

## Common mode Noise Filters

Type: **EXC14CH**



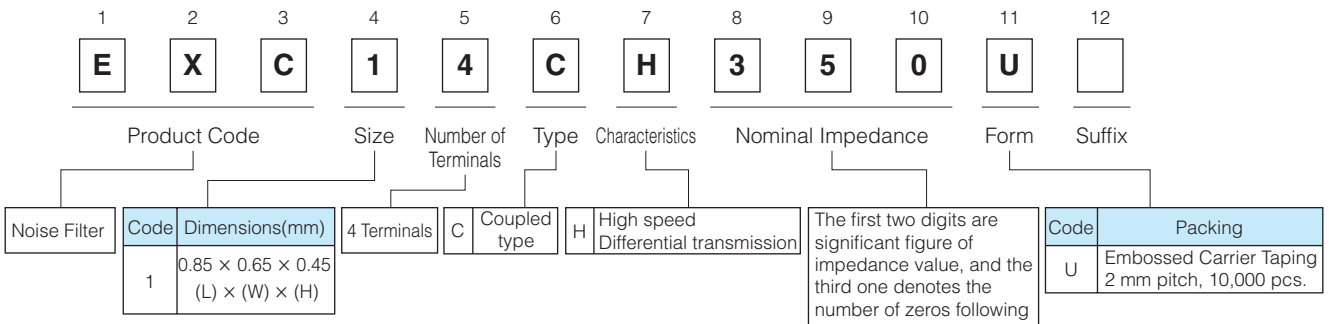
### Features

- Small and thin (L 0.85 mm×W 0.65 mm×H 0.45 mm)
- High common mode attenuation in high-speed differential transmission lines, Cut-off frequency is more than 8.5 GHz, and an influence to differential transmission signal quality is little
- Strong multilayer/sintered structure, excellent reflow resistance and high mounting reliability
- Lead, halogen and antimony-free
- RoHS compliant

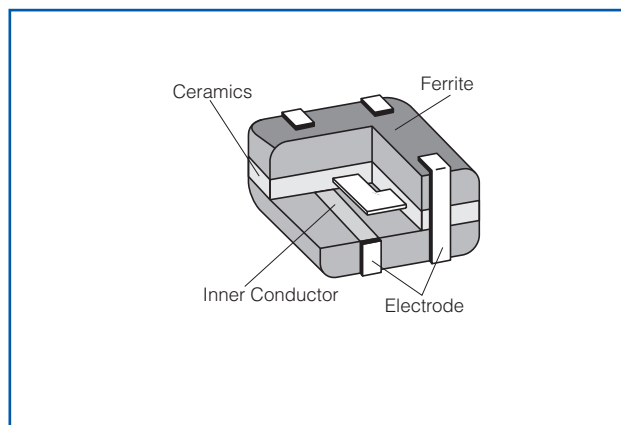
### Recommended Applications

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

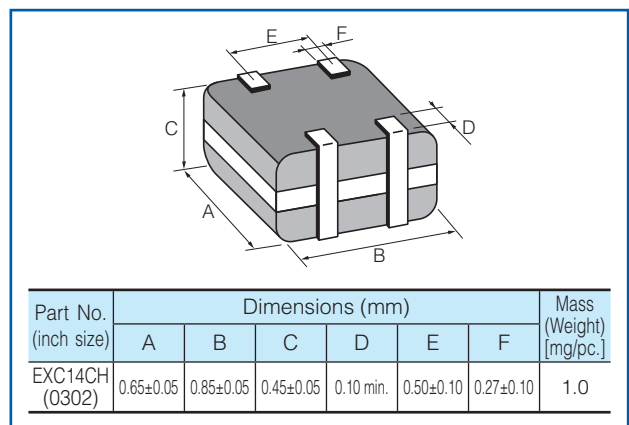
### Explanation of Part Numbers



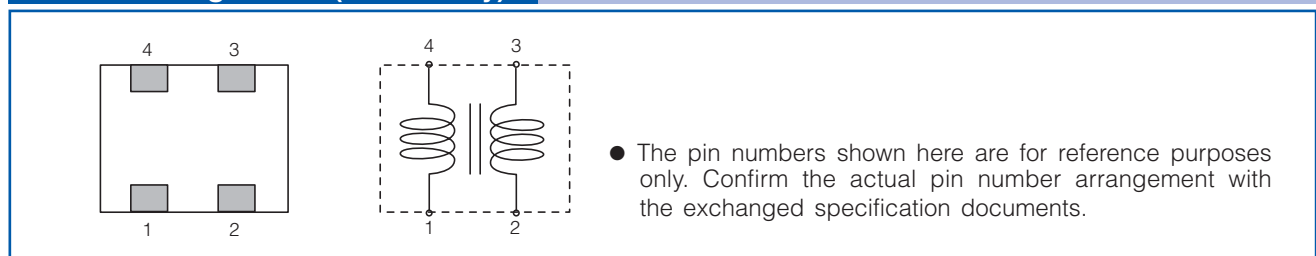
### Construction



### Dimensions in mm (not to scale)



### Circuit Configuration (No Polarity)



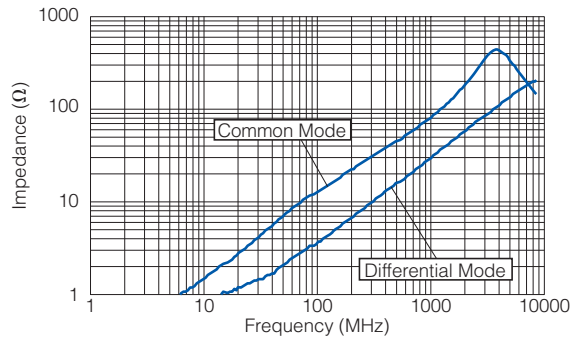
## Ratings

Part Number	Impedance ( $\Omega$ ) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance ( $\Omega$ )max.
	Common Mode	Differential Mode			
EXC14CH120U	12 $\Omega$ $\pm$ 25 %	10 $\Omega$ max.	5	100	1.0
EXC14CH350U	35 $\Omega$ $\pm$ 30 %	15 $\Omega$ max.	5	100	1.5

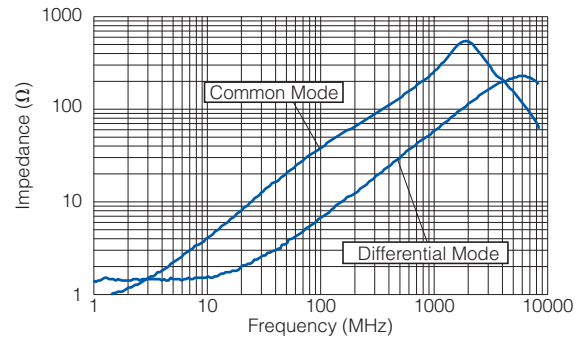
- Category Temperature Range  $-40$  °C to  $+85$  °C

## Impedance Characteristics (Typical)

### ● EXC14CH120U

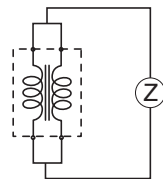


### ● EXC14CH350U

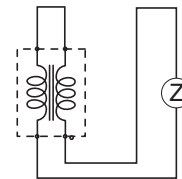


### ● Measurement Circuit

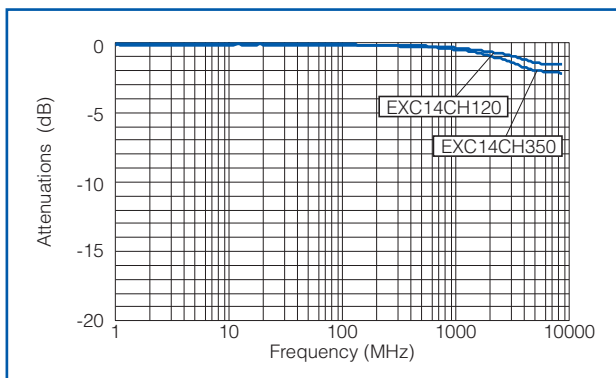
(A) Common Mode



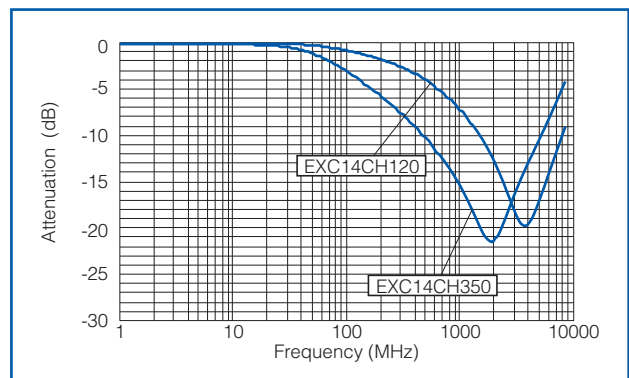
(B) Differential Mode



## Insertion Loss (Typical)



## Common mode Attenuation Characteristics (Typical)



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

## Performance

Test Item	Performance Requirements	Test Conditions
Resistance	Within Specified Tolerance	25 °C
Overload	–	Rated Voltage
Resistance to Soldering Heat	±30 % (Impedance Change)	260 °C, 10 s
Rapid Change of Temperature	±30 % (Impedance Change)	–40 °C (30 min.) / +85 °C (30 min.), 200 cycles
High Temperature Exposure	±30 % (Impedance Change)	85 °C, 500 h
Damp Heat, Steady State	±30 % (Impedance Change)	60 °C, 95 %RH, 500 h
Load Life in Humidity	±30 % (Impedance Change)	60 °C, 95 %RH, Rated Current, 500 h

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