

## Common mode Noise Filters

Type: **EXC14CT**



### Features

- Small and thin (L 0.85 mm×W 0.65 mm×H 0.45 mm)
- High attenuation at common-mode for noise suppression of harmonic signal components and cellular frequency
- High cut-off frequency and capability of coping with high-speed signals (USB and HDMI)
- Strong multilayer/sintered structure, excellent reflow resistance and high mounting reliability
- Lead, halogen and antimony-free
- RoHS compliant

### Recommended Applications

- Smartphones, Tablet PCs and DSC
- Noise suppression of high-speed differential data lines such as MIPI, USB and LVDS

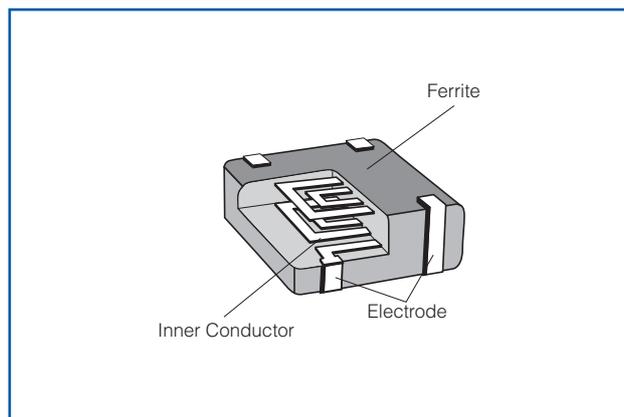
### Explanation of Part Numbers

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

Noise Filter	Code	Dimensions(mm)	4 Terminals	C	Coupled type	T	High attenuation type	The first two digits are significant figure of impedance value, and the third one denotes the number of zeros following	Code	Packing
	1	0.85 × 0.65 × 0.45 (L) × (W) × (H)							U	Embossed 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	
EXC14CT (0302)	0.65±0.05	0.85±0.05	0.45±0.05	0.10 min.	0.50±0.10	0.27±0.10	1.0

### 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.

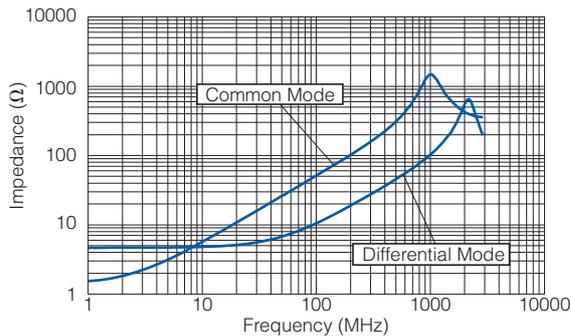
## Ratings

Part Number	Impedance ( $\Omega$ ) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance ( $\Omega$ )max.
	Common Mode	Differential Mode			
EXC14CT500U	50 $\Omega \pm 25\%$	17 $\Omega$ max.	5	100	2.3 $\Omega \pm 30\%$
EXC14CT900U	90 $\Omega \pm 20\%$	20 $\Omega$ max.	5	100	3.3 $\Omega \pm 30\%$

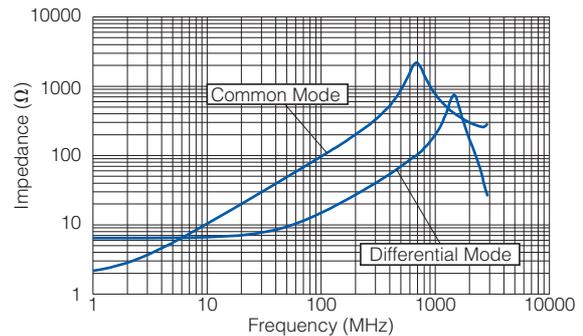
- Category Temperature Range  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$

## Impedance Characteristics (Typical)

### ● EXC14CT500U

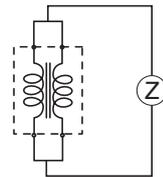


### ● EXC14CT900U

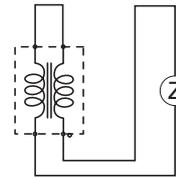


### ● Measurement Circuit

(A) Common Mode

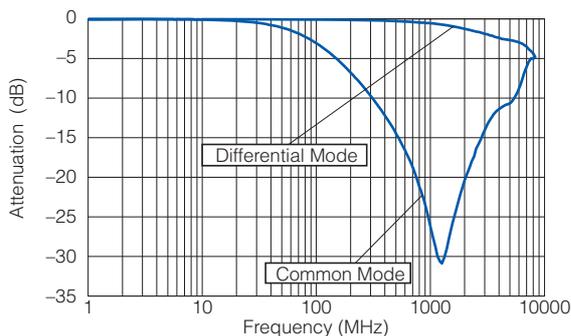


(B) Differential Mode

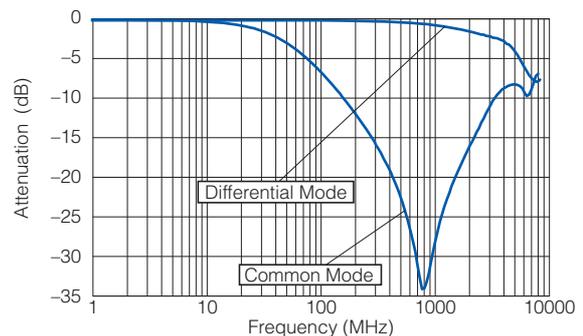


## Attenuation Characteristics (Typical)

### ● EXC14CT500U



### ● EXC14CT900U



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