

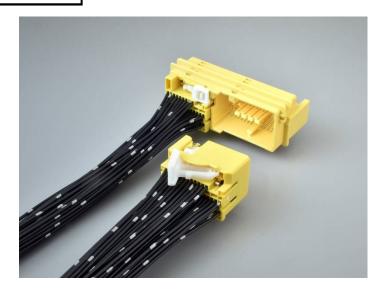
# **MX67A Series**

CONNECTOR MB-0344-1

High Density Automotive Connectors for Safety Restraint Systems

July 2019

### **RoHS Compliant**



The MX67A Series are compact, high density connectors designed for automotive Safety Restraint System (SRS) Electronic Control Units (ECU's), with up to 100 signal line contacts.

The MX67A provides an industry solution to the increasing number of SRS system devices implemented in today's standard vehicle. For added convenience, the structure is optimized for easy mounting with a built-in lever to reduce insertion and extraction forces. Press-fit type contacts make it easy to terminate pins without the need for soldering.

**Applicable Markets** 

Vehicle-mounted SRS-ECU's

#### **Features**

- 2 blocks offer high pin counts of 45 positions + 59 positions
- 100 signal lines available
- Incomplete mating detection pins located on each block
- Lever operating force of 66.6N maximum during mating
- Easy mounting with press-fit type contacts that do not require soldering
- The Connector securely fastens to the unit case flange area
- Applicable wire sizes are AVSS 0.3mm² to 0.5mm²
- Tin or gold plating options available for 0.64 terminals

## General Specifications

| Number of Contacts              | 100 positions (2 blocks) + 4 positions for correct mating detection |  |
|---------------------------------|---|--|
|                                 | -40°C to +120°C   |  |
| Operating Temperature Range     | (Including temperature rise due to                                  |  |
|                                 | operation)  |  |
| Rated Current                   | 3 A   |  |
| Lever Operation Insertion Force | 66.6N max.  |  |
|                                 | Compatible with tin and gold plating                                |  |
| Applicable Wire                 | contacts.   |  |
|                                 | AVSS 0.3mm <sup>2</sup> ~0.5mm <sup>2</sup>                         |  |

#### Materials and Finishes

## ■ Angle Pin Header

| Components                | Materials / Finishes                     |  |
|---------------------------|--|--|
| Pin Housing               | 30%GF PBT                                |  |
| Terminal                  | Phosphor bronze / Sn plating, Au plating |  |
| Mating Detection Terminal | Phosphor bronze / Sn plating             |  |

# ■ Socket Housing

| Components             | Materials / Finishes         |  |
|------------------------|------------------------------|--|
| Socket Housing         | PPE + PA66                   |  |
| Mating Lever           | POM - GF25                   |  |
| Retainer               | PBT - GF30                   |  |
| Short-circuit Terminal | Phosphor bronze / Au plating |  |
| Mating Detection Pin   | Copper alloy / Sn plating    |  |

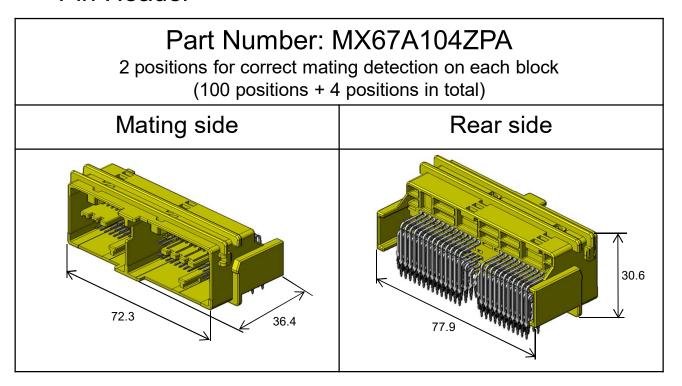
## ■ Socket Terminal

| Components      | Materials / Finishes                  |
|-----------------|---------------------------------------|
| Socket Terminal | Copper alloy / Sn plating, Au plating |

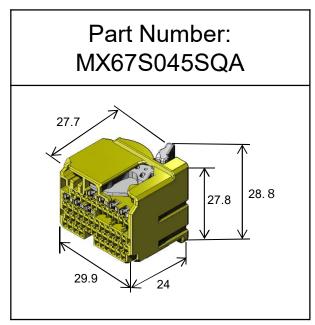
**Outer Dimensions** 

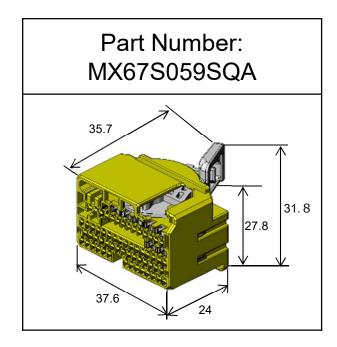
(Unit: mm)

### ■ Pin Header

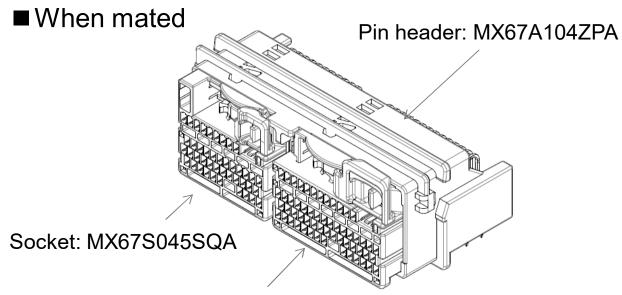


## ■ Socket Housing

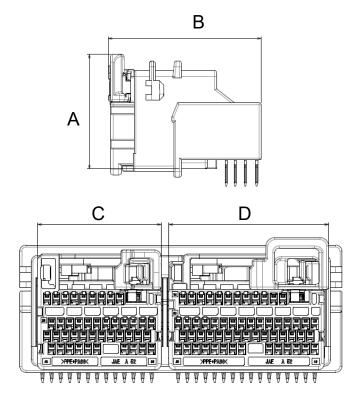




### Outer Dimensions



Socket: MX67S059SQA



(Unit: mm)

|                       | Dimension | Dimension | Dimension | Dimension |
|-----------------------|-----------|-----------|-----------|-----------|
|                       | A         | B         | C         | D         |
| Dimensions when mated | 30.2      | 40.2      | 29.9      | 38.7      |

#### Part Numbers and Drawing Numbers

| Connector Type   | Part Number | Drawing Number |
|--|-------------|----------------|
| Angle pin header (80 positions) (Product without pins for signal terminal) | MX67A080ZPA | SJ117804       |
| Angle pin header (104 positions)   | MX67A104ZPA | SJ117803       |
| Socket connector (45 positions)  | MX67S045SQA | SJ116023       |
| Socket connector (59 positions)  | MX67S059SQA | SJ116024       |
| Socket terminal (Sn 0.3mm²)  | M34S75C4F1  | SJ038527       |
| Socket terminal (Sn 0.5mm²)  | M34S75C4F2  | SJ038528       |
| Socket terminal (Au 0.3mm²)  | MX67S75C4P1 | SJ116025       |
| Socket terminal (Au 0.5mm²)  | MX67S75C4P2 | SJ116026       |

**Specifications: JACS-11121** 

Handling Instructions: JAHL-11121

#### **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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<sup>\*</sup> The specifications in this brochure are subject to change without notice. Please contact JAE for information.