

## Common mode Noise Filters with ESD Suppressor



Type: **EXC24CS**

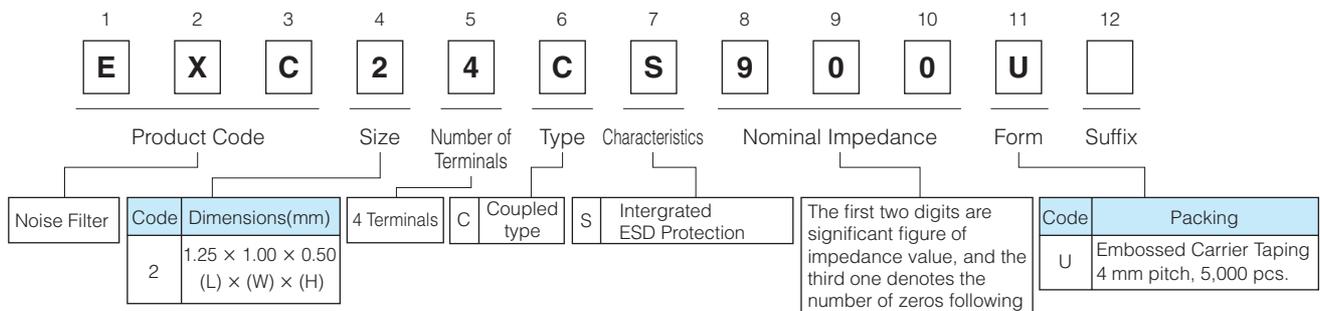
### Features

- Provides EMI Filtering and ESD Protection (L 1.25 mm×W 1.00 mm×H 0.50 mm)
- ESD and noise suppression of high-speed differential transmission lines with little influence of waveform rounding on signal transmission
- High Common mode attenuation in the range between 700 MHz and 1 GHz (RF band)
- Strong multilayer/sintered structure, excellent reflow resistance and high mounting reliability
- Lead, halogen and antimony-free
- RoHS compliant

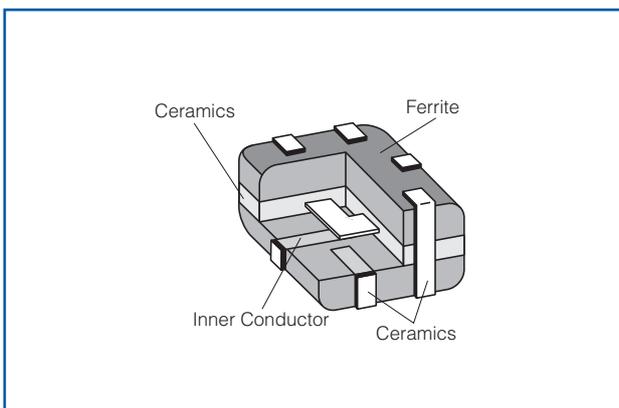
### Recommended Applications

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

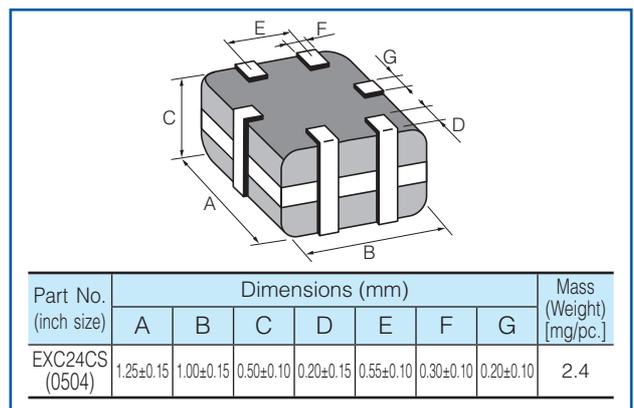
### Explanation of Part Numbers



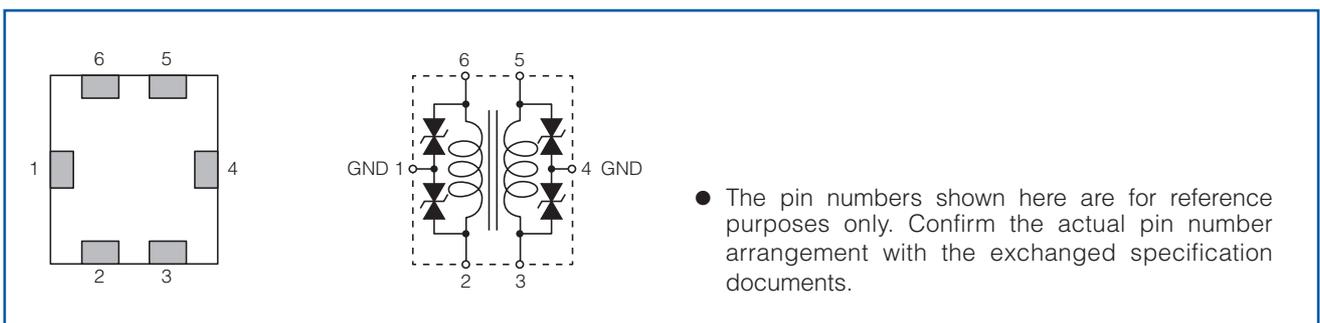
### Construction



### Dimensions in mm (not to scale)



### Circuit Configuration (No Polarity)



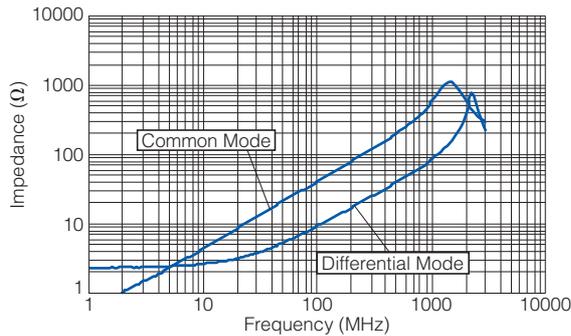
## Ratings

Part Number	Impedance ( $\Omega$ ) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance ( $\Omega$ )max.
	Common Mode	Differential Mode			
EXC24CS350U	35 $\Omega \pm 30\%$	15 $\Omega$ max.	5	100	2.0
EXC24CS900U	90 $\Omega \pm 20\%$	20 $\Omega$ max.	5	100	3.0

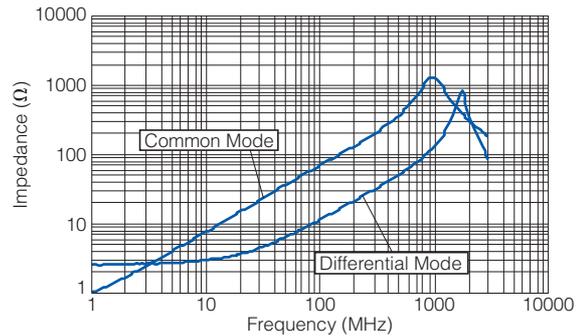
- Category Temperature Range  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$

## Impedance Characteristics (Typical)

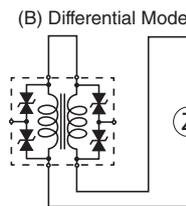
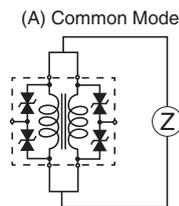
### ● EXC24CS350U



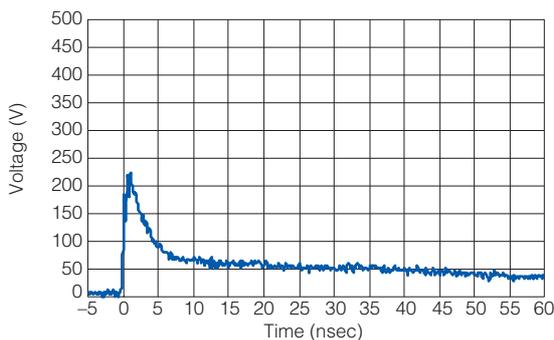
### ● EXC24CS900U



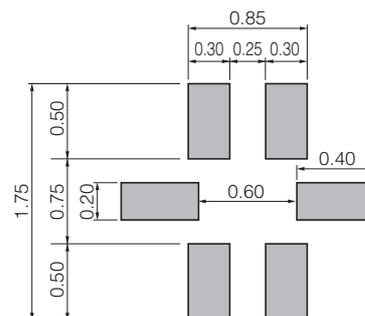
### ● Measurement Circuit



## ESD Suppression Characteristics (Typical: IEC61000-4-2, 8 kV contact discharge)



## Recommended Land Pattern Design in mm (not to scale)



## ■ As for Packaging Methods, 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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