

AX03 Series Horizontal connection Floating Board-to-board Connector

CONNECTOR
MB-0349-1
November 2019



RoHS Compliant

JAE has developed the AX03 Series, floating board-to-board connectors for horizontal connection.

This product absorbs positional misalignments during mounting and assembly, and also allows for simultaneous use of multiple board-to-board connectors.

Applicable Market

FA equipment, semiconductor manufacturing equipment, office machines, communication equipment, measuring equipment, broadcasting equipment, gaming and arcade machines, and other various applications

Features

- 0.635 mm pitch, horizontal connection (no mating compatibility between AX03 Series and AX01 Series)
- Floating tolerance: ± 0.5 mm in both X & Y directions
- Length of mating guides: ± 0.6 mm in both X & Y directions
- Low insertion and removal forces achieved by roll surface contact structure
- Supports automatic mounting
- Allows for multiple connectors to be used on a single board
- Clear visibility of solder joint during visual inspection

General Specifications

Pitch	0.635mm pitch
Number of Contacts	50 position
Floating Tolerance	X direction: ± 0.5 mm, Y direction: ± 0.5 mm
Mating Guides	X direction: ± 0.6 mm, Y direction: ± 0.6 mm
Operating Temperature Range	-40 deg. C to +105 deg. C (including conduction temperature rise)
Rated Current	0.5A
Rated Voltage	AC 50 Vr.m.s.
Contact Resistance	Initial: 70 milliohm max. After test: 100 milliohm max.
Dielectric Withstanding Voltage	AC 250 Vr.m.s., conduction for 1 minute
Insulation Resistance	100 megohm min.
Durability	100 mating cycles

Materials and Finishes

Floating Connector

Component	Materials	Finishes
Fixed Insulator	LCP	
Floating Insulator	LCP	
Contact	Copper alloy	Au plating
Hold-down	Copper alloy	Sn plating

Fixed Connector

Component	Materials	Finishes
Insulator	LCP	
Contact	Copper alloy	Au plating
Hold-down	Copper alloy	Sn plating

Ordering Information

AX03 * 050 H A *1 R***

Series: AX03

F: Floating type
R: Rigid type (fixed type)

Number
of
Contact

H: Angle type, contact SMT

Reeled Part Number

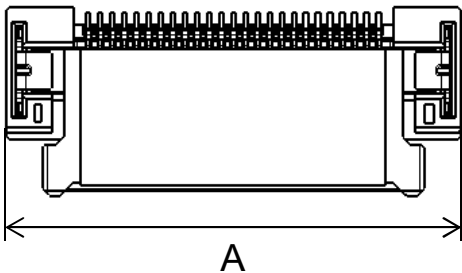
Modification Code

A: Plating of connection area
is Au0.1 μm min.

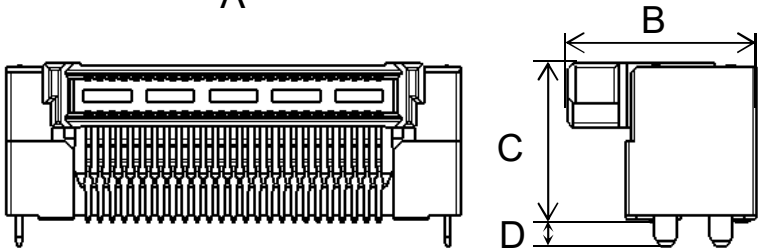
Note) Immediately available only in 50 positions. Please contact us for other pin counts.

Outer Dimensions

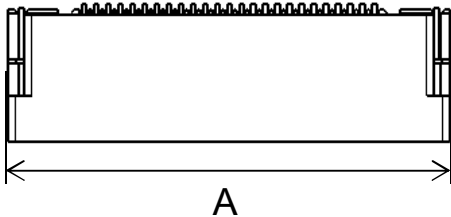
Floating Connector - AX03F050HAX1



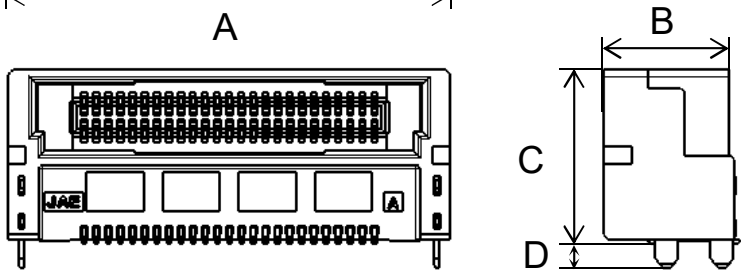
A	B	C	D
23.8	9.9	8.3	1.3



Fixed Connector - AX03R050HAY1



A	B	C	D
23.2	7	9.1	1.3



Drawing Number

Part Number	Drawing Number	Specifications	Handling Instructions
AX03F050HAX1 AX03F050HAX1R550	SJ120395 (Individual Product)	JACS-11239	JAHL-11239
	SJ120396 (Reeled Product)		
AX03R050HAY1 AX03R050HAY1R500	SJ120397 (Individual Product)		
	SJ120398 (Reeled Product)		

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

Product Marketing Division

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539

Phone: +81-3-3780-2882 FAX: +81-3-3780-2946

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