Common mode Noise Filters with ESD Suppressor

Type: EXC14CS

Features
- Provides EMI Filtering and ESD Protection (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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>X</td>
<td>C</td>
<td>1</td>
<td>4</td>
<td>C</td>
<td>S</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>U</td>
<td></td>
</tr>
</tbody>
</table>

- **Product Code**: E
- **Size**: X
- **Number of Terminals**: C
- **Type**: 1
- **Characteristics**: 4
- **Nominal Impedance**: C
- **Integrated ESD Protection**: S
- **The first two digits are significant figure of impedance value, and the third one denotes the number of zeros following**
- **Form**: 9
- **Suffix**: 0
- **Code**: U
- **Packing**: Embossed Carrier Taping

Dimensions in mm (not to scale)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dimensions (mm)</th>
<th>Mass (Weight) [mg/pc.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXC14CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>0.67±0.05</td>
<td>0.87±0.05</td>
</tr>
</tbody>
</table>

Construction

Ceramics

Ferrite

Inner Conductor

Electrode

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.

Downloaded from Arrow.com.
## Ratings

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Impedance (Ω) at 100 MHz</th>
<th>Rated Voltage (V DC)</th>
<th>Rated Current (mA DC)</th>
<th>DC Resistance (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXC14CS350U</td>
<td>Common Mode: 35 Ω±30 %, Differential Mode: 15 Ω max.</td>
<td>5</td>
<td>100</td>
<td>2.0±30 %</td>
</tr>
<tr>
<td>EXC14CS900U</td>
<td>Common Mode: 90 Ω±20 %, Differential Mode: 20 Ω max.</td>
<td>5</td>
<td>100</td>
<td>3.3±30 %</td>
</tr>
</tbody>
</table>

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

## Impedance Characteristics (Typical)

- **EXC14CS350U**

- **EXC14CS900U**

## Measurement Circuit

- **Common Mode**
- **Differential Mode**

## 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