

NEW

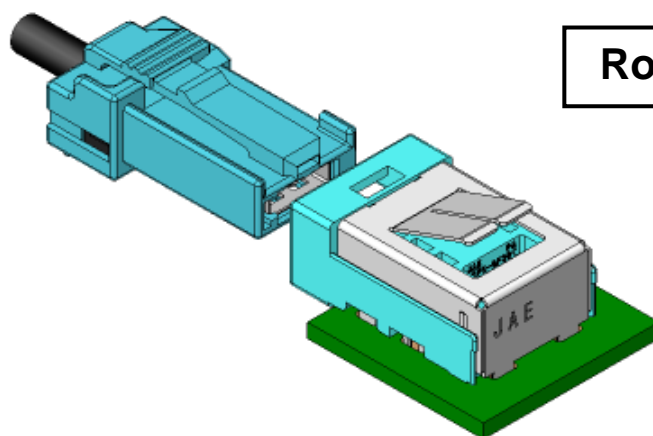

Automotive High-speed Differential Transmission

CONNECTOR

MX48 Series

MB-0249-1

July 2012

**RoHS Compliant**

Along with the electro-mechanical advances taking place in cars, the number of parts used is increasing and there is a demand for more compact electrical units.

At the same time, the use of displays is growing due to DVD watching in the back seat, safety checks using a rear monitor, and LCD type instrument panels.

And as the displays become larger and high-definition the signal used is shifting from analog to digital high-speed differential transmission, which can transmit large amounts of data more efficiently.

To meet these demands, JAE has developed the MX48 Series connector for automotive high-speed differential transmission.

The MX48 Series is minimized in depth, height, and width compared to our previous product and achieves a 48% reduction in volume.

It is also compatible with GVIF and LVDS transmission, which are ideal for the transmission of video signals in cars.

* "GVIF" is a trademark of Sony Corporation.

Features

- Achieves a 48% reduction in volume compared to our previous product.
- 2.0mm side pitch, 2-position signal lines.
- Compatible with GVIF and LVDS transmission.
- Impedance matching design, compatible with high-speed transmission.
- Mechanical lock and twist-resistant structure for mated connector.
- Dual-shield structure with ground terminals for EMI control.
- Available as a completed harness to ensure transmission performance reliability.

General Specifications

- No. of Contacts: 2 positions
- Dielectric Withstanding Voltage: AC1000 Vr.m.s. (applied voltage) per minute (mated condition)
- Operating Temperature: -40 Deg. C to +85 Deg. C
- Insulation Resistance: 100M Ω min. (mated condition)
- Applicable Board Thickness: 1.6mm
- Applicable Wire: Shielded twisted pair wire (for harness)
- Connector Insertion Force: 70N max.

Materials and Finishes

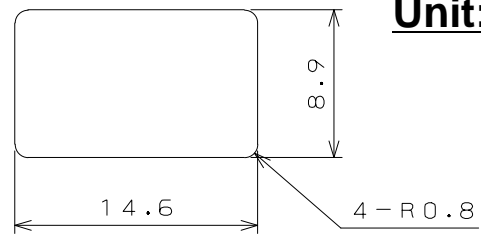
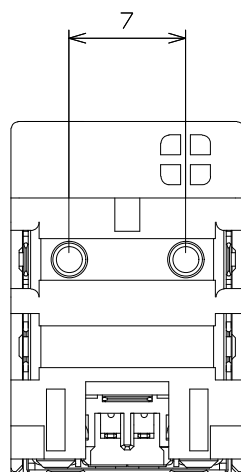
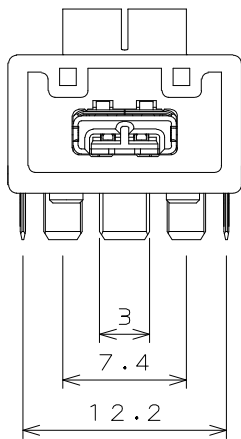
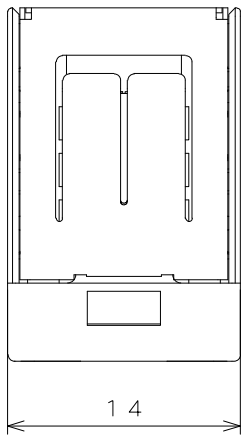
■ Angle Pin Connector

Component	Material / Finish
Signal Terminal	Copper Alloy / Contact area: Au plating over Ni Board termination area: Sn plating
External Housing	SPS-GF30
Internal Housing	LCP-GF35
Ground Terminal Shield Shell	Copper Alloy / Sn Plating

■ Socket Connector

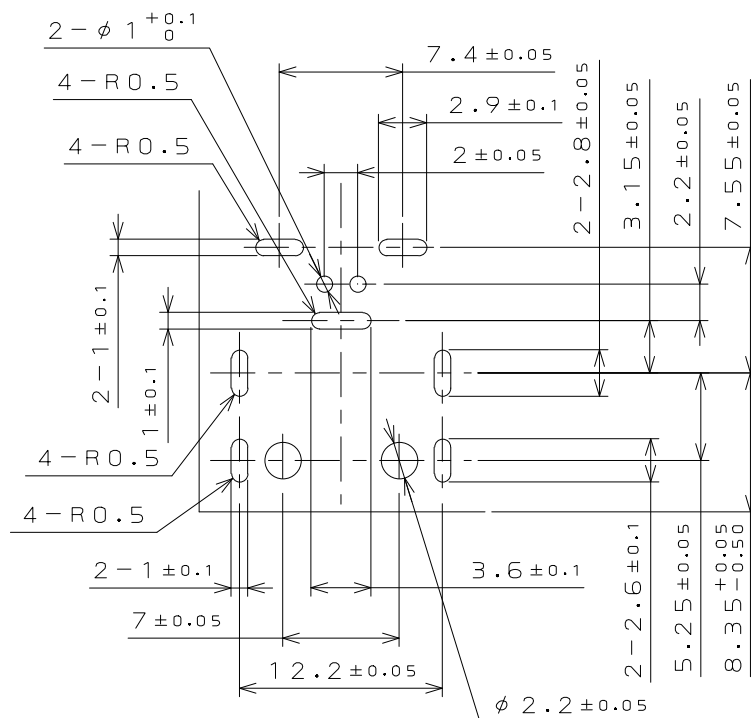
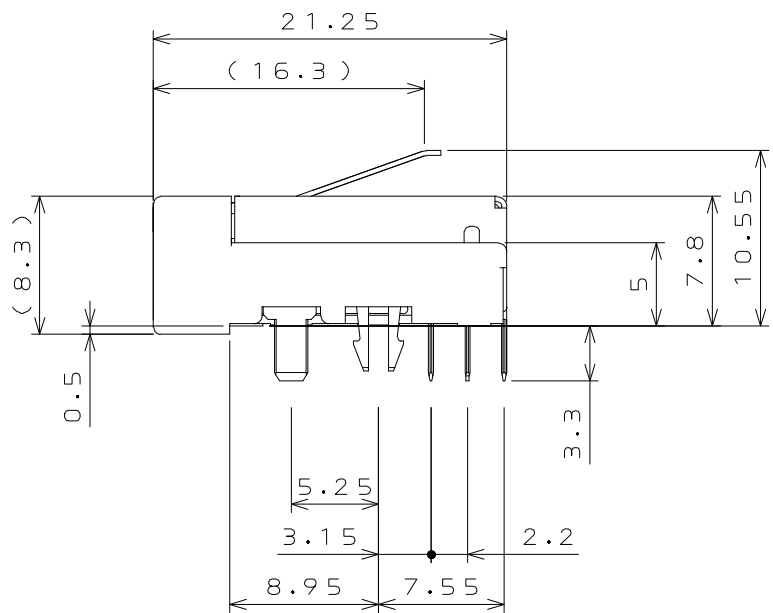
Component	Material / Finish
Signal Terminal	Copper Alloy / Contact area: Au plating over Ni Board termination area: Sn plating
External Housing Retainer	PBT
Internal Housing Holder	LCP-GF35
Ground Terminal	Copper Alloy / Sn Plating
Cover Shell Sleeve	Brass / Sn Plating

Angle Pin Connector (MX48002NQ1) Drawing No.: SJ110279



Unit: mm

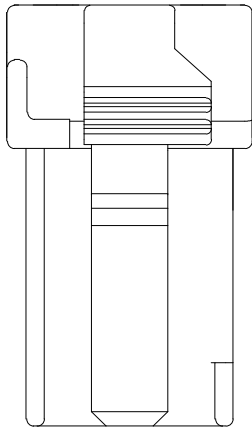
PANEL CUT OUT DIMENSION (REF.)



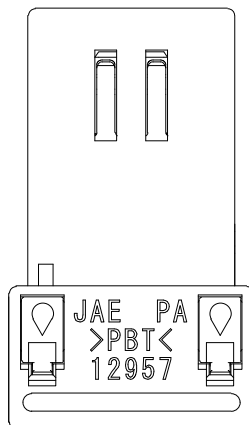
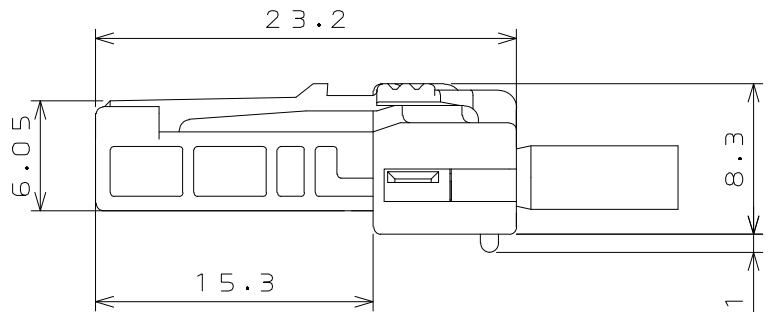
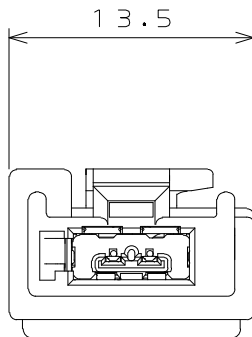
APPLICABLE P.C.B. DIMENSION (REF.)

■ Socket Connector (for reference)

Unit: mm



Note:
Socket connector is a harness product.
It is not sold as an individual connector.



Other

Specifications

JACS-10666

Notice: Products shown in this brochure 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.

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

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.