

## Common mode Noise Filters

Type: **EXC24CG**



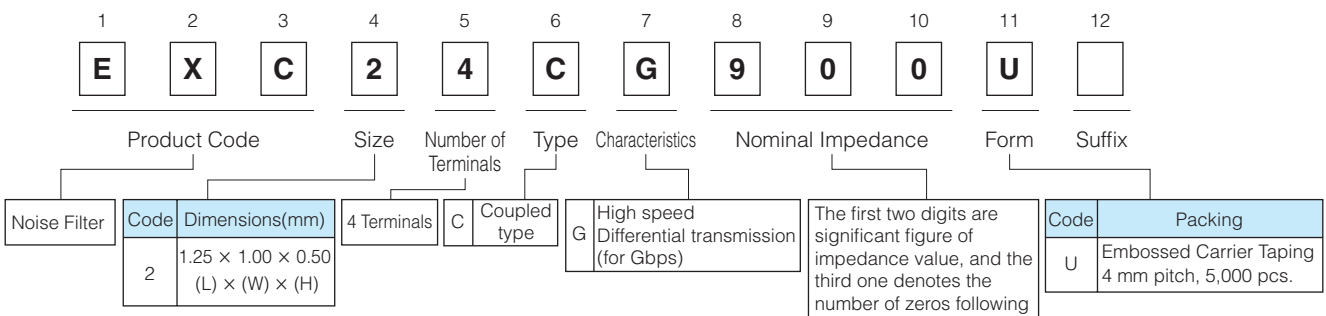
### Features

- Elimination of radiation noises from high-speed differential transmissions
- Prevention of reflection of transmission signals and noise radiation by controlling TDR characteristic impedance as 100 Ω
- Satisfaction of eye pattern standards of HDMI waveforms with capability to improve waveform fluctuations of skew and overshoot
- Simple multilayer structure, excellent mass productivity and high reliability
- Small and thin (L 1.25 mm×W 1.00 mm×H 0.50 mm)
- RoHS compliant

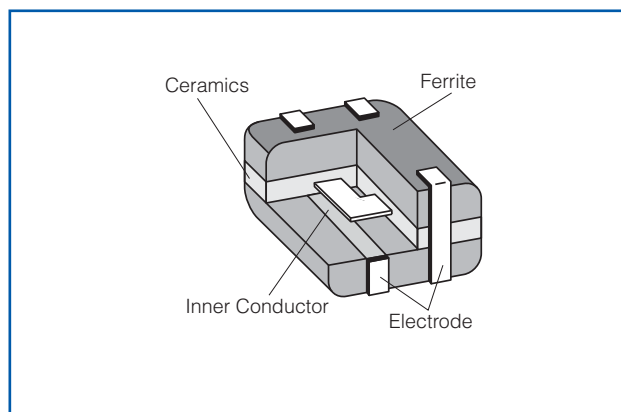
### Recommended Applications

- AV equipment (LCD-TV, DVD/Blu-ray drives), Information equipment (PCs, HDD), Communications equipment (Mobile phones, Smartphones)
- Noise suppression of high-speed differential data lines such as HDMI, SATA and LAN

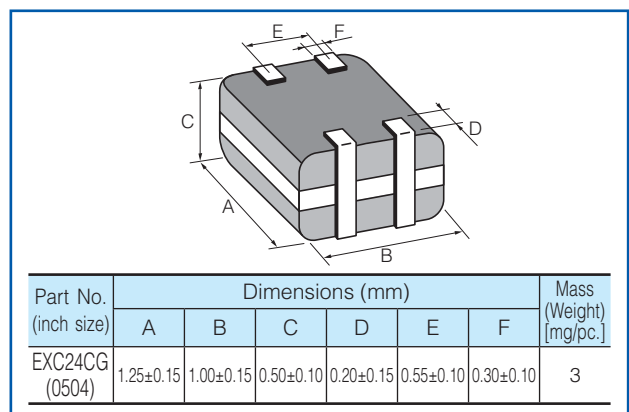
### Explanation of Part Numbers



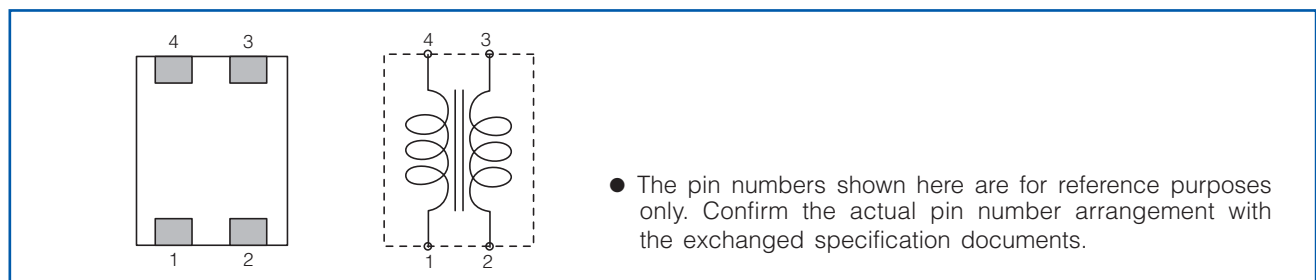
### Construction



### Dimensions in mm (not to scale)



### Circuit Configuration (No Polarity)



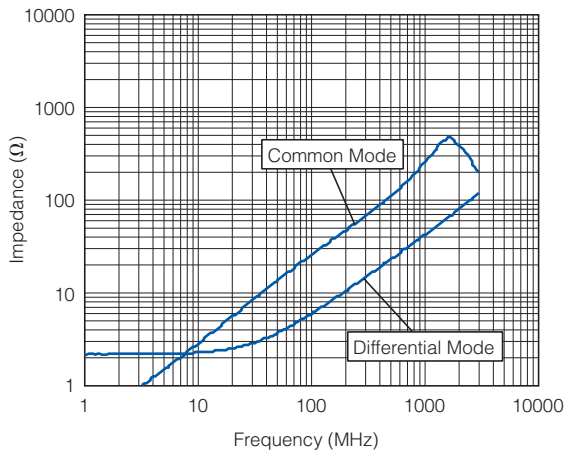
## Ratings

Part Number	Impedance ( $\Omega$ ) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance ( $\Omega$ )max.
	Common Mode	Differential Mode			
EXC24CG240U	24 $\Omega \pm 25\%$	15 $\Omega$ max.	5	160	1.5
EXC24CG360U	36 $\Omega \pm 25\%$	15 $\Omega$ max.	5	130	1.7
EXC24CG900U	90 $\Omega \pm 25\%$	20 $\Omega$ max.	5	100	3.0

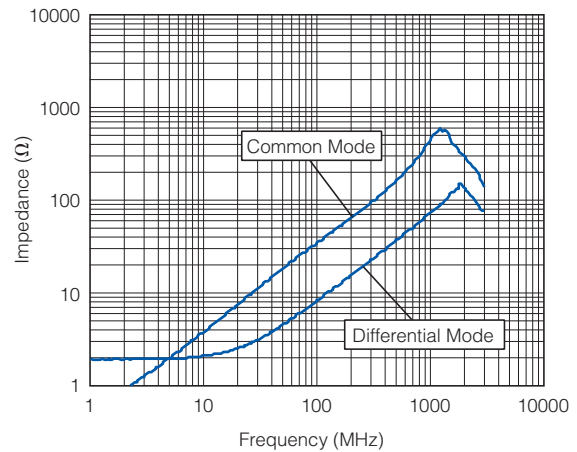
● Category Temperature Range  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$

## Impedance Characteristics (Typical)

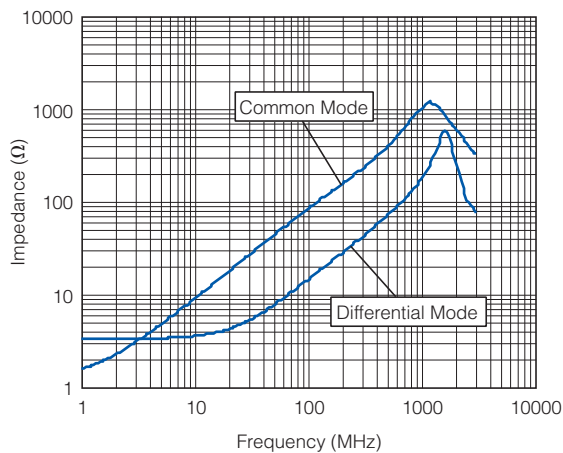
### ● EXC24CG240U



### ● EXC24CG360U

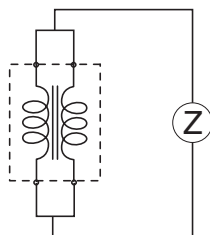


### ● EXC24CG900U

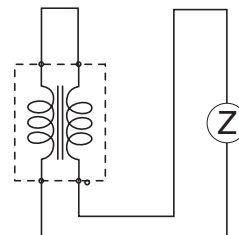


### ● Measurement Circuit

(A) Common Mode



(B) Differential Mode



■ 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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