



High-speed Differential Transmission Compatible  
Board-to-Cable Connector

CONNECTOR

MB-0272-1

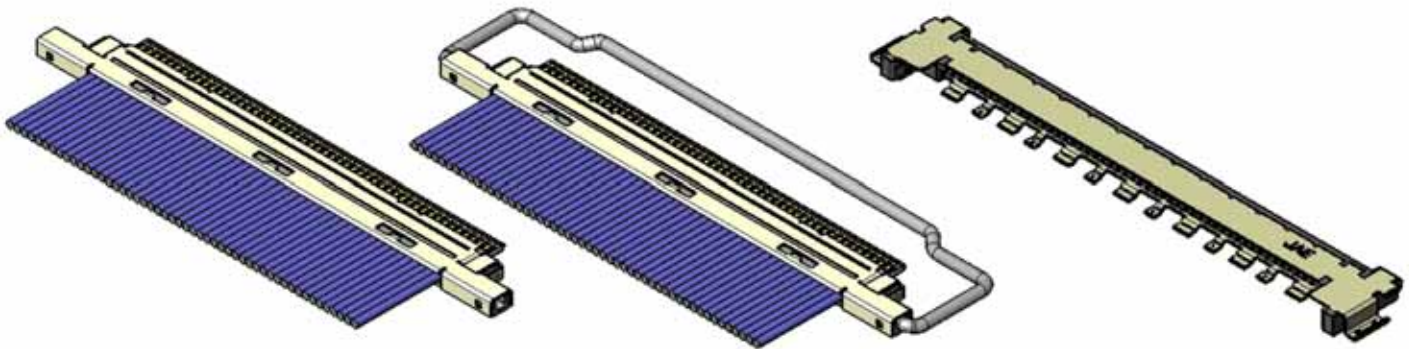
November 2013

# HJ1 Series

**RoHS Compliant**

Plug

Receptacle



Pull bar without lock

Pull bar with lock

The HJ1 Series board-to-cable horizontal connector compatible with eDP ver.1.4(5.4Gbps) high-speed transmission has been developed as a LCD interface for next generation notebook PCs and tablet PCs.

## Features

- 0.4mm pitch, 0.9mm mating height (maximum 1.0mm) narrow pitch, low-profile board-to-cable connector.
- Discrete cable is compatible with 34AWG (rated current 1A per position).
- Compatible with eDP1.4 (5.4 Gbps) high-speed transmission.
- High shielding is realized with multiple grounding points.
- Can use both coax and discrete wires together.
- Pb-free and Halogen-free.

## Development Status

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>■ No. of Contacts: 50 positions</li> <li>■ Pitch: 0.4mm</li> <li>■ Applicable Wire:               <ul style="list-style-type: none"> <li>34AWG to 36AWG (discrete wire)</li> <li>36AWG to 44AWG (fine wire coaxial)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>■ Rated Current:               <ul style="list-style-type: none"> <li>AC, DC each 1A per terminal (34AWG)</li> </ul> </li> <li>■ Rated Voltage:               <ul style="list-style-type: none"> <li>AC, DC each 100V per terminal</li> </ul> </li> <li>■ Insulation Resistance:               <ul style="list-style-type: none"> <li>1000M ohms min.</li> </ul> </li> <li>■ Dielectric Withstanding Voltage:               <ul style="list-style-type: none"> <li>AC250Vr.m.s. for 1 minute</li> </ul> </li> <li>■ Contact Resistance: 70m ohms max.</li> <li>■ Operating Temperature:               <ul style="list-style-type: none"> <li>-40 Deg. C + 85 Deg. C</li> </ul> </li> </ul> |
|---|---|

Materials and Finishes
------------------------

## Board Side Connector HJ1S050HA1

Component	Material and Finish
Contact	Copper Alloy / Contact area: Au plating over Ni
Insulator	Heat-resistant Plastic / None
Shell	Copper Alloy / Au plating over Ni

## Plug Side Connector HJ1P050MA1

Component	Material and Finish
Contact	Copper Alloy / Au plating over Ni
Insulator	Heat-resistant Plastic / None
Base Shell	Copper Alloy / Au plating over Ni

## Cover Shell for Plug HJ1P050-CSH1-10000

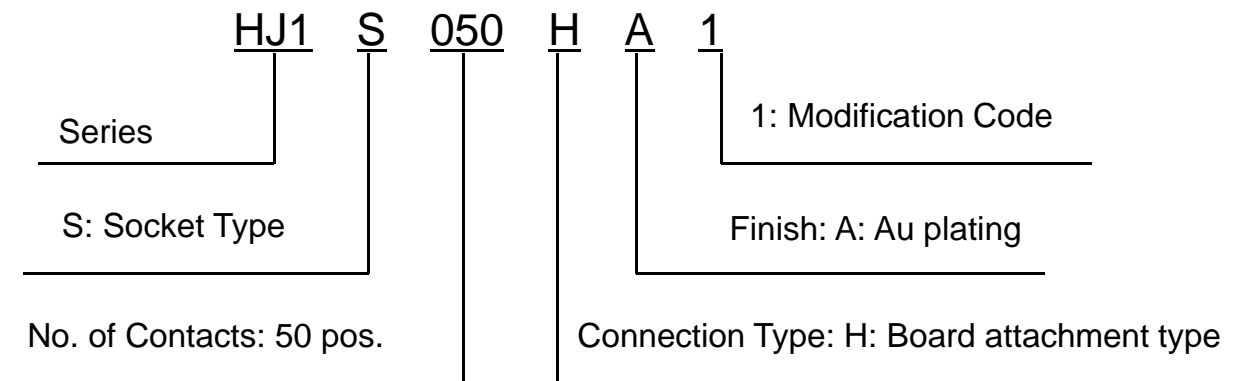
Component	Material and Finish
Cover Shell	Copper Alloy / Au plating over Ni

## Pull Bar HJ1P050-PB1

Component	Material and Finish
Pull Bar	Stainless Steel / None

Ordering Information

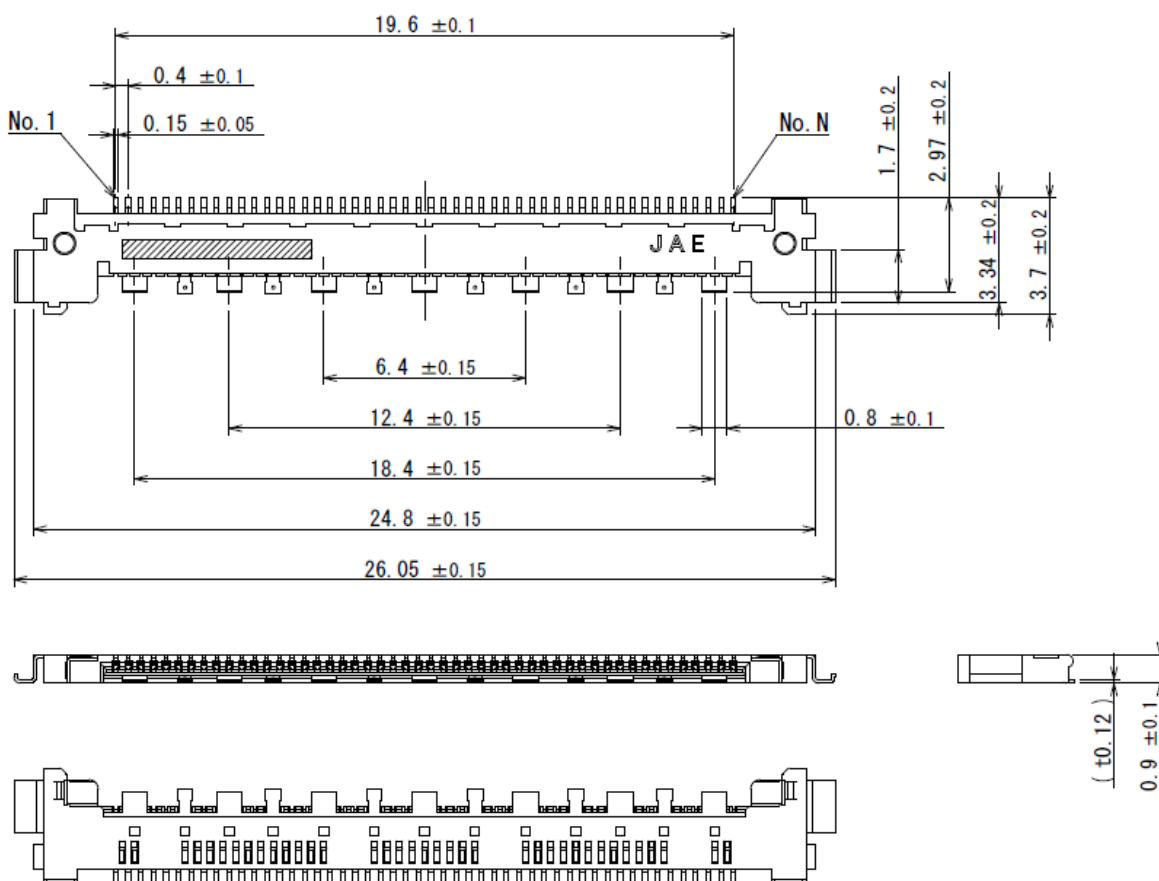
# Board Side Connector (SJ112817)



Product Drawing

## HJ1S050HA1(SJ112817)

Unit: mm



Ordering Information

# Board Side Connector Embossed (SJ112818)

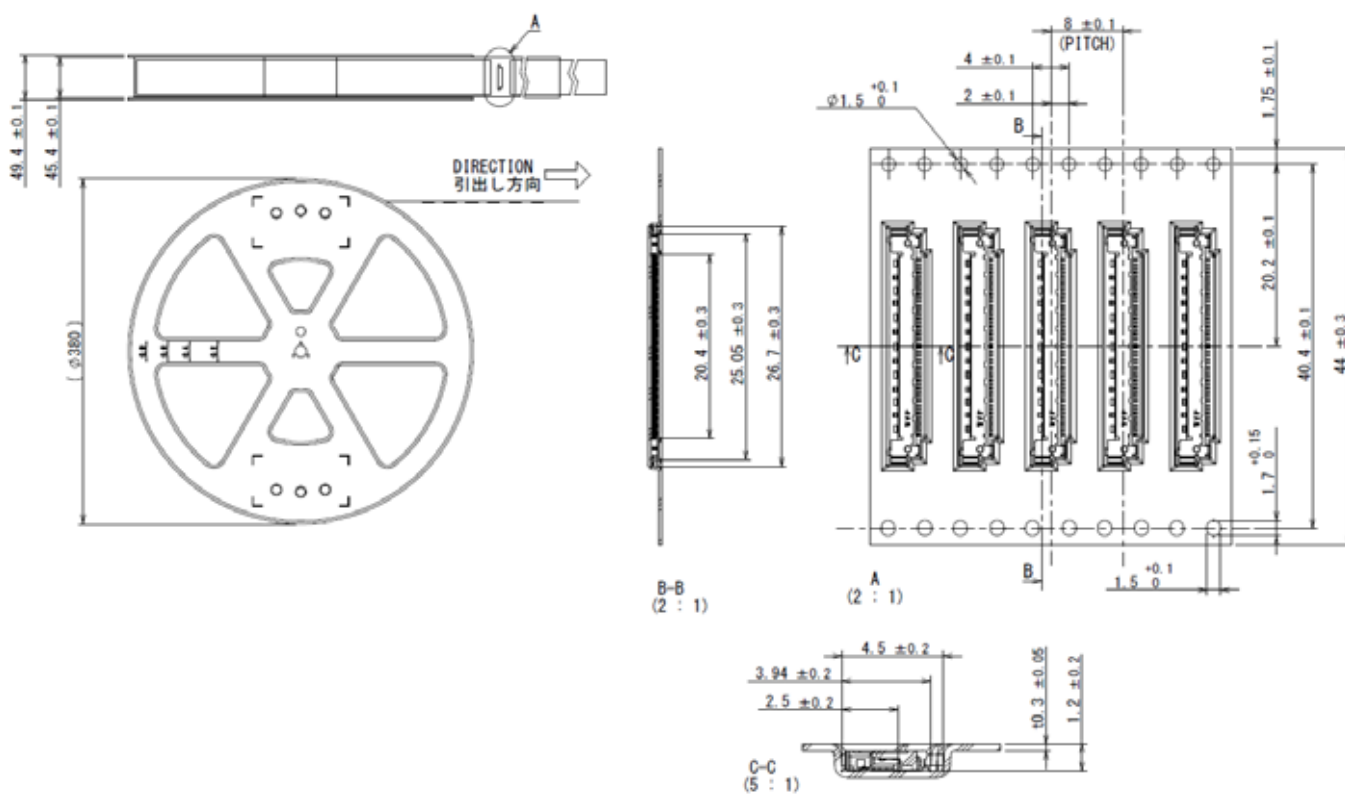
HJ1 S 050 H A 1 R6000

R: Embossed Reel: 6000pcs.

Product Drawing

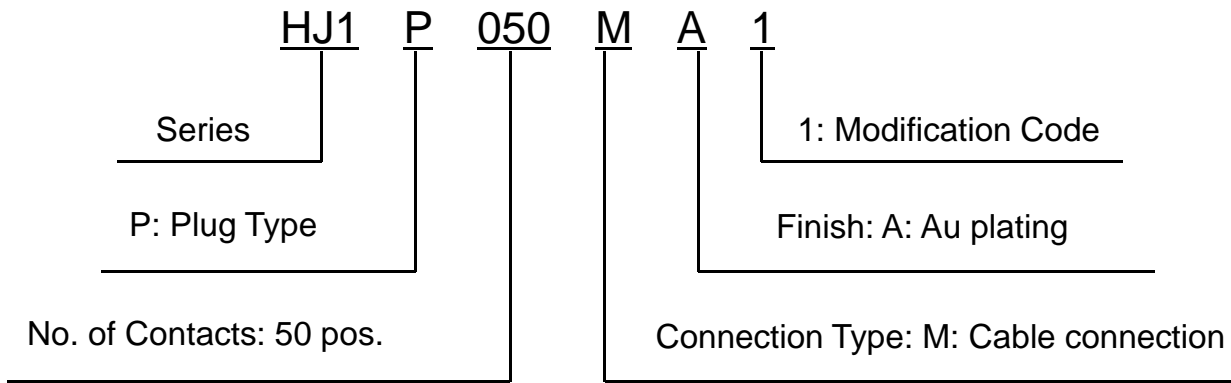
HJ1S050HA1R6000(SJ112818)

Unit: mm



Ordering Information

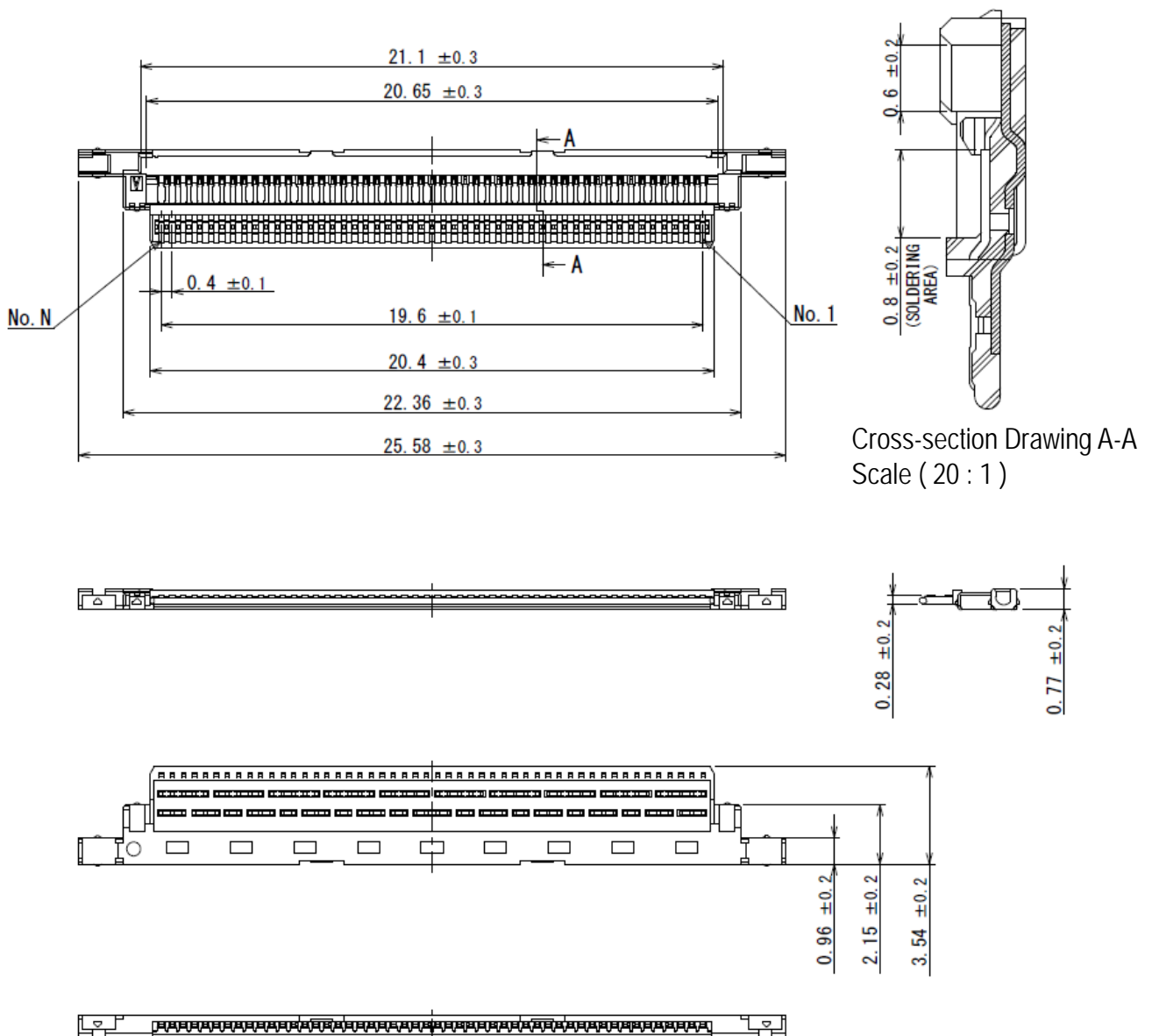
# Plug Connector (SJ112814)



Product Drawing

## HJ1P050MA1(SJ112814)

Unit: mm



Ordering Information

Plug Connector Embossed (SJ112815)

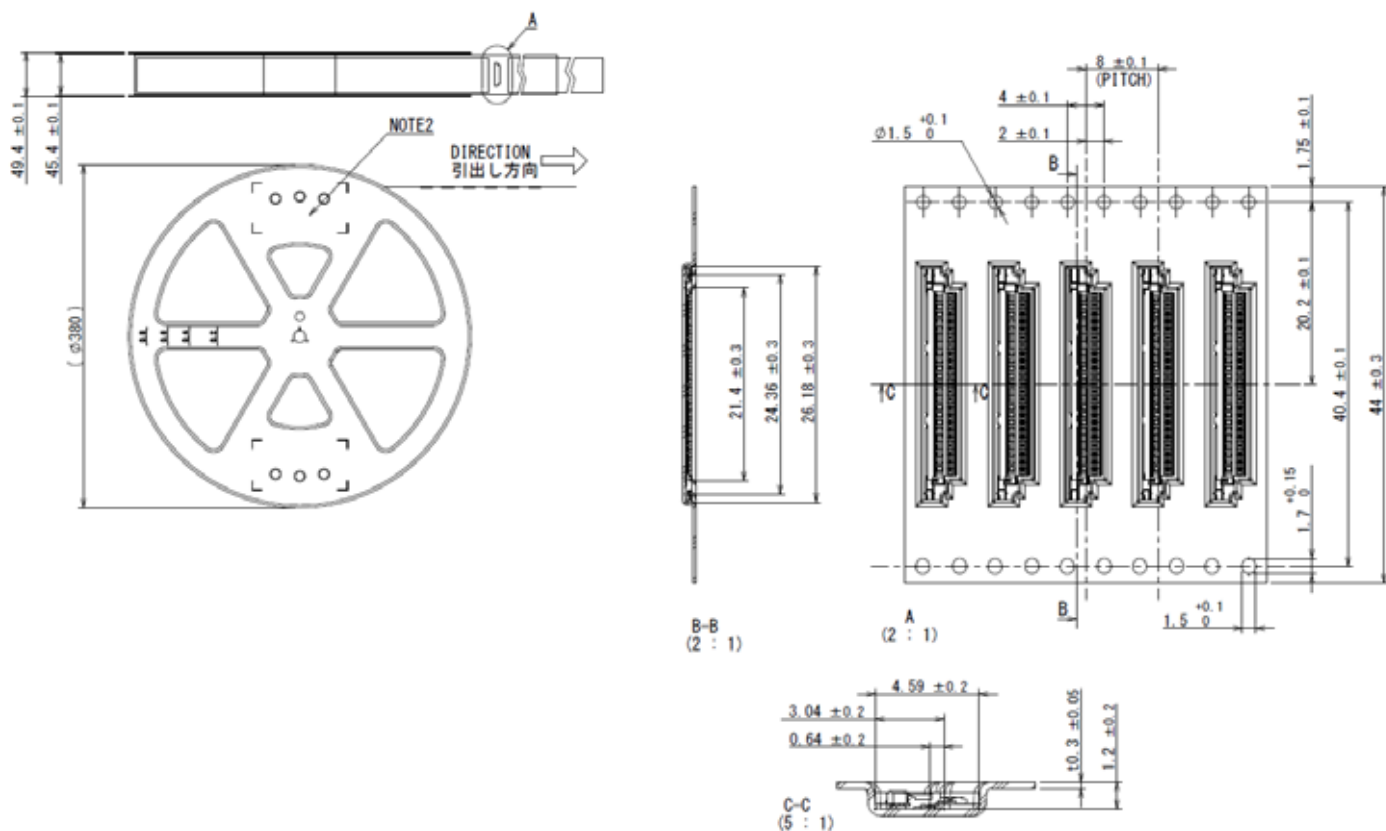
HJ1 P 050 M A 1 R6000

R: Embossed Reel: 6000pcs.

Product Drawing

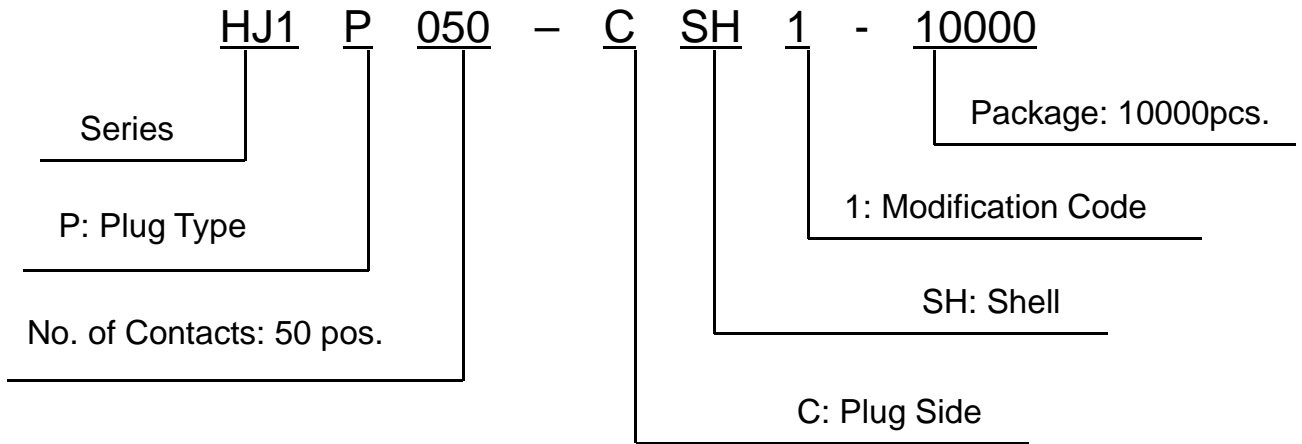
HJ1P050MA1R6000(SJ112815)

Unit: mm



Ordering Information

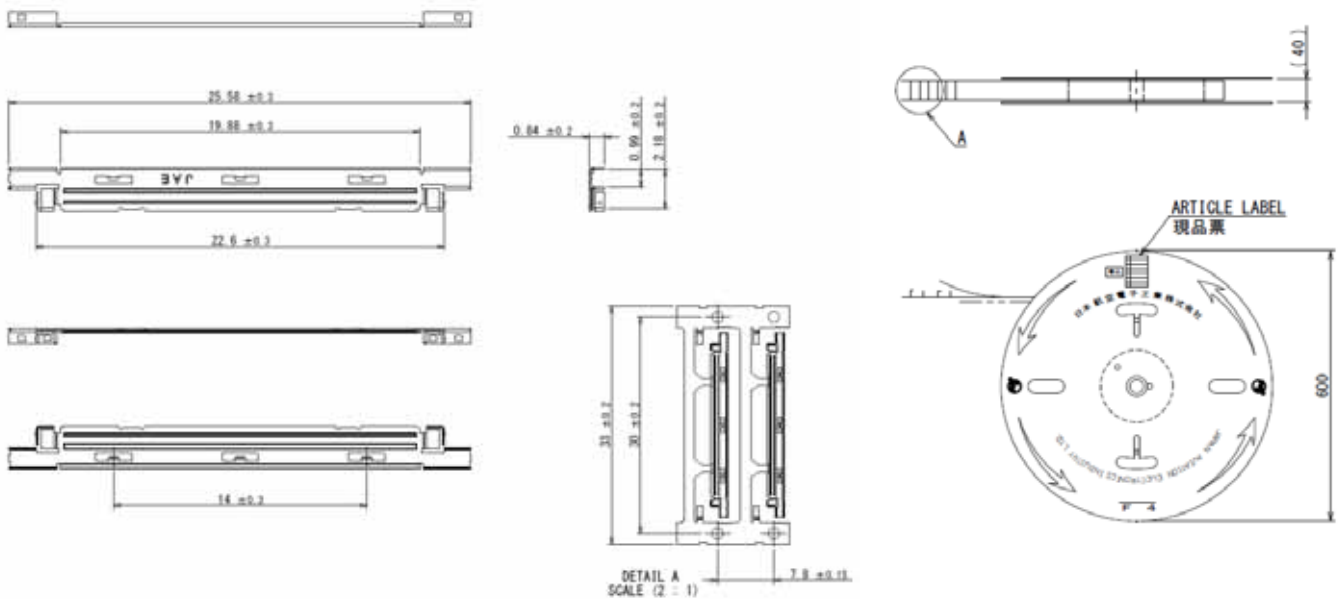
# Cover Shell (SJ112816)



Product Drawing

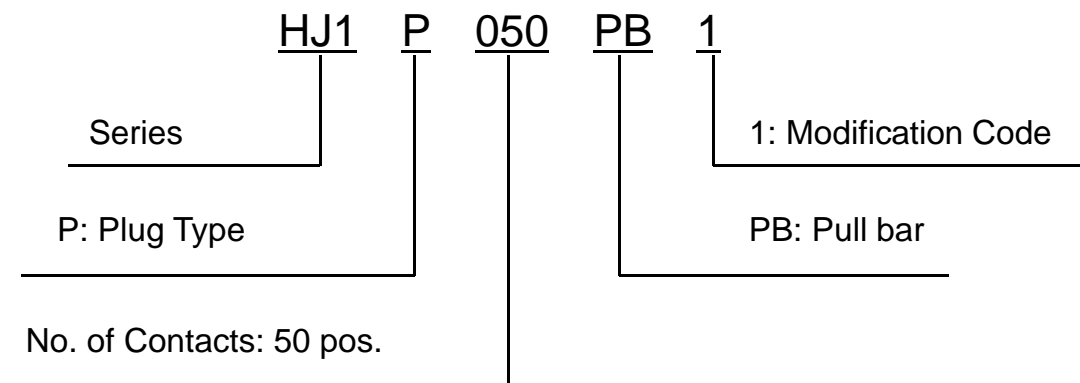
HJ1P050-CHS1-10000(SJ112816)

Unit: mm



Ordering Information

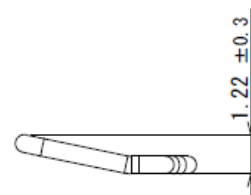
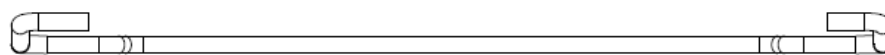
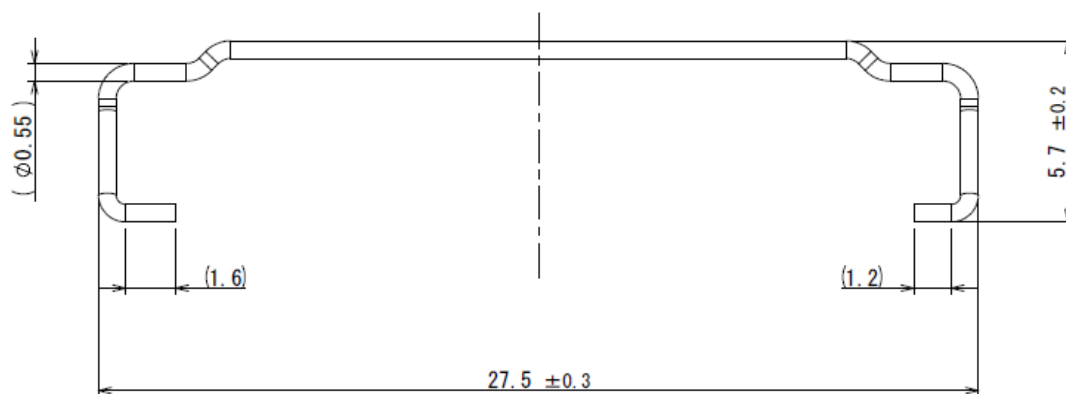
# Pull Bar (SJ113152)



Product Drawing

HJ1P050PB1(SJ113152)

Unit: mm





**Related Documents****Specifications (JACS): JACS-10924**  
**Handling Instructions (JAHL): JAHL-10924-10**  
**JAHL-10924-1(Plug Assembly)****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**

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