

## Common mode Noise Filters

Type: **EXC14CG**  
**EXC14CE**



### Features

- Small and thin (L 0.85 mm×W 0.65 mm×H 0.45 mm)
- Noise suppression of high-speed differential transmission lines with little influence of waveform rounding on signal transmission
- Low DC resistance and low insertion loss
- High-Q value and high impedance of GHz zone : EXC14CG type
- Strong multilayer/sintered structure, excellent reflow resistance and high mounting reliability
- Lead, halogen and antimony-free
- RoHS compliant

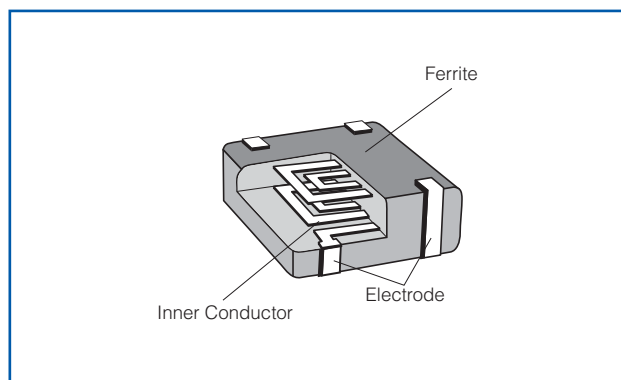
### Recommended Applications

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

### Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	X	C	1	4	C	E	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	E High speed Differential transmission G High-Q 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	
EXC14CG/CE (0302)	0.65±0.05	0.85±0.05	0.45±0.05	0.10 min.	0.50±0.10	0.27±0.10	1.4

### 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.

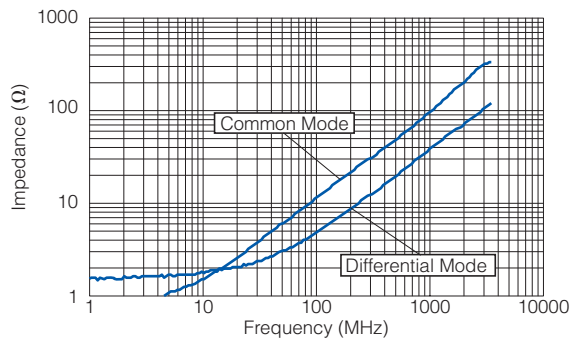
## Ratings

Part Number	Impedance ( $\Omega$ ) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance ( $\Omega$ )max.
	Common Mode	Differential Mode			
EXC14CG120U	12 $\Omega$ ±30 %	10 $\Omega$ max.	5	130	2.0
EXC14CG350U	35 $\Omega$ ±30 %	15 $\Omega$ max.	5	100	2.0
EXC14CG430U	43 $\Omega$ ±25 %	15 $\Omega$ max.	5	100	2.7
EXC14CE650U	65 $\Omega$ ±20 %	20 $\Omega$ max.	5	130	2.5
EXC14CE900U	90 $\Omega$ ±20 %	20 $\Omega$ max.	5	130	2.5
EXC14CE121U	120 $\Omega$ ±20 %	20 $\Omega$ max.	5	100	3.8

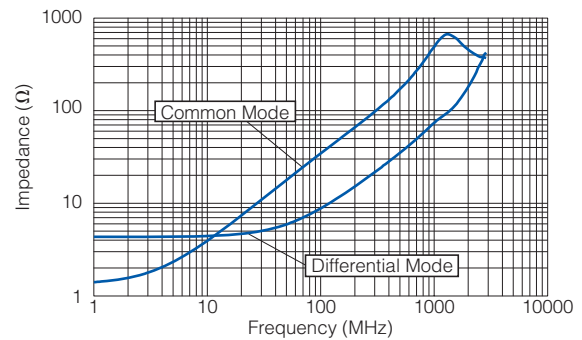
- Category Temperature Range  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$

## Impedance Characteristics (Typical)

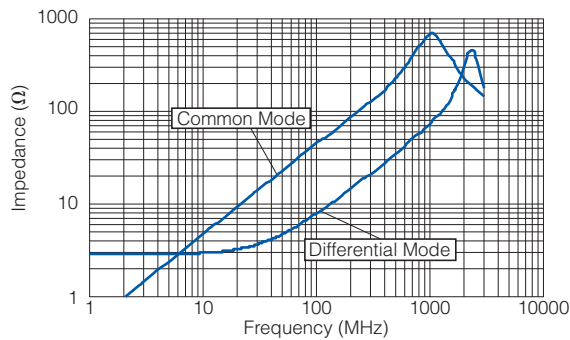
### ● EXC14CG120U



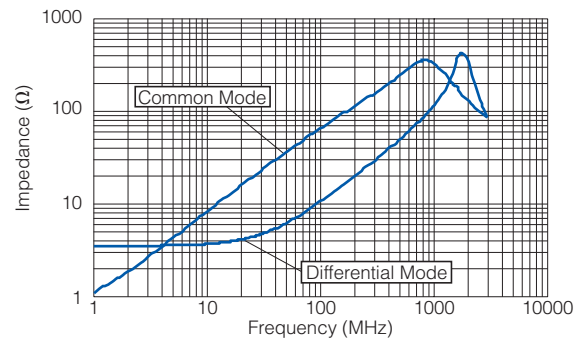
### ● EXC14CG350U



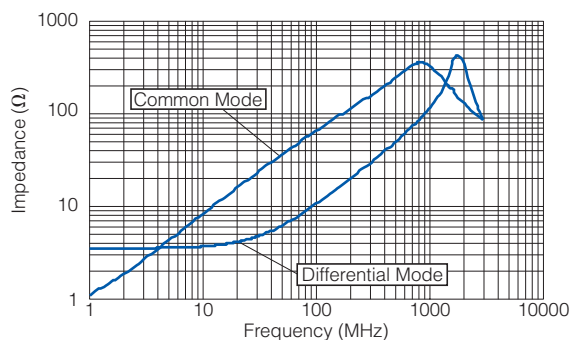
### ● EXC14CG430U



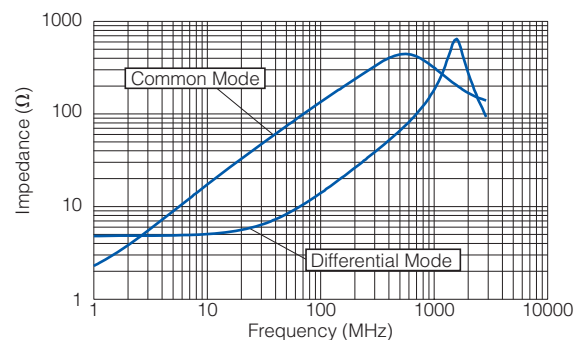
### ● EXC14CE650U



### ● EXC14CE900U

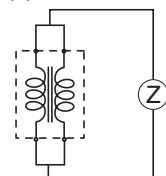


### ● EXC14CE121U

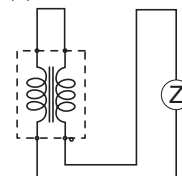


### ● Measurement Circuit

(A) Common Mode

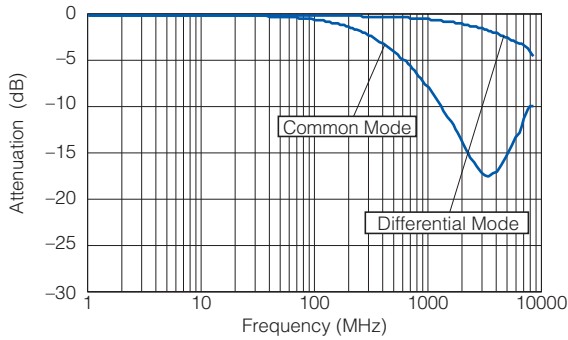


(B) Differential Mode

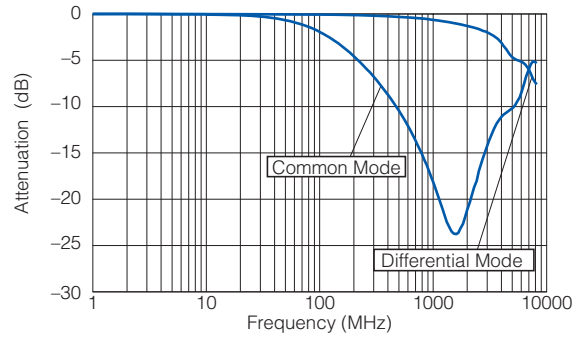


## Attenuation Characteristics (Typical)

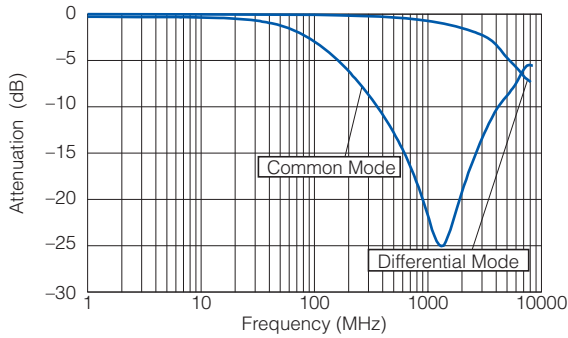
● EXC14CG120U



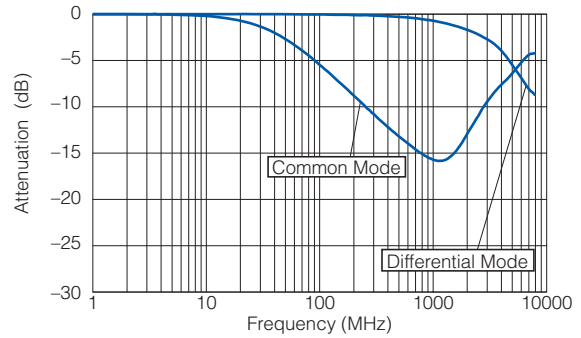
● EXC14CG350U



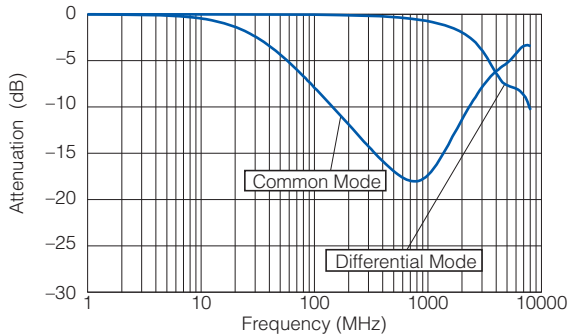
● EXC14CG430U



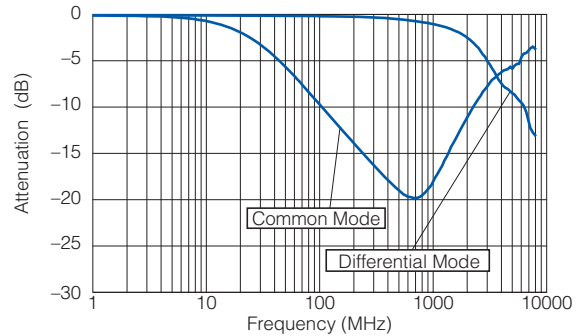
● EXC14CE650U



● EXC14CE900U



● EXC14CE121U



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