Common mode Noise Filters with ESD Suppressor

Type: **EXC14CS**



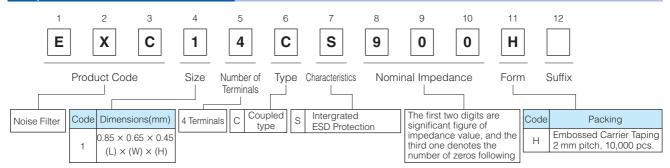
Features

- ◆ Provides EMI Filtering and ESD Potection (L 0.85 mm×W 0.65 mm×H 0.45 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

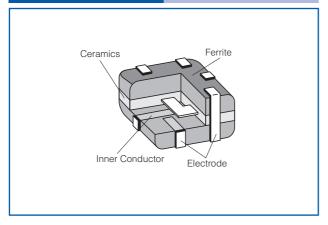
Recommended Applications

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

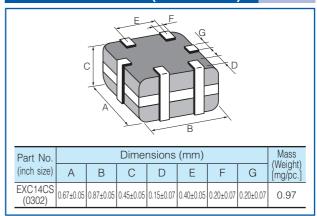
Explanation of Part Numbers



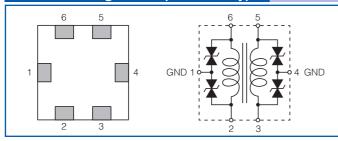
Construction



Dimensions in mm (not to scale)



Circuit Configuration(No Polarity)



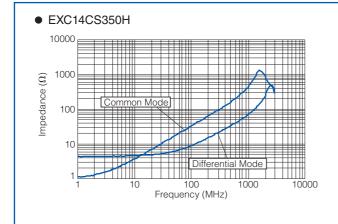
The pin numbers shown here are for reference purposes only. Confirm the actual pin number arrangement with the exchanged specification documents.

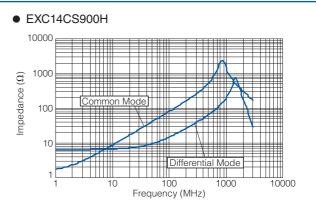
Ratings

Part Number	Impedance (Ω) at 100 MHz		Rated Voltage	Rated Current	DC Resistance
	Common Mode	Differential Mode	(V DC)	(mA DC)	(Ω)
EXC14CS350H	35 Ω±30 %	15 Ω max.	5	100	2.0±30 %
EXC14CS900H	90 Ω±20 %	20 Ω max.	5	100	3.3±30 %

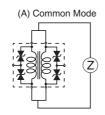
● Category Temperature Range -40 °C to +85 °C

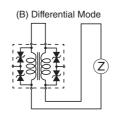
Impedance Characteristics (Typical)



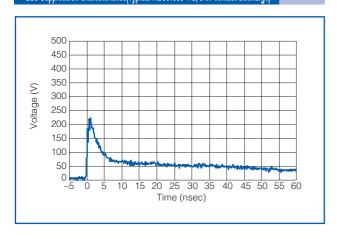


Measurement Circuit

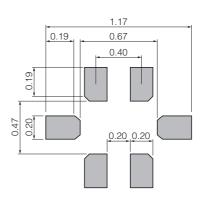




ESD Suppression Characteristics(Typical: IEC61000-4-2, 8 kV contact discharge)



Recommended Land Pattern Design in mm (not to scale)



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

Panasonic Common mode Noise Filters/Common mode Noise Filters with ESD Suppressor/2 mode Noise Filters

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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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