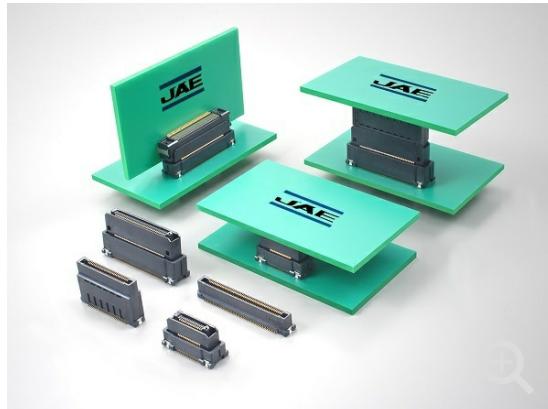


# MA01 Series (Automotive Grade, High-speed Transmission, Floating Board-to-board Connector)

## Automotive Grade, High-speed Transmission, Floating Board-to-board Connector



The MA01 Series is the next generation floating board-to-board connector. This product features a highly reliable two-point contact structure, achieving high-speed transmission exceeding 8Gbps. With an operation temperature range of -40 °C to 125 °C the connector is suitable for harsh temperature environments unique to the automotive industry.

[Catalog !\[\]\(c3d993ca47bfe2a953c700506ce31fa0\_img.jpg\)](#)[Specifications !\[\]\(d66ff64371a51729ac8c1cdaa685ba6f\_img.jpg\)](#)[Handling Instructions >](#)[Test Report !\[\]\(003082e50e3009141f59bd5df831749f\_img.jpg\)](#)[Product Information Modules >](#)[Applicable Tools >](#)[Product Videos >](#)[Product Samples >](#)[Stock Search >](#)[PDF Download !\[\]\(95b425611cbd2b8716a140cf67c81822\_img.jpg\)](#)

## Features

- Floating tolerance:  $\pm 0.5$  mm in both X & Y directions
- Stacking height tolerance between boards:  $\pm 0.5$  mm in Z-axis direction
- Two-point contact structure ensures high contact reliability
- Low insertion and removal forces achieved by roll surface contact structure
- Operating temperature range: -40°C to +125°C
- 8 Gbps+ high-speed transmission (10GBASE-KR and PCIe Gen3 equivalent)
- Excellent mating process with large guides ,supporting automatic assembly and mating (mating guide length:  $\pm 1.0$  mm)
- Supports automatic mounting
- Allows for multiple connectors to be used on a single board
- Keyed to prevent mis-mating

# Applications

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On board equipment (ADAS-ECU, Central gateway, etc.), FA equipment, semiconductor manufacturing equipment, office machines, communication equipment, measuring equipment, broadcasting equipment, and other various applications

## Documents

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### Links

- [What's New \(May 20, 2021\) | MA01 Series, Automotive Grade, 8Gbps High-speed Transmission, Two-point Contact Floating Board-to-board Connector](#)

## General Specifications

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<b>Number of Contacts</b>	30, 40, 60, 80, 90, 100, 120, 140 pos.
<b>Contact Pitch</b>	0.635 mm pitch
<b>Rated Current</b>	0.5 A
<b>Rated Voltage</b>	AC 50 Vr.m.s.
<b>Contact Resistance</b>	Initial: 50 milliohm max. After test: 100 milliohm max.
<b>Dielectric Withstanding Voltage</b>	AC 250 Vr.m.s., conduction for 1 minute
<b>Insulation Resistance</b>	100 megohm min.
<b>Stacking Height</b>	8, 10, 14, 16, 18, 20, 22, 24, 30 mm
<b>Floating Movable Amount</b>	X direction: +/-0.5 mm, Y direction: +/-0.5 mm

<b>Durability</b>	100 mating cycles
<b>Operating Temperature Range</b>	-40 deg. C to +125 deg. C (including conduction temperature rise)

### Notice

1. The values specified in this web site are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products.

For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this web site are designed for the uses recommended below.

We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

\*Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster evention equipment, etc.

\*We may separately give you our support with a quality assurance program that

you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

\*Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc