

Common mode Noise Filter Array with ESD Suppressor



Type: **EXC18CS**

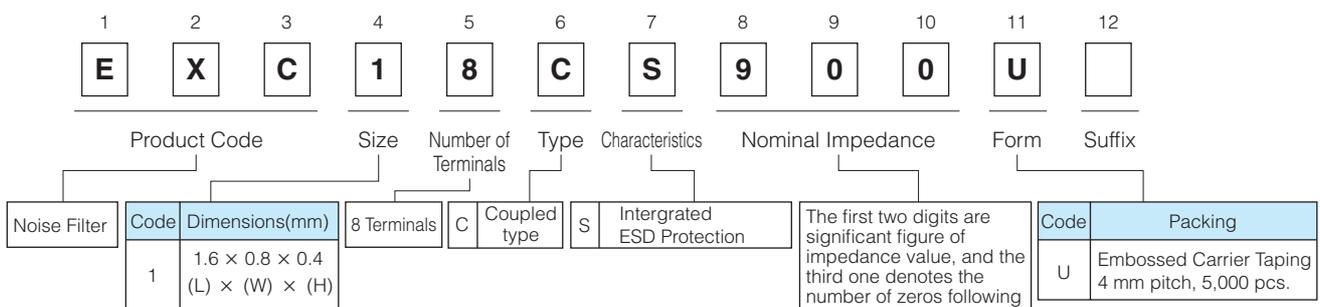
Features

- Provides EMI Filtering and ESD Protection (L 1.6 mm×W 0.8 mm×H 0.4 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

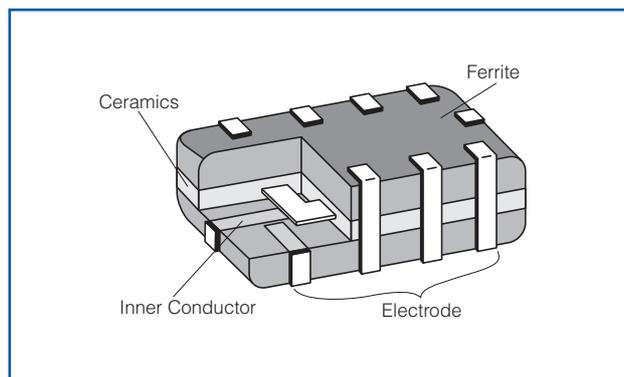
Recommended Applications

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

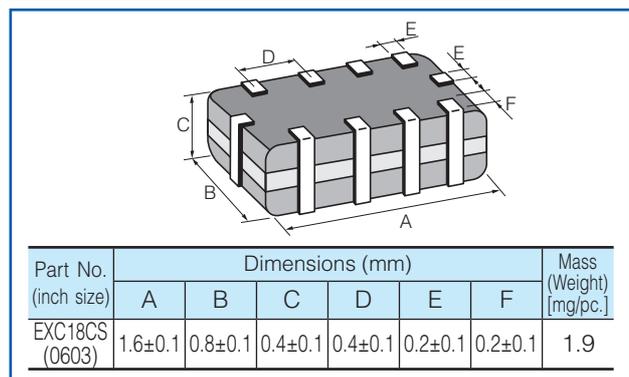
Explanation of Part Numbers



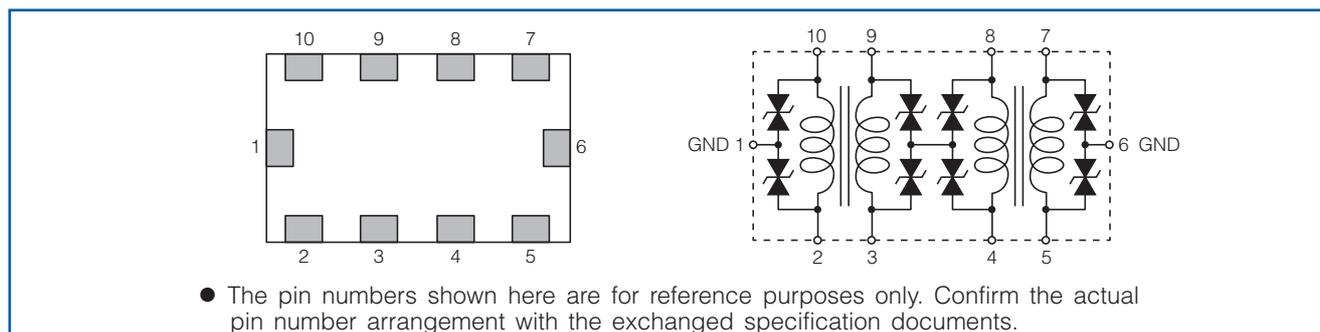
Construction



Dimensions in mm (not to scale)



Circuit Configuration (No Polarity)



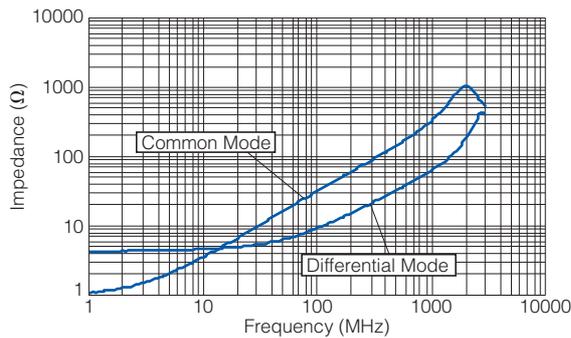
Ratings

Part Number	Impedance (Ω) at 100 MHz		Rated Voltage (V DC)	Rated Current (mA DC)	DC Resistance (Ω)
	Common Mode	Differential Mode			
EXC18CS350U	35 $\Omega \pm 30\%$	15 Ω max.	5	100	1.8 $\pm 30\%$
EXC18CS900U	90 $\Omega \pm 20\%$	20 Ω max.	5	100	3.0 $\pm 30\%$

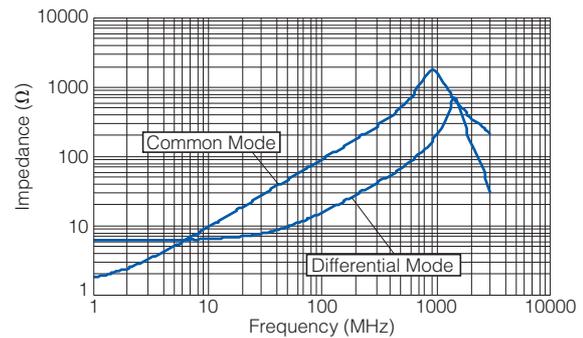
- Category Temperature Range $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$

Impedance Characteristics (Typical)

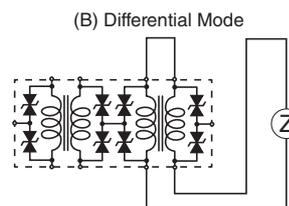
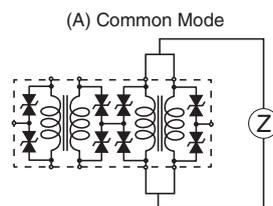
● EXC18CS350U



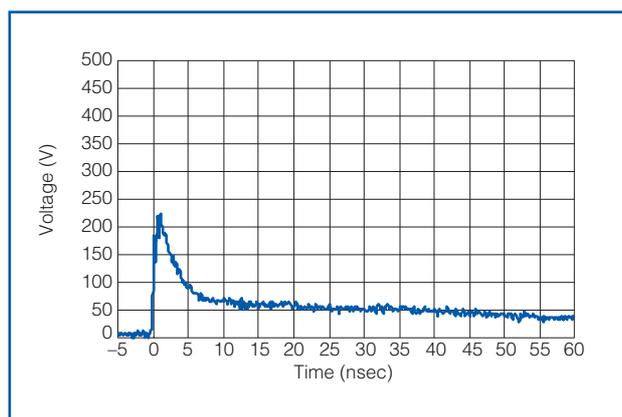
● EXC18CS900U



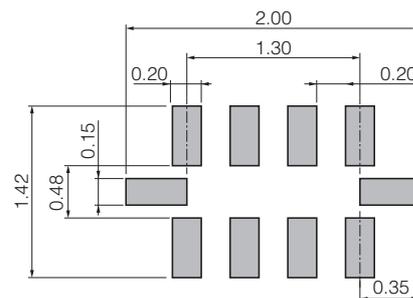
● Measurement Circuit



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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