ES5 Series
Board-to-Cable Connector for LED Lighting

Connector Training Module
Application Examples

• LED Lighting
• LCD TV Backlighting
• Other compact devices
ES5 Series Overview

The ES5 series is a single position board to cable connector for power supply in various applications including LED lighting, LCD TV backlight, tablet PC, and other compact devices. No-insulator design realizes low profile 1.6mm height. The locking structure enables assembly workers to get good click feeling to prevent incomplete mating. ES5 series also has misalignment prevention structure on receptacle side. UL/cUL certified.

Cable Side: Plug  SMT Side: Receptacle
ES5 Mechanical Structure

Locking Structure

Mating

Extraction

Mismating prevention and guide structure

Automatic mounting

Vacuum area

2mm × 2.2mm

Key

Lock

Tool

Release of lock

JAE’s Board-to-Cable Connector for LED Lighting, ES5 Series

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## General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of contacts</td>
<td>1</td>
</tr>
<tr>
<td>Rated current</td>
<td>AC/DC 4A</td>
</tr>
<tr>
<td>Applicable wire</td>
<td>AWG#26 to #24 (stranded)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40 degC to +105 degC</td>
</tr>
<tr>
<td>Mated height</td>
<td>1.6mm above board</td>
</tr>
<tr>
<td>Mating durability</td>
<td>20 cycles</td>
</tr>
<tr>
<td>Contacts</td>
<td>Copper alloy / Tin plating</td>
</tr>
</tbody>
</table>

**Cable Side:**
- Plug

**SMT Side:**
- Receptacle

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Basic Dimensions

*All units in mm

PCB Footprint

JAE's Board-to-Cable Connector for LED Lighting, ES5 Series
### ES5 Series Part Numbers

<table>
<thead>
<tr>
<th>Part Number (cable side)</th>
<th>ES5P09K5FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number (PCB side)</td>
<td>ES5S001JFAR5500</td>
</tr>
<tr>
<td>Connector Specifications</td>
<td>JACS-10914</td>
</tr>
<tr>
<td>Crimp Hand Tool</td>
<td>CT150-4-ES5</td>
</tr>
<tr>
<td>Semi Auto Applicator</td>
<td>3502-ES5-2</td>
</tr>
<tr>
<td>Semi Auto Press</td>
<td>CP215-5B</td>
</tr>
</tbody>
</table>
Summary

• Single position board-to-cable connector
• Power supply applications include
  • LED Lighting
  • LCD TV backlight
  • Tablet PC
  • Other compact devices
• No-insulator design, low profile 1.6 mm height
• Locking structure enables positive feedback to prevent incomplete mating
• Misalignment prevention structure on receptacle
• UL/cUL certified