    | 50 to 200                                        | 30 to 400                                        |
| EXCENT332D□ | 16                   | 3300                            | ±20           | YD                                         | 5                    | 40 to 160                                        | 25 to 400                                        |
| EXCENT103D□ | 16                   | 10000                           | ±30           | YD                                         | 5                    | 25 to 120                                        | 15 to 400                                        |

Lead Cut Type: C, Taped Type: T

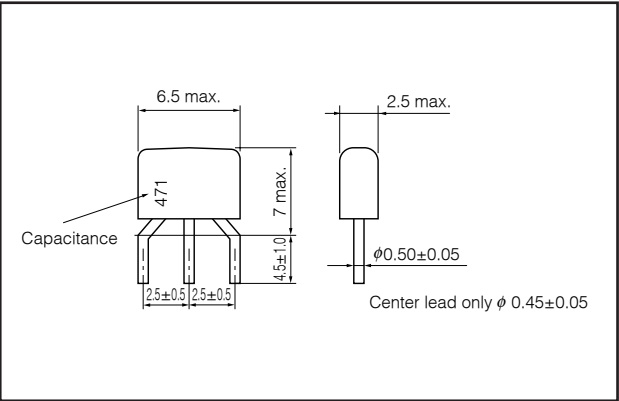
(1) Measurement Temperature: +20 °C, Measurement Frequency: 1 kHz

(2) Temperature Characteristics YB: Maximum capacitance change is ±10 % over the temperature range of -25 °C to +85 °C in reference to +20 °C  
YD: Maximum capacitance change is +20, -30 % over the temperature range of -25 °C to +85 °C in reference to +20 °C

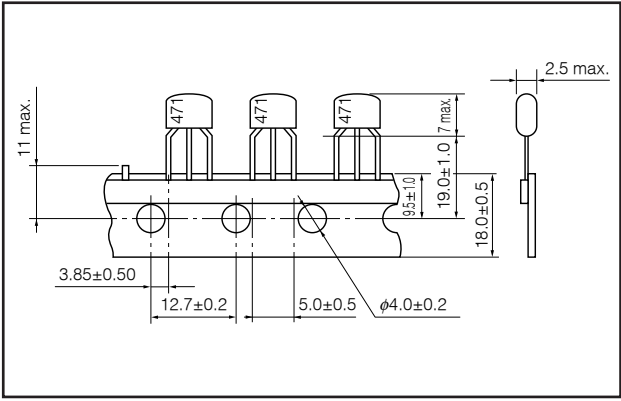
(3) Measurement Temperature: +20 °C

**Note:** Please inquire to the particular capacitance value, on a range of 22 to 10000 pF.

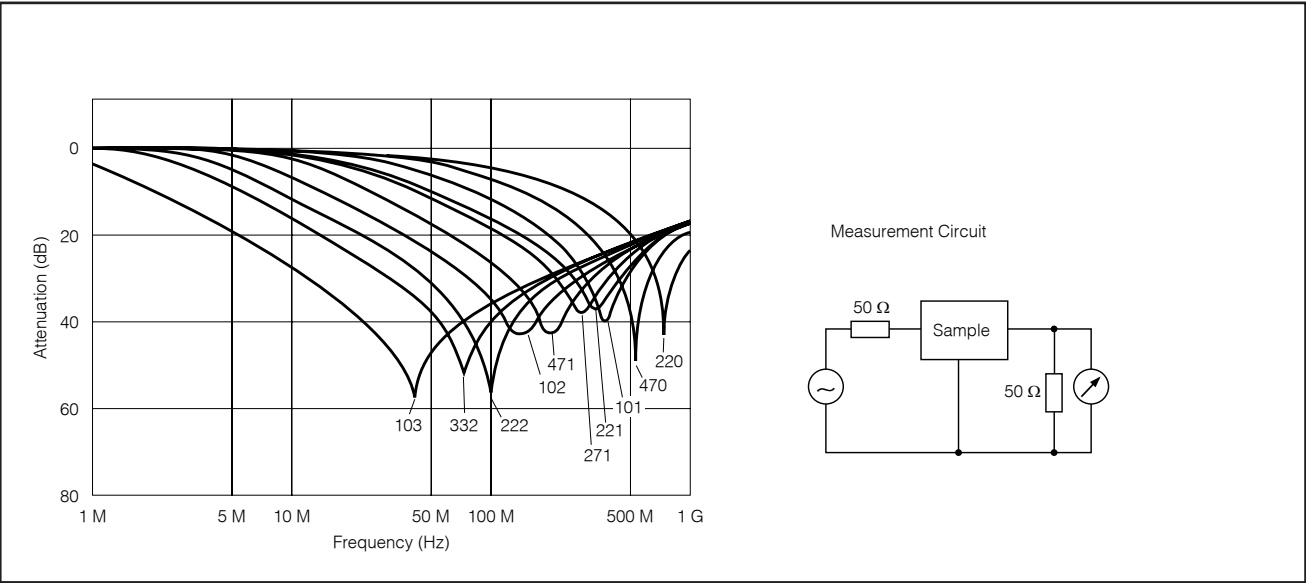
## Dimensions in mm (not to scale)



## Standard Lead Taping in mm (not to scale)



## Typical Attenuation Characteristics



### ■ Packaging Specifications

| Part Number | Standard Quantity | Style    | Weight (mg/pcs.) |
|-------------|-------------------|----------|------------------|
| EXCEMT□□□□C | 200 pcs./Bag      | Bulk     | 216              |
| EXCEMT□□□□T | 2000 pcs./Box     | Flat box | 291              |

### ⚠ Safety Precautions

- The filter may fail in a short-circuit mode (or open-circuit mode) when subjected to severe conditions of electrical and/or environmental stresses beyond their specified rating. Burnout or glowing may result in the worst case.
- Soldering Flux: Use rosin type or nonhalogen type flux.
- Cleaning Solvent: Use alcohol based solution. Consult with us before using any other type of cleaning agent.
- Avoid contact with static electricity.
- Filter characteristics may deteriorate if subjected to surge or other abnormal voltage.
- Excessive mechanical stress may damage the components. Handle with care.
- Store under temperatures ranging from  $-5^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  and relative humidity from 40 % to 60 %. Avoid rapid changes of temperature and humidity.
- Use the components within one year of delivery.
- Before ordering, test sample components in your application to ensure proper function and compatibility.