JAE

In-vehicle connector for ICT Devices
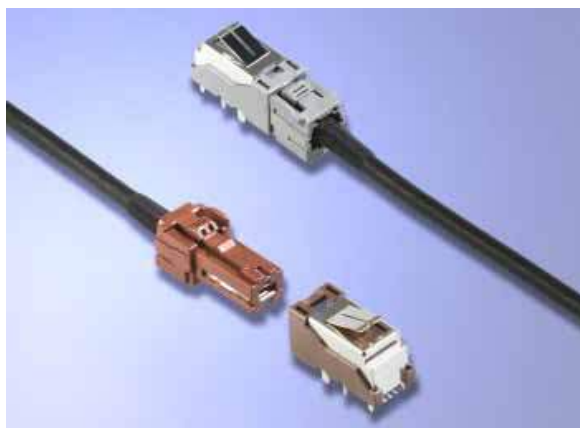# MX79A Series

CONNECTOR

MB-0366-1
Jan.2021

RoHS Compliant

The MX79A Series are miniaturized high-speed automotive infotainment connectors designed to support data transmission. Speeds of up to 1.5 Gbps can be supported when used in conjunction with the MX55J Series of automotive camera connectors. Four mating key variations are available to prevent incorrect mating when multiple connections are used for the same module.

Applications

Automotive Navigation System
Advanced Driver Assistance Systems
Back-up Cameras

In-Vehicle Entertainment
User Interface Modules
Autonomous Driving

Features

- Supports LVDS, Ethernet and USB protocols
- 4 contacts total; 2 positions for signal (1 pair) + 2 positions for power supply
- Available as a complete harness to ensure transmission performance reliability
- Mechanical locking structure prevents damage from twist force when mated
- 4 mating key variations prevents incorrect mating
- Offers high retention strength considering small size
- Compatible with Shield Twisted Quad Wire (STQ) cables
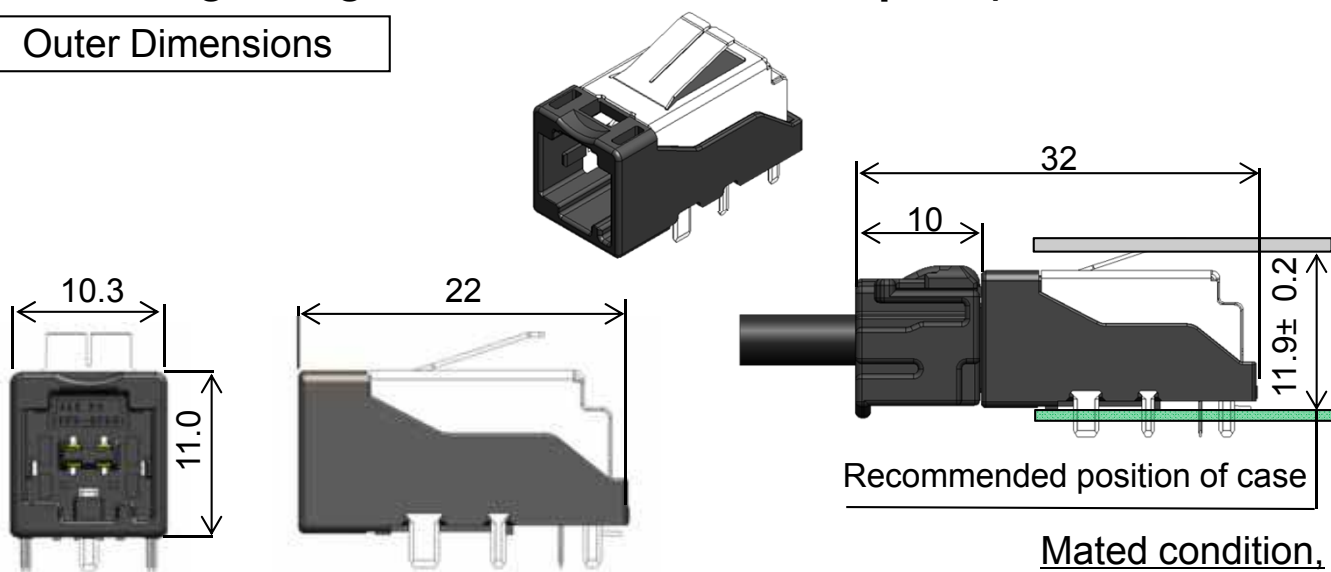- Realizes high retention strength while maintaining small size.

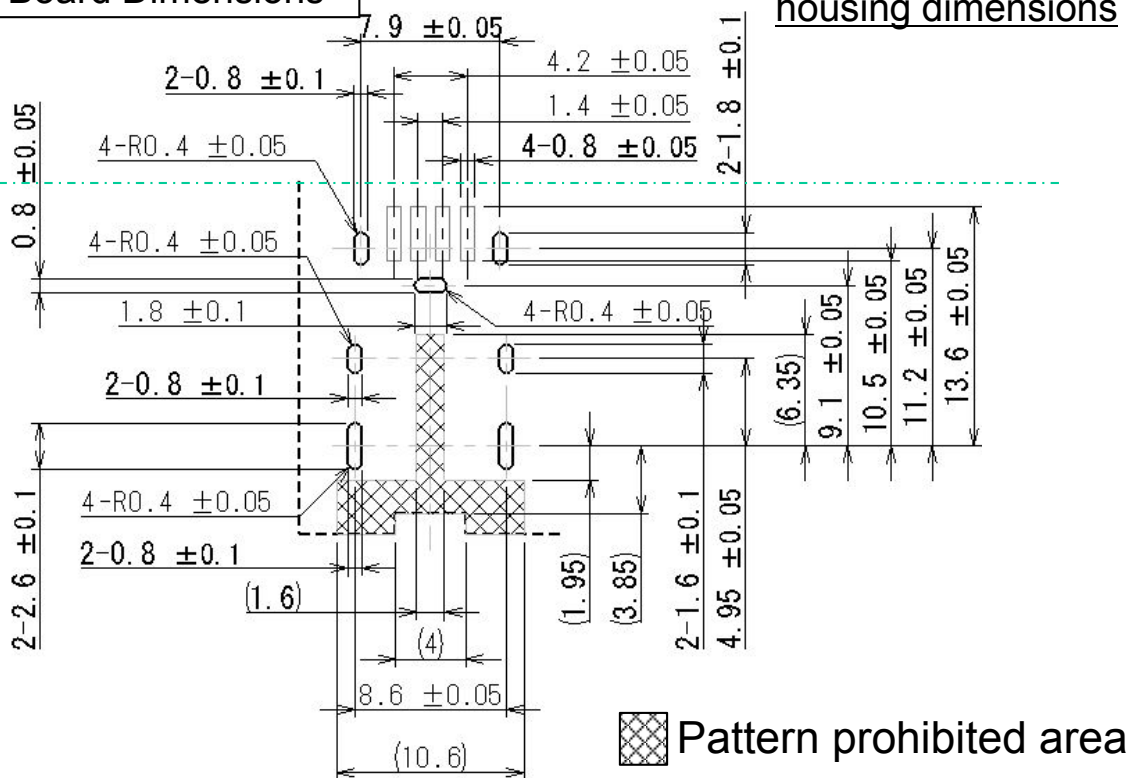(70% reduced mounting space compared to our MX49A)

General Specifications

Number of Contacts	4 positions (2 pos. for differential signal and 2 pos. for power supply)
Operating Temperature Range	-40℃ to ＋85℃
Applicable Cable	STQ (AWG#26, cable outer diameter Φ4mm
Applicable Board thickness	t1.2~1.6mm

MX79A（**Right Angle Pin Header, non-waterproof)**

Outer Dimensions

10.3

11.0

22

32

10

11.9± 0.2

Recommended position of case

Mated condition, recommended housing dimensions

Recommended Board Dimensions

7.9 ±0.05
2-0.8 ±0.1
4-R0.4 ±0.05
4-R0.4 ±0.05
1.8 ±0.1
2-0.8 ±0.1
4-R0.4 ±0.05
2-0.8 ±0.1
2-2.6 ±0.1
(1.6)
(4)
8.6 ±0.05
(10.6)
4.2 ±0.05
1.4 ±0.05
4-0.8 ±0.05
4-R0.4 ±0.05
2-1.8 ±0.1
0.8 ±0.05
(6.35)
9.1 ±0.05
10.5 ±0.05
11.2 ±0.05
13.6 ±0.05
(1.95)
(3.85)
2-1.6 ±0.1
4.95 ±0.05

Pattern prohibited area

Connector Part Number and Drawing Number

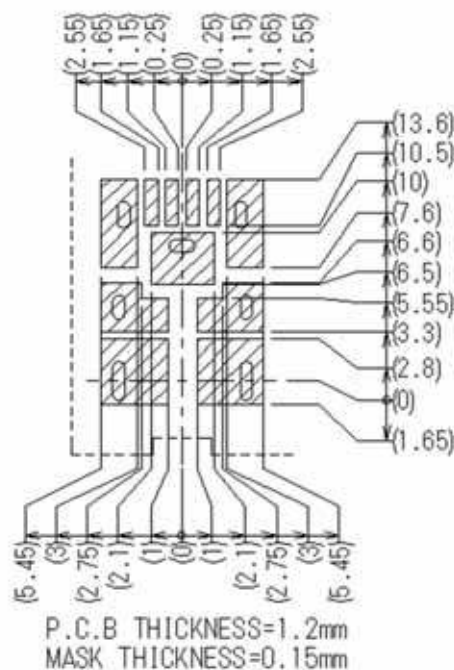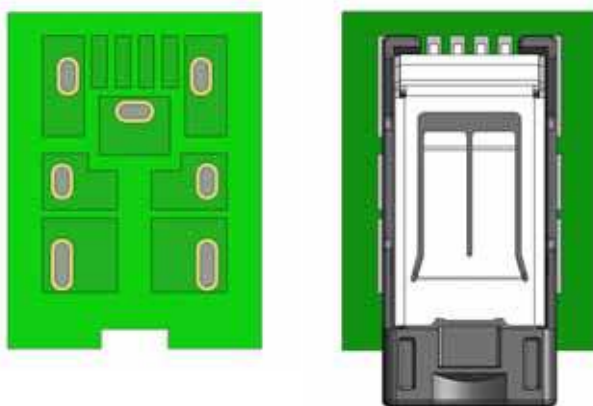| Emboss Reeled Product Part Number	Drawing Number	Individual Connector Part Number	Drawing Number	Key code - color
MX79A04HQ1R150	SJ117531	MX79A04HQ1	SJ117169	A - Black
MX79A04HQ2R150	SJ117532	MX79A04HQ2	SJ117170	B - Gray
MX79A04HQ3R150	SJ117533	MX79A04HQ3	SJ117171	C - Brown
MX79A04HQ4R150	SJ117534	MX79A04HQ4	SJ117172	D - Green

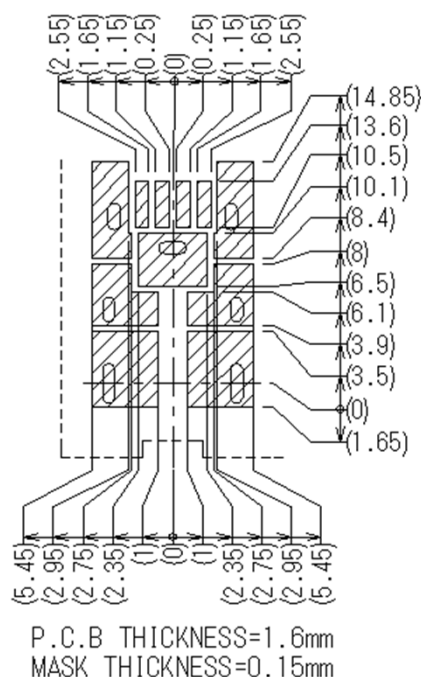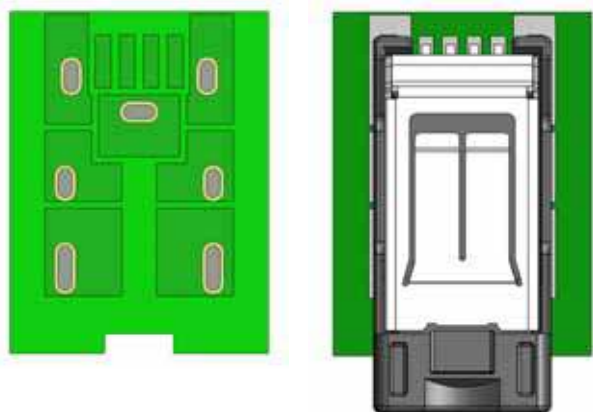# MX79A（Right Angle Pin Header, non-waterproof)

Parts Composition

No.	Components	Pieces	Material	Finish
1	Outer Housing	1 pc.	PPS GF40	-
2	Signal Terminal 1	2 pcs.	Brass	Contact area :Au / mating area: Sn
3	Signal Terminal 2	2 pcs.	Brass	Contact area :Au / mating area: Sn
4	GND Terminal	1 pc.	Copper alloy	Sn
5	Shield Shell	1 pc.	Copper alloy	Sn

Recommended metal mask for reference
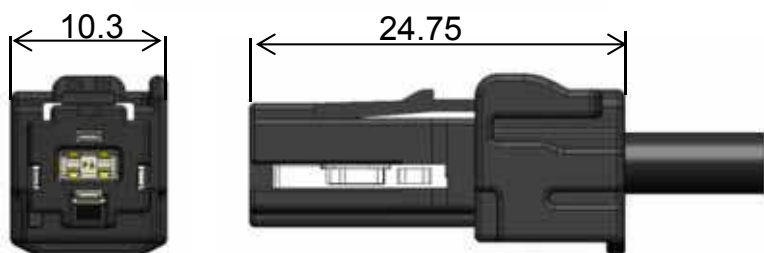
Board thickness 1.2mm

P.C.B THICKNESS=1.2mm
MASK THICKNESS=0.15mm

Board thickness 1.6mm

P.C.B THICKNESS=1.6mm
MASK THICKNESS=0.15mm

MX79A (Socket connector, non-waterproof)

Outer Dimensions

10.3

24.75

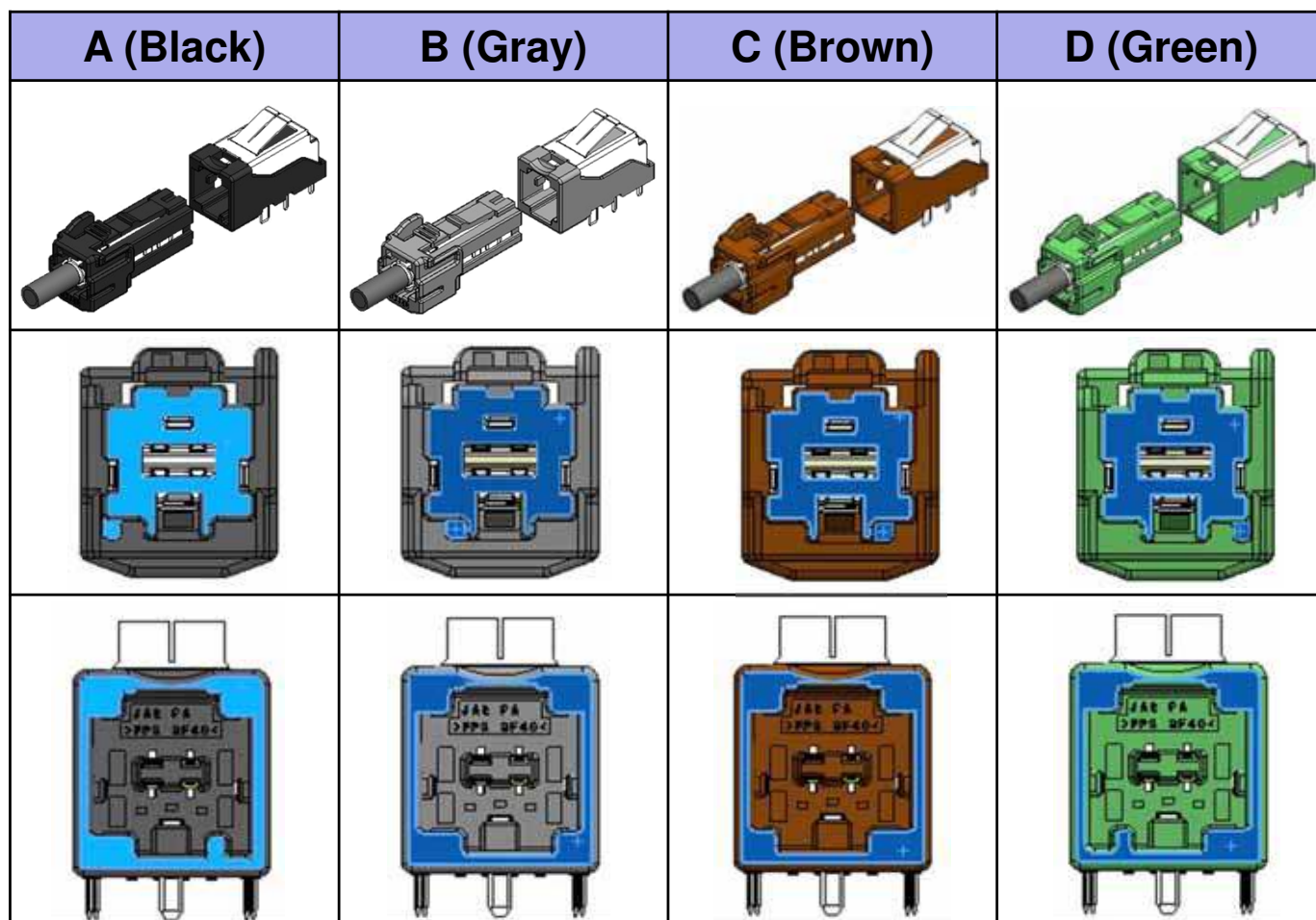| Part Number for Individual Connector |
|---|

Part Number	Drawing Number	Key code - color
MX79A04FQ1	SJ117165	A - Black
MX79A04FQ2	SJ117166	B - Gray
MX79A04FQ3	SJ117167	C - Brown
MX79A04FQ4	SJ117168	D - Green

Parts Composition

No.	Components	Pieces	Material	Finish
1	Outer Housing	1 pc.	PBT	-
2	Inner Housing	1 pc.	LCP GF35	-
3	Signal Terminal	4 pcs.	Copper alloy	Contact area: Au / mating area: Sn
4	GND Terminal	1 pc.	Copper alloy	Sn
5	Cover Shell	1 pc.	Brass	Sn
6	Retainer	1 pc.	PBT	-
7	Holder	2 pcs.	LCP GF35	-
8	Sleeve	1 pc.	Brass	Sn
9	Cable (STQ)	-	-	-

Mating Key Variations

A (Black)	B (Gray)	C (Brown)	D (Green)

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.

Japan Aviation Electronics Industry, Limited

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