DZ02 Series
Mini I/O Interface Connector

Connector Training Module
JAE DZ02 Series
Mini I/O Interface Connector

Application Examples

• Servo Amplifiers
• Motion Controllers
• PLC (Programmable Logic Controller)
• Other industrial machinery applications
DZ02 Series Overview

JAE’s DZ02 series mini I/O connector has been developed for industrial equipment. It is a 0.635mm pitch compact connector with a superior lock structure resistant to vibration and is suitable for use under harsh environmental conditions. It can be used as an I/O connector for systems compatible with the product standard IEC/EN 61800-5-2 (Electrical Control Motor) of the international standard IEC 61508 for functional safety.
DZ02 Series Features

*Compact connector with a superior structure*

- 0.635mm pitch compact connector
- Superior lock structure resistant to vibration
- Suitable for use under harsh environmental conditions
- Structure prevents solder flux scattering by covering bottom surface of contact area with an outer shell
- Supports SMT mounting with excellent co-planarity
DZ02 Series Features: SMT Co-planarity

Reduction of Contact Points

<table>
<thead>
<tr>
<th>Parts</th>
<th>No. of Contact Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulator</td>
<td>None</td>
</tr>
<tr>
<td>Shell</td>
<td>2</td>
</tr>
<tr>
<td>Contact</td>
<td>8</td>
</tr>
</tbody>
</table>

- Lesser contact points are good for avoiding insufficient soldering

Press Contact Against Insulator

- Pressing the contacts against the insulator wall at a position close to SMT area stabilizes the contacts into position.
- Coplanarity 0.1mm MAX (including “during reflow”)
## General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Contacts</td>
<td>8 contacts</td>
</tr>
<tr>
<td>Current Rating</td>
<td>0.5A/ 1 contact</td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>30V</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>Receptacle: 40mΩ max.</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>500MΩ min. (Individual connector)</td>
</tr>
<tr>
<td>Dielectric Withstanding Voltage</td>
<td>AC250V r.m.s (Individual connector)</td>
</tr>
<tr>
<td>Mounting Method</td>
<td>SMT automatic mounting</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 Deg. C ~ +85 Deg. C</td>
</tr>
</tbody>
</table>
Basic Dimensions
*All units in mm

Receptacle

---

JAE’s Mini I/O Interface Connector, the DZ02 Series
# Materials and Finishes

<table>
<thead>
<tr>
<th>Component</th>
<th>Part</th>
<th>Material/Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptacle</td>
<td>Insulator</td>
<td>Synthetic Resin</td>
</tr>
<tr>
<td></td>
<td>Shell</td>
<td>Copper alloy / Sn plating</td>
</tr>
<tr>
<td></td>
<td>Contact</td>
<td>Copper alloy / Au plating (contact area)</td>
</tr>
</tbody>
</table>

![Diagram of a JAE’s Mini I/O Interface Connector, the DZ02 Series](image)
Ordering Information

Receptacle

Document Number (Content of Document)

<table>
<thead>
<tr>
<th>Specification</th>
<th>JACS-30337</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling Instruction</td>
<td>-</td>
</tr>
</tbody>
</table>

Series
Development No.
Figure
R: Receptacle
No. of Contacts
008: 8 pos.
Modification Code
1: Standard
Plating Specification
C: 0.5µ min. Au plating (contact area)
Au plating (terminal area)
Type
N: Right angle SMT with H/D
Summary

• An I/O connector developed for industrial equipment
• 0.635mm pitch compact connector
• Superior lock structure resistant to vibration
• Suitable for use under harsh environmental conditions
• Structure prevents solder flux from scattering with covered bottom
• Supports SMT mounting with excellent co-planarity
Click [here](http://www.jae.com) to contact your local JAE sales representative.