

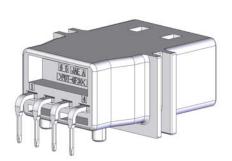


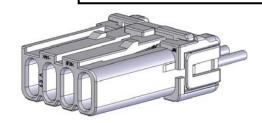
Compact Waterproof Automotive Connectors with Low Pin Counts CONNECTOR

MB-0185-1

**MX44 Series** June 2008

## **RoHS Compliant**





JAE has developed the MX44 Series compact waterproof connector for automotive applications.

It has been made more compact by adopting a structure that closely presses the rubber seals to mating surfaces. Due to the vibration absorption function of the rubber the connector has an improved vibration resistance. Moreover, each contacts is individually waterproof, making the connector suitable for use in harsh environments such as engine areas.

#### **Features**

- •3.5 mm side pitch, 1row, compact waterproof board to wire connector
- •Connector size reduced by waterproof structure with tight sealing rubber in the mating area.
- Vibration resistance improved by rubber absorbing unsteadiness of connector and contact.
- Adopts single contact waterproof structure which makes each contact separately waterproof.
- •Socket contact is a box type which is strong against external force, and contact area adopts a proven double spring which is resistant to twisting.
- •Contacts set in position by inserting retainer from wire side. Retainer protects connector lock portion.

#### **General Specifications**

•No. of Contacts: 2, 4, 6 pos

•Contact Resistance:

5m ohm max. (initial) 10m ohm max. (after test)

Rated Current: 3A

Insulation Resistance:

100M ohm min

•Waterproof: 98 kPa min. (initial)

•Vibration Proof: 30G (50 to 1000Hz)

each pole/ 3 Hours

Applicable Cable: AVSS 0.3 to 0.5sq

Operating Temperature:

-40 Deg. C to +125 Deg. C

#### Materials and Finishes

#### ■ Pin Connector

Component	Material/ Finish
Pin Housing	30%GF PBT
Pin Contact	Brass/ Sn plating
Header Seal Rubber	Silicone rubber

## ■ Socket Connector

Component	Material/ Finish
Socket Housing	30%GF PBT

### Retainer

Component	Material/ Finish
Retainer	30%GF PBT

## Socket Contact

Component	Material/ Finish
Socket Contact	High conductive material/ Sn plating

## ■ Wire Seal

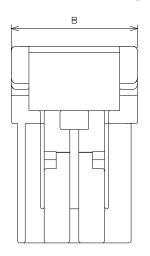
Component	Material/ Finish
Wire Seal	Silicone rubber

#### Press-Fit Tool

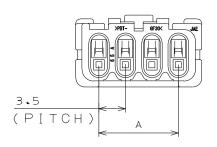
Part Number	Hand Crimp Tool	Semi-Automatic Applicator
M44S05K4F1	CT150-2-MX44	3502-MX44-2

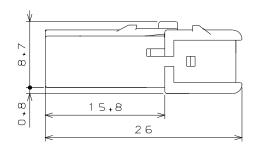
## Drawings

## ■ Socket Housing



No. of	Dart Number	C.I. Drowing	Dimensions	
Contacts	Part Number	SJ Drawing	Α	В
2	MX44002SF1	SJ107057	3.5	9.7
4	MX44004SF1	SJ107058	10.5	16.7
6	MX44006SF1	SJ107059	17.5	23.7

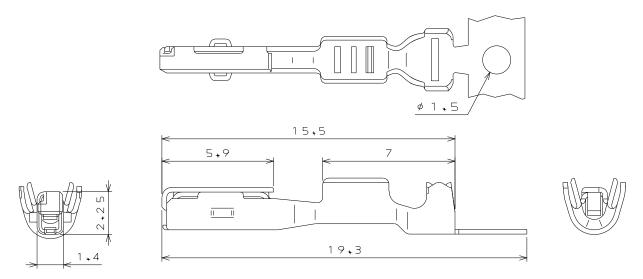




## Socket Contact

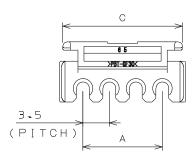
Part Number: M44S05K4F1

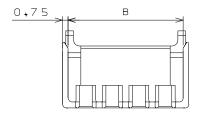
Drawing: SJ107063

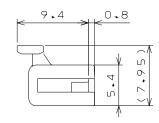


## ■ Retainer

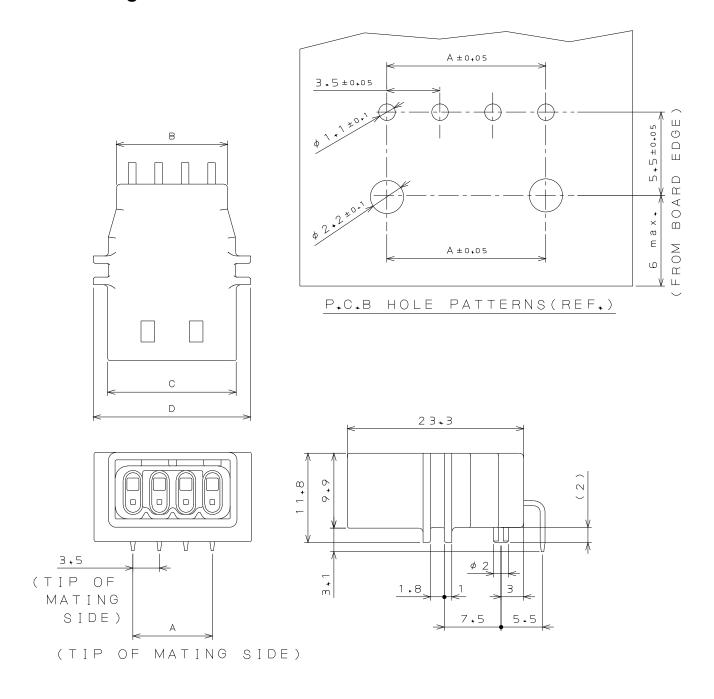
No. of Contacts	Part Number	SJ Drawing	Dimensions		6
Contacto			Α	В	С
2	MX44002XR1	SJ107060	3.5	8.2	8.8
4	MX44004XR1	SJ107061	10.5	15.2	15.8
6	MX44006XR1	SJ107062	17.5	22.2	22.8





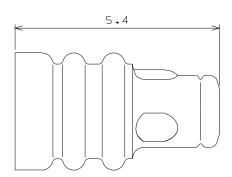


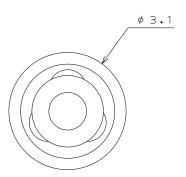
# Angle Pin Header



No. of Contacts	Part Number	SJ Drawing	Dimensions			
Contacto			Α	В	С	D
2	MX44002NF1	SJ107054	3.5	8.2	10.5	14.3
4	MX44004NF1	SJ107055	10.5	14.7	17.0	20.8
6	MX44006NF1	SJ107056	17.5	21.7	24.0	27.8

#### ■ Wire Seal





Part Number	SJ Drawing	Applicable Wire	Applicable Wire Insulation Outer Diameter
MX44000XP1	SJ107064	AVSS0.3sq	1.4 dia. to 1.5 dia.
MX44000XP2	SJ107065	AVSS0.5sq	1.6 dia. to 1.7 dia.

Others

Specifications

JACS-10389

Handling Instructions

JAHL-10389

### Japan Aviation Electronics Industry, Limited

Product Marketing Division

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946 Motice: Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices,

Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.

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

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