ES10 Series
Single Wire LED Lighting Connector

Connector Training Module
Application Examples

• LED lighting
• LCD television backlight
• Tablet PC
• Various devices w/ minimal mounting space
ES10 Series Overview

JAE’s ES10 series connector separates itself from other LED lighting connectors by requiring no soldering or crimping of the wire, which saves time and cost, and not having an insulator saves space and cost. The ES10 Series is a single wire, single contact connector, making insertion quick and easy. Its compact size makes this connector the smallest in the industry and minimizes mounting space needed to allow for design flexibility.
Basic Dimensions

*All units in mm

5.1 ± 0.2

4.2 ± 0.2

2 ± 0.2

(1) (φ1.5)

(5) (1.7) (φ0.4)
ES10 Series Features

Space-Saving Connector

- Single pin and wire structure allows quick and easy insertion
- Compact size of 2.5mm width, 5.1mm length, and 2.0mm height
- No soldering or crimping of wires required
- No insulator minimizes mounting space and maximizes design flexibility
- Guiding feature ensures easy wire insertion
- Original spring contact structure improves contact reliability
- Available in embossed reel packaging for automated mounting
- RoHS compliant
# General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Positions</td>
<td>1</td>
</tr>
<tr>
<td>Dimensions (width x length x height)</td>
<td>2.5mm x 5.1mm x 2.0mm</td>
</tr>
<tr>
<td>Mating Direction</td>
<td>Horizontal Connection</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>30m Ω max</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 to +105°C</td>
</tr>
<tr>
<td>Current Rating</td>
<td>AC/DC 2A</td>
</tr>
<tr>
<td>Wire Gauge</td>
<td>26 AWG ~ 24 AWG</td>
</tr>
<tr>
<td>Cable Unmating Force</td>
<td>24 AWG: 5N (min.)</td>
</tr>
<tr>
<td></td>
<td>26 AWG: 4N (min.)</td>
</tr>
<tr>
<td>Conductor Diameter</td>
<td>0.4mm to 0.53mm</td>
</tr>
<tr>
<td>Insulator Diameter</td>
<td>2.0mm max.</td>
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</tbody>
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JAE's Single Wire LED Lighting Connector, ES10 Series

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## Materials and Finishes

<table>
<thead>
<tr>
<th>Component</th>
<th>Material/Finish</th>
</tr>
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<tbody>
<tr>
<td>Contact</td>
<td>Copper alloy / Sn plating</td>
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</tbody>
</table>

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Summary

• Compact size and low-profile design
• Quick and easy insertion
• Space-saving structure requires no insulator
• No soldering or crimping of wires required saves time
• Available in embossed reel packaging for automated mounting
• RoHS compliant