

Board-to-Cable Connector for High-speed Transmission

CONNECTOR

# HD Series Connector

MB-0247-2

June 2020

**RoHS Compliant**

JAE has developed the HD Series of connectors (HD1: 40 pos. HD2: 30 pos.) for notebook PC LCD interface applications. The HD Series connectors are compatible with LVDS transmission and LED backlight as standardized in the VESA® 16:9 Wide Notebook Panel Standard, and are licensed products for the Dai-ichi Seiko Co., Ltd. (I-PEX) CABLINE®-VS.

## Applicable Markets

Ideal for usage such as LCD interface for notebook PCs

## Features

- Products licensed by Dai-ichi Seiko Co., Ltd. (I-PEX)
- Fully compatible with the Dai-ichi Seiko., Ltd. (I-PEX) CABLINE®-VS
- Compatible with LVDS transmission
- HD1: 40 position (receptacle and plug); HD2: 30 position (receptacle)
- Pb-free
- Halogen-free

Note: CABLINE-VS is a registered trademark of Dai-ichi Seiko Co., Ltd. (I-PEX)

LICENCED BY DAI-ICHI SEIKO CO.,LTD.(I-PEX)

General Specifications
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Number of Contacts	HD1: 40 position HD2: 30 position
Pitch	0.5mm
Applicable Cable	Discrete cable: AWG#32 ~ AWG#36 Micro-coaxial cable: AWG#36 ~ AWG#44
Rated Current	AWG#32: 1.0A per contact AC/DC AWG#34: 1.0A per contact AC/DC AWG#36: 0.8A per contact AC/DC AWG#40: 0.3A per contact AC/DC AWG#42: 0.24A per contact AC/DC AWG#44: 0.1A per contact AC/DC
Rated Voltage	AC,DC each 100V per contact
Contact Resistance Values in the [ ] (square brackets) include the conductor resistance of 100mm cable.	AWG#32: 140mΩ max. [60mΩ max.] AWG#34: 180mΩ max. [100mΩ max.] AWG#36: 275mΩ max. [160mΩ ~ 195mΩ max.] AWG#40: 600mΩ max. [485mΩ ~ 520mΩ max.] AWG#42: 700mΩ max. [585mΩ ~ 620mΩ max.] AWG#44: 1080mΩ max. [1000mΩ max.]
Dielectric Withstanding Voltage	AC250V r.m.s. per minute
Insulation Resistance	1000MΩ min.
Operating Temperature	-40 ~ +85

Product line-up
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Sold only as reeled product.

Type		Part Number	Drawing Number	Specification	
HD1	Board Side Connector	Individual Product	HD1S040HA1	SJ110381	JACS-10696
		Reeled Product	HD1S040HA1R6000	SJ110382	
	Board Side Connector (with differences in plating thickness)	Individual Product	HD1S040HA3	SJ116226	JACS-10696-1
		Reeled Product	HD1S040HA3R6000	SJ116227	
	Plug Side Connector	Individual Product	HD1P040MA1	SJ111088	JACS-10696
Reeled Product		HD1P040MA1R6000	SJ111089		
Cover Shell for Plug	Reeled Product	HD1P040-CSH2-10000	SJ111533		
HD2	Board Side Connector	Individual Product	HD2S030HA1	SJ110547	JACS-10696
		Reeled Product	HD2S030HA1R6000	SJ110548	
	Board Side Connector (with differences in plating thickness)	Individual Product	HD2S030HA3	SJ114291	JACS-10696-1
		Reeled Product	HD2S030HA3R6000	SJ114292	

Materials and Finishes
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## (1) Bard Side Connector

Part Number	HD1S040HA1 / HD2S030HA1	HD1S040HA3 / HD2S030HA3
Contact	Copper alloy / Au plating over Ni (contact area)	
Insulator	Heat resistant plastic	
Shell	Copper alloy / Au plating over Ni (Au plating 0.03um min.)	Copper alloy / Au plating over Ni (Au plating 0.02um min.)

## (2) Plug Side Connector

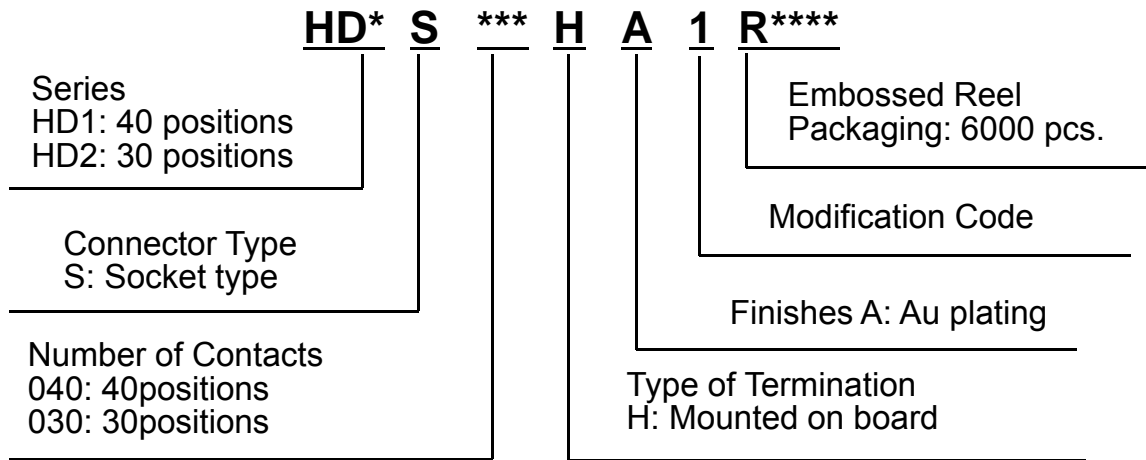
Part Number	HD1P040MA1
Contact	Copper alloy / Au plating over Ni (contact area)
Insulator	Heat resistant plastic
Base Shell	Copper alloy / Au plating over Ni

## (3) Cover Shell for Plug

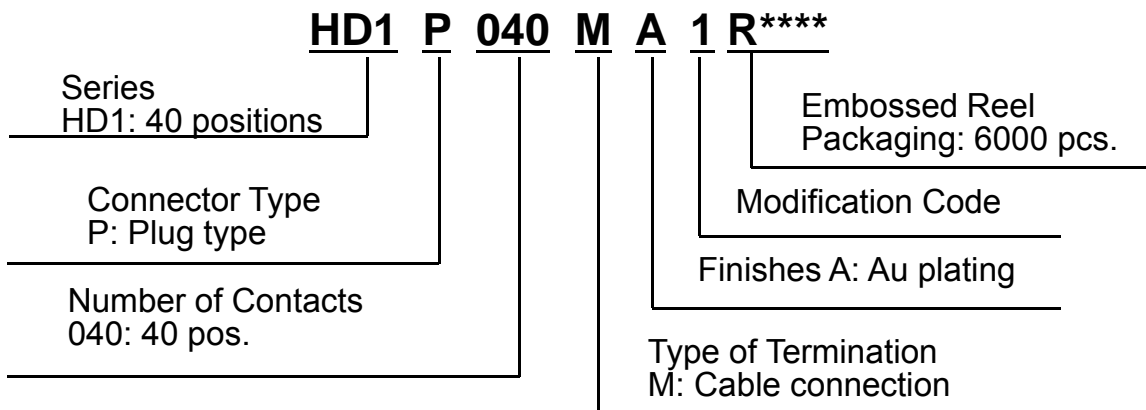
Part Number	HD1P040-CSH2-10000
Cover Shell	Copper alloy / Au plating over Ni

Ordering Information

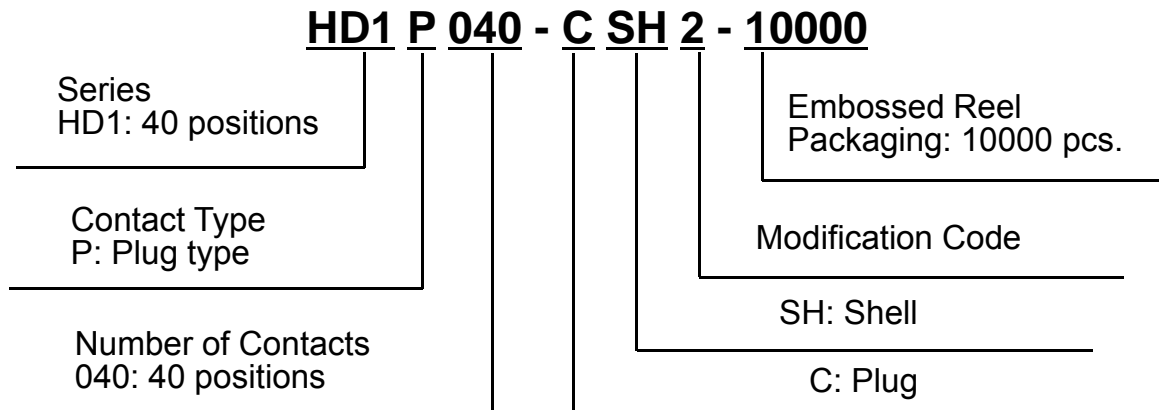
(1) Bard Side Connector



(2) Plug Side Connector



(3) Cover Shell for Plug

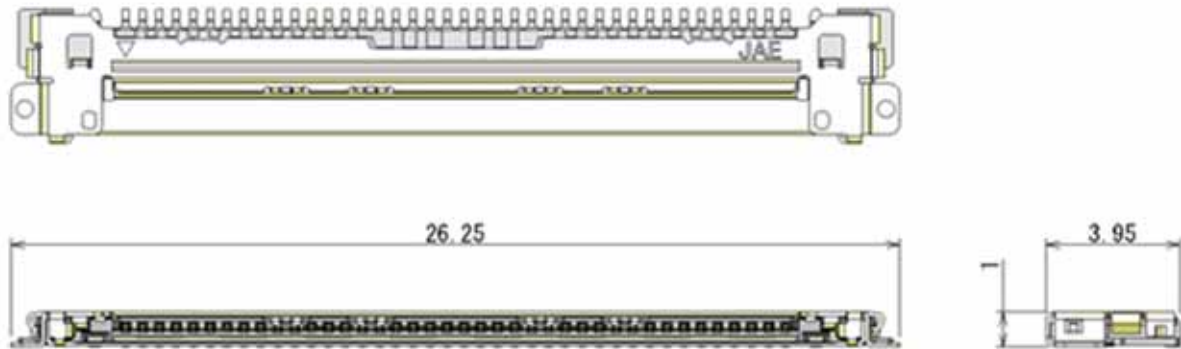


Outer Dimensions

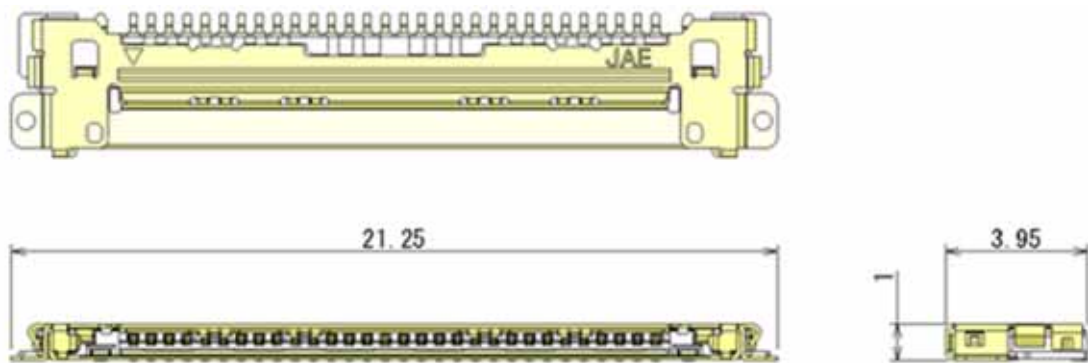
Unit: mm

(1) Board Side Connector

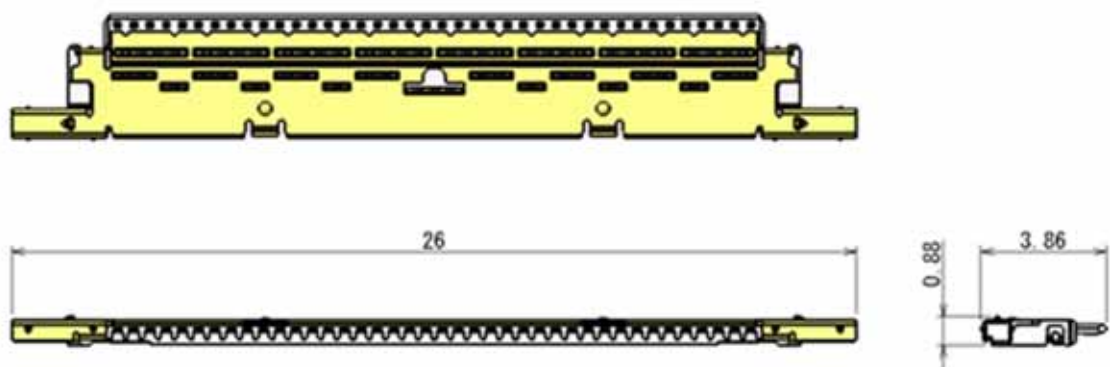
HD1S040HA1 / HD1S040HA3



HD2S030HA1 / HD2S030HA3



(2) Plug Side Connector: HD1P040MA1



## Outer Dimensions

Unit: mm

### (3) Cover Shell for Plug: HD1P040-CSH2-10000



#### **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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