



USB3.0 High-speed Transmission Connector for Automotive

# **MX62 Series**

CONNECTOR MB-0298-1 2015/7/27

# **RoHS Compliant**

Right Angle Pin Connector Socket Connector









Along with the spread of USB 3.0 compatible devices in the consumer products market, recently, the users considering applications using USB 3.0 are increasing for automotive infotainment applications.

To meet these demands, the MX62 Series has been developed to comply with USB3.0 for automotive applications.

The MX62 Series is a connector compatible with USB3.0 transmission specifications, designed to satisfy 5Gbps high-speed; achieving both mechanical and environmental performances for requirements used for automotive application.

Also it adopts shielded wires exclusively developed for automotive applications.

#### Features

- 2.0mm side pitch, 2 row 10 contact type.
- High-speed impedance matching design, compatible with USB 3.0 transmission specification.
- Differential line compatible with 5Gbps equivalent: 2 pair, differential line compatible with 480Mbps equivalent: 1 pair
- Compatible not only with USB 3.0 but also with other high-speed transmissions.
- Adopts double metal shell shielding structure for EMI control.
- Robust design with consideration for automotive on-board use.
- In-line type is also available with consideration for cable wiring routing.
- Available as a completed harness to ensure transmission performance reliability.

#### **General Specifications**

- ■No. of Contacts: 10 pos.
- ■Operating Temperature: -40 Deg. C to +85 Deg. C
- ■Contact Resistance: 8mΩ max. (initial)
- Insulation Resistance: 100MΩ min. (when mated)
- Rated Current: 2.2A (power / GND line)
  Dielectric Withstanding Voltage: AC 1,000V (applied for 1 minute when mated)
  Applicable Board: 1.6 mm
  - ■Applicable Wire: Shielded Twist Pair Cable (Sold only as a harness product)

Materials and Finishes

## ■ Right Angle Pin Connector

Component	Material / Finish
Outer Housing	PPS-GF40
Inner Housing	LCP-GF35
Terminal	Brass / Contact area Au plating
	Connection area Sn plating
Inner Shell	Copper alloy / Sn plating
Outer Shell	Brass / Sn plating

Note) Please consult us concerning packaging.

## Socket Connector

Component	Material / Finish
Outer Housing, Retainer, Rear Cover	PBT
Inner Housing	LCP-GF35
Holder	9TNy-GF45
Terminal	Copper Alloy / Contact area Au plating
	Connection area Sn plating
Shell A	Copper alloy / Sn plating
Shell B	Brass / Sn plating
Sleeve	Brass / Sn plating

## ■ In-line Connector

Component	Material / Finish
Outer Housing, Retainer, Rear Cover	PBT
Inner Housing	LCP-GF35
Holder	9TNy-GF45
Terminal	Brass / Contact area Au plating
	Connection area Sn plating
Shell A	Copper alloy / Sn plating
Shell B	Brass / Sn plating
Sleeve	Brass / Sn plating

■ Right Angle Pin Connector (MX62010HQ1) Drawing No.: SJ113305



<u>Unit: mm</u>

Socket Connector (MX62010FQ1) SJ Drawing No.: SJ113309



Note) Socket Connector is to be sold as a harness product. It is not available as an individual connector.









#### Notice:

1. The values specified in this brochure 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 brochure 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:

(i) 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 prevention equipment, etc.

(ii) 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

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